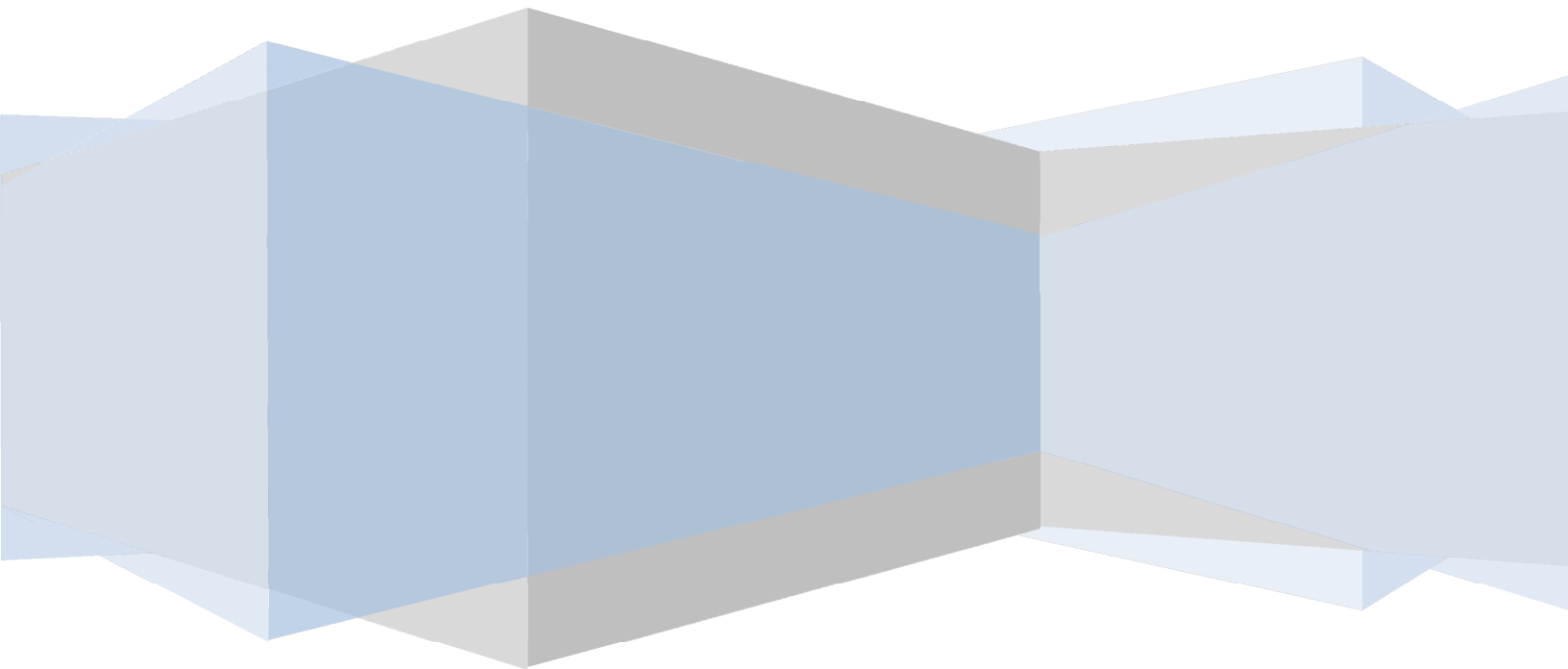


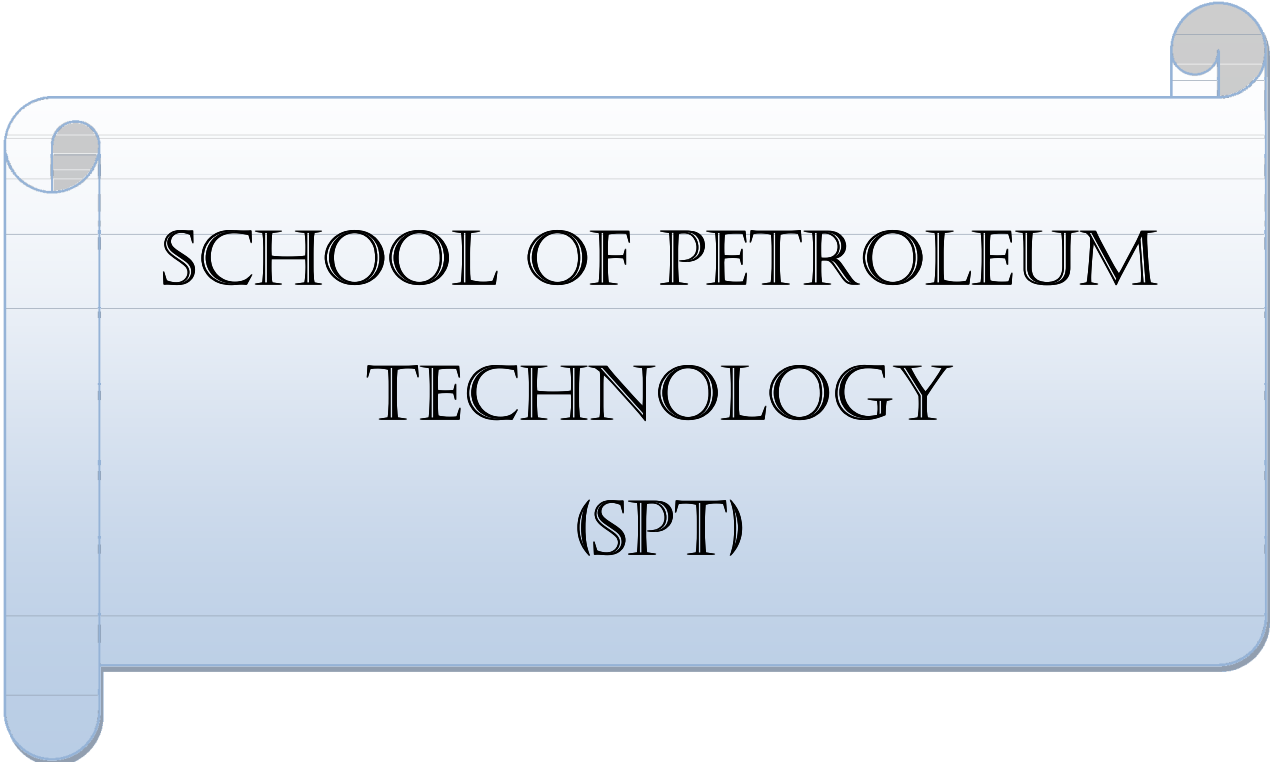


**Pandit Deendayal Petroleum  
University  
VOLUME - II  
SELF EVALUATION REPORT**



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SCHOOL OF PETROLEUM  
TECHNOLOGY  
(SPT)

**1. Name of the Institute**

School of Petroleum Technology (SPT), Constituent school of Pandit Deendayal Petroleum University (PDPU)

**2. Year of establishment of the private University :**

2007

**3. Is the Department part of a School/Faculty of the university?**

Yes. The Institution, School of Petroleum Technology (SPT), is a constituent of Pandit Deendayal Petroleum .University (PDPU).

**4. Names of programs offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.).**

Undergraduate Programs:

- B.Tech. in Petroleum Engineering

Post graduate Programs:

- M.Tech. in Petroleum Engineering

Ph.D Program:

- Full Time
- Part-Time

**5. Interdisciplinary programs and departments involved:**

NA

**6. Courses in collaboration with other universities, industries, foreign institutions, etc.**

Sr. No.	MoU with	Objectives	Short details of progress	Date of Signing
1	Mewborne School of Petroleum & Geological	<ul style="list-style-type: none"> <li>• Promote Education and research on Shale Gas</li> </ul>	Students internship program completed successfully Joint research seminars	10.01.11

	Engineering, University of Oklahoma		conducted	
2	University of Tulsa	<ul style="list-style-type: none"> <li>• Consultation on curriculum and course content</li> <li>• Opportunities for Joint research</li> <li>• Exchange of undergraduate students</li> <li>• Faculty participation in seminars and academic meetings</li> <li>• Exchange of academic materials, publications and other information</li> <li>• Joint quality assurance and benchmarking</li> </ul>	Students exchange program completed successfully	05.11.09
3	Georgia Institute of Technology	<ul style="list-style-type: none"> <li>• Opportunities for Joint research and educational activities</li> <li>• Exchange of undergraduate students</li> </ul>	Joint research projects completed Students exchange program completed successfully	21.11.2009
4	University of Houston, Houston, USA	<ul style="list-style-type: none"> <li>• Opportunities for Joint research</li> <li>• Exchange of undergraduate students</li> </ul>	Students internship program completed successfully	20.11.2009

Sr. No.	MoU with	Objectives	Date of Signing
1	ONGC Energy Centre, New Delhi	Collaboration for Geothermal Energy Exploration & Exploitation	18.06.2015
2	Hazira LNG Pvt. Ltd., Ahmedabad	Shell Total Chair Professor ship	06.01.11
3	Institute of Seismology Research, Raisan	To establish academic & research collaboration, share infrastructure	10.01.11

		facility/labs	
4	Hazira LNG Pvt. Ltd., Ahmedabad	Shell-Petroskills Workshop	05.07.11
5	Cairn India Ltd., Gurgaon	Cooperation, collaboration, faculty development, reciprocal facilitation, Guest Lectures, internships, projects etc.	15.07.11

(i). ***Rural Internship***

SPT students undergo a compulsory 3 week Rural Internship program at the end of the first year of engineering. The main objective of Rural Internship is to strengthen understanding on concepts of rural development with specific reference to the Indian context. Students are exposed to grassroots realities, in the rural setting, with a focus on participation in interventions by NGOs. This helps in making them understand and appreciate broader contexts of other stakeholders, like government agencies, donors and local self-governance institutions, while participating in existing field projects. This helps in the holistic development of a student and also makes them aware of the harsh climates and adversities they might be facing on the job.

The idea behind this program is to develop a sensitized workforce in energy sector who are socially concerned and willing to positively contribute to the society. The program enables the students to understand about the rural socio-economic scenario and also helps them in facing challenging issues in existing systems and suggests possible solutions. It also helps to enhance other skills of students. i.e. observation skill, analytical skill, decision making skill, communication skill.

(ii). ***Industrial Orientation***

SPT students undergo an industrial orientation program at the end of the second year which exposes students to various operations of oil and gas industry for enhancing their understanding about application of science and engineering principles studied in first two years of B. Tech program. The program is aimed at exposing students to upstream, midstream and downstream operations of oil and gas sector.

(iii). ***Industrial Training***

SPT students are required to undergo 6 to 8 weeks of Industrial Training in the non teaching period of the Third year of the B.Tech Program as partial requirement for the award of the degree. This training can be carried out either in Industry, at an R&D

organization, or Schools of Technology/Departments of Universities. The objective of the training is to make the students industry ready and give them an experience of the real industrial scenarios and practices. An effective training/internship enables the students to prepare for interviews in line with the industry expectations. It also prepares them well to enter the industry at the end of their B.Tech program and grooms them as per industry standards.

(iv). ***International Exposure program***

The International Exposure program enables students to not only develop technically but also enriches their linguistic and cultural knowledge. In terms of linguistic and cultural awareness, students emerge with a greater level of sensitivity and patience.

This in turn leads them to move from a fundamental understanding of the theoretical concepts to a more sophisticated interpretation and application based approach. Secondly, most students adapt to the practical challenges they encounter by finding mechanisms to help them cope with their new surroundings. Many students have shown concern about adjusting in the countries they planned to visit. Students also have some misconceptions about the nature of the people and the overall cultural aspects of the region. The exposure program helps the students to soak in the real essence of the cultural aspects in person and enables them to grow technically as well as spiritually.

**7. Details of programs discontinued, if any, with reasons**

Nil

**8. Examination System: Annual/Semester/Trimester/Choice Based Credit System**

An academic year consists of two semesters. The autumn semester generally starts from July to November & the spring semester generally starts from December to April. The student registers for course(s) during a given semester, on the basis of the program as prescribed in the Curriculum. Examinations of the students, who clear minimum attendance criteria i.e. 80%, are conducted in the middle and at the end of the semester. Students, who do not fulfill the criteria, are not permitted to take the end-semester examination in that course. They are permitted to take re-examination in subsequent semester.

The percentage allocation for evaluating a Theory course will generally remain as 30% for Mid Semester examination, 60% for End Semester and 10% for the Internal Assessment like Quiz, Class Assignments. The percentage allocation for evaluating a Practical course will generally remain as 50% for the Laboratory Work and 50% for the Laboratory related Examination. The assessment in a laboratory course is based on turn-to-turn supervision of the student's work, performance in viva voce examinations, and group discussions, the quality of work as prescribed through laboratory journals and an end-semester test that contains an experiment and/ or a written examination.

Each course is assigned a numerical weightage termed as credits for that particular course. A letter grade is awarded to students as the final evaluation in each course, and each letter grade carries numerical points, known as grade points. Based on the grades and their numerical equivalents, Semester Performance Index (SPI) and Cumulative Performance Index (CPI) of the student are calculated at the end of each semester: SPI and CPI are calculated up to the second decimal.

Choice Based Credit System (CBCS) is a flexible system of learning that permits students to,

- ~ Choose electives from a wide range of elective courses offered by the University departments
- ~ Adopt an inter-disciplinary approach in learning
- ~ Make best use of the expertise of available faculty.

## **9. Participation of the department in the courses offered by other departments**

- Earth Science is offered to Civil Engineering Dept, and is taught by SPT Faculties.
- Research Methodology is offered to all other engineering dept, and is taught by SPT Faculties.
- Based on Choice Based Credit System, SPT is offering a bouquet of courses to all other engineering dept. Following are few examples of courses offered by SPT to other depts.:
  - ~ Formation Damage and well simulation
  - ~ Enhanced Oil Recovery
  - ~ Reservoir Modelling and Simulation
  - ~ Industrial Instrumentation & Control
  - ~ Petroleum Production Engineering
  - ~ Process Dynamics & Control

**10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)**

**No. of sanctioned Faculties**

Positions	Teaching Faculty			Non-teaching staff	Technical staff
	Professor	Associate professor	Assistant Professor/Lecturer		
Sanctioned by the University	02	05	17	22	04

**Available Faculties:**

Prof.	Asso. Prof.	Asst. Prof./Lect.	Adjunct Faculty	Total
Nil	3	7	3	13

9 faculties from School of Technology and School of Liberal Studies are conducting classes for various courses on engineering, humanities, science and mathematics and man-making courses of SPT.

**11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance**

Name	Qualification	Designation	Specialization	No. of years of experience	No. of Ph.D./ M. Phil. Students guided for the last 4 years
Dr. Anirbid Sircar	Ph.D, PGDBA	Associate Professor	Geophysics, Petroleum Exploration & Tomography	19	2 Ph.D (Completed) 5 Ph.D (Ongoing) 14 M.Tech. (Completed)
Dr. Uttam Bhui	Ph.D,	Associate Professor	Geochemistry & Petrology	16	2 Ph.D (Completed) 2 Ph.D (Ongoing) 3 M.Tech (Completed)

Dr. Ashish Sarkar	Ph.D	Associate Professor	Micropaleontology	19	4 M.Tech (Completed)
Dr. Bhawanisingh Desai	Ph.D	Assistant Professor	Paleontology & Ichnology	12	3 M.Tech (Completed) 1 Ph.D (Ongoing)
Dr. N Madhavan	Ph.D	Assistant Professor	Environmental Chemistry	20	Nil
Ms. Shreya Sahajpal	M.Tech	Lecturer	Chemical Process & Plant Design	4	2 M.Tech (Completed)
Mr. R Balasubramanian	M.Tech	Lecturer	Petroleum Refinery & Petrochemicals	7	Nil
Mr. Manan Shah	M.Tech	Lecturer	Chemical & Petroleum Engg	--	Nil
Mr. Maunish Shah	M.Tech	Lecturer	Thermal Engg	4	Nil
Ms. Vaishali Sharma	M.Tech	Lecturer	Petroleum Engg	1	Nil
Mr. R K Jain	B.Tech	Adjunct Faculty	Chemical Engg & Artificial Lift Techniques	40	Nil
Mr. S S P Singh	B.Tech	Adjunct Faculty	Petroleum Engg & Stimulation	42	Nil
Mr. G S Negi	M.Tech	Adjunct Faculty	Chemistry & Petroleum Engg	34	Nil

## 12. List of senior Visiting Fellows, adjunct faculty, emeritus professors

While the School has adequate number of full time scholarly faculty, role and importance of visiting and guest faculty cannot be undermined. In order to bring in the latest and best professional inputs for SPT students, professionals of various disciplines from industrial and business organizations are invited to supplement course deliveries at the school.

SPT currently has 3 adjunct faculty roped in from leading industries.

VISITING FACULTY			
<i>Name</i>	<i>Qualification</i>	<i>Specialization</i>	<i>No. of years of experience</i>
Prof. Subhash	Ph.D	Chemical Engg & Petroleum	40

Shah		Engg	
Mr. Hiren Patel	M.Tech.	Mechanical Engg & Petroleum Engg	6
<b>ADJUNCT FACULTY</b>			
Mr. R K Jain	B.Tech	Chemical Engg & Artificial Lift Techniques	40
Mr. S S P Singh	B.Tech	Petroleum Engg & Stimulation	42
Mr. G S Negi	M.Tech	Chemistry & Petroleum Engg	34

SPT every year conducts specialized courses on Offshore Drilling & Completions Reservoir Modeling & Simulation in collaboration with PetroSkills.

SPT regularly conducts Expert Lectures and on an average 15-20 hrs are earmarked for the Expert Lectures from Industries & Institutes of fame to guide our students & sensitize them for industry and research needs. Some of them are given below:

Seminar/Invited talk	Topic	Month & Year
Mr. Rajan Desai, International Coordinator, HTRI, India	How HTRI Xchanger Suite Educational can be useful to bridge Academia with Industry	31 <sup>st</sup> July, 2015
Dr. Subhash Shah, Ph.D., P.E., Stephenson Chair Professor, Mewbourne School of Petroleum and Geological Engineering, University of Oklahoma	Drilling and Well Completion	13 <sup>th</sup> February, 2015
Dr. Subhash Shah, Ph.D., P.E., Stephenson Chair Professor, Mewbourne School of Petroleum and Geological Engineering, University of Oklahoma	Shale Gas Development	17 <sup>th</sup> February, 2015
Mr. Dilip Lote, AGM-HSE, Gujarat Gas	Process Safety in Oil & Gas Industry	23 <sup>rd</sup> April, 2015
Expert Lecture by Mr. Sanjib Baruah, Oil & Gas Consultant	Petroleum Business Challenges and Building Organizational Capabilities	11 <sup>th</sup> September, 2015
1 <sup>st</sup> "Distinguished Speakers Lecture Series"	India Towards Energy	14 <sup>th</sup> March, 2014

Seminar/Invited talk	Topic	Month & Year
Mr. Rajan Desai, International Coordinator, HTRI, India	How HTRI Xchanger Suite Educational can be useful to bridge Academia with Industry	31 <sup>st</sup> July, 2015
Dr. Subhash Shah, Ph.D., P.E., Stephenson Chair Professor, Mewbourne School of Petroleum and Geological Engineering, University of Oklahoma	Drilling and Well Completion	13 <sup>th</sup> February, 2015
Dr. Subhash Shah, Ph.D., P.E., Stephenson Chair Professor, Mewbourne School of Petroleum and Geological Engineering, University of Oklahoma	Shale Gas Development	17 <sup>th</sup> February, 2015
Mr. Dilip Lote, AGM-HSE, Gujarat Gas	Process Safety in Oil & Gas Industry	23 <sup>rd</sup> April, 2015
Expert Lecture by Mr. Sanjib Baruah, Oil & Gas Consultant	Petroleum Business Challenges and Building Organizational Capabilities	11 <sup>th</sup> September, 2015
by Mr. Amit Khara, Partner at Mc. Kinsey, New Delhi, India	Independence 2030	
2 <sup>nd</sup> “Distinguished Speakers Lecture Series” by Mrs. Kiran Majumdar Shaw, CMD, Biocon Ltd and Mr. Amitava Saha, Head – HR, Biocon, Ltd, Bengaluru.	Global Industry: Local Talent	18 <sup>th</sup> Aug, 2014
Honorary Lecture South & East Asia with ‘Shell’ by Dr. Deva Ghosh, Research Advisor, PETRONAS	Geophysical Issues and Challenges in Southeast Asia with Emphasis on Malay Basin	21 <sup>st</sup> August, 2010

**13. Percentage of classes taken by temporary faculty – program-wise information**

<i>Program</i>	<i>Percentage of classes taken by temporary faculty</i>
Petroleum Engg	NIL

**14. Program-wise Student Teacher Ratios**

<i>Program</i>	<i>Student Teacher Ratios</i>
Petroleum Engg	23:1

**15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual**

	<i>Sanctioned</i>	<i>Filled</i>	<i>Actual</i>
Number of technical staff	4	4	4
Number of administrative staff	22	3	3

**16. Research thrust areas as recognized by major funding agencies**

- Focus on Shale gas studies which includes rock typing, petrophysical analysis, reservoir modelling, resource estimation, fracture network analysis, flow pattern determination, hydraulic fracturing etc.
- Geothermal exploration and exploitation: Understanding the hot reservoirs using integrated geological, geophysical and reservoir studies, prospect analysis, risking and ranking of prospects, stochastic resource estimation.
- Extraction of thermal energies from Low Enthalpy reservoirs and utilization of the same for power generation, domestic and Industrial uses for heating and cooling application.
- Understanding potential of Deltaic depositional system using ichnofabric indices for measuring recorded extent of animal-sediment relation and its effect on petrophysical properties in Kachchh Basin. Comparative studies of ichnofabric between different lithofacies. Vertical sequence normalization of ichnofabric indices to percent of total thickness.
- High resolution Sequence stratigraphic framework of the carbonate sediments of the Western India.
- Application of tracer studies in evaluating heterogeneous permeability in bioturbated reservoirs.

**17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.**

<b>R &amp; D Project (Ongoing)</b>					
<b>Sr. No.</b>	<b>Principal Investigator</b>	<b>Title of the Projects</b>	<b>Project Sanctioned By</b>	<b>Duration</b>	<b>Amount Sanctioned (Rs.)</b>
1.	Dr. Bhawanisingh G. Desai	Ichnofabric analysis, Event Stratigraphy and Depositional Environment of the Cretaceous sediments of Western India	DST	3 Years	27,00,000
2.	Dr. Anirbid Sircar Ms. Shreya Sahajpal Mr. Manan Shah	Geothermal Energy Exploration & Exploitation	GOG	3 Years	2,00,00,000
3.	Dr. Bhawanisingh G. Desai	Middle Jurassic-Cretaceous Belemnite fauna at Southern and Northern Tethyan margin: Biogeographic patterns, stratigraphic distribution and Key correlative levels.	DST-RFBR International Bilateral Program	2 Years	24,00,000 (Indian side)

**18. Inter-institutional collaborative projects and associated grants received (a) National collaboration (b) International collaboration**

<b>Sr. No.</b>	<b>Principal Investigator/Co-PI</b>	<b>National Collaboration Project/Details</b>	<b>Grant Received (in Rs.)</b>
1	PI: Dr. Bhawanisingh Desai Co PI: Dr. Anirbid Sircar	Permeability Characterization and Modeling of Tight Gas Sandstone Reservoirs <i>Collaboration:</i> Georgia Tech & PDP	2,50,00,000

**19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.**

Sr. No.	Principal Investigator	Title of Projects	Project Sanctioned By	Duration	Amount Sanctioned (Rs.)
<b>R &amp; D Project (Completed)</b>					
1	Dr. Bhawanisingh Desai	Ichnofabric Mapping of the Mundhan and Guneri section with special Reference to (Umian-Mundhanian Kutch Stages), Kachchh, Gujarat	DST	3 Years	14,41,600
2	Dr. Bhawanisingh Desai	Ichnology of the Jurrasic rocks of the Jara dome, Western Mainland, Kachchh, India	DST	3 Years	12,07,000
3	Dr. Bhawanisingh Desai/ Dr. Anirbid Sircar	Permeability Characterization and Modelling of Tight Gas Sandstone Reservoirs	GSPC	1.5 Years	2,50,00,000
4	Dr. Bijaya Behera	Creation of Corporate Database Management System	DoP	1 Year	1,00,00,000
5	Dr Bijay Behera	Prefeasibility study for 1MW Geothermal Power Generation in Gujarat, India	GoG	1 Year	45,00,000
<b>R &amp; D Project (Ongoing)</b>					
6	Dr. Bhawanisingh Desai	Ichnofabric analysis, Event Stratigraphy and Depositional Environment of the Cretaceous sediments of Western India	DST	3 Years	27,00,000
7	Dr. Anirbid Sircar Ms. Shreya Sahajpal Mr. Manan Shah	Geothermal Energy Exploration & Exploitation	GOG	3 Years	2,00,00,000
8	Dr. Bhawanisingh Desai	Middle Jurassic-Cretaceous Belemnite fauna at Southern and Northern Tethyan margin: Biogeographic patterns,	DST-RFBR International Bilateral Program	2 Years	24,00,000 (Indian side)

		stratigraphic distribution and Key correlative levels.			
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**20. Research facility / centre with**

- **state recognition**
- **national recognition**
- **international recognition**

- Government of India, Ministry of Science and Technology, Department of Scientific and Industrial Research has given recognition to Pandit Deendayal Petroleum University (PDPU), Gandhinagar as Scientific and Industrial Research Organization (SIRO) and Income Tax Exemption under 35i(ii).
- **ISO 9001:2008**  
PDPU has got ISO 9001:2008 certifications for Design, Development & Delivery of Higher Education Programs & Training
- **Association of Indian Universities**  
PDPU has been granted membership by the Association of Indian Universities. PDPU for strategic planning process including guidelines for assessing on-campus international partnership capacity and developing practical strategic plans for partnership activities in India have planned a collaboration with The International Academic Partnership Program (IAPP), originally funded by the U.S. Department of Education's Fund for the Improvement of Postsecondary Education (FIPSE), is a major initiative of IIE's Center for International Partnerships in Higher Education
- **Centre of Excellence for Geothermal Energy (CEGE)** was set up in 2013 by SPT. Government of Gujarat is funding CEGE for demonstrative research project on Geothermal Energy harnessing in Gujarat. The objective of the project is exploration and exploitation of Geothermal Energy resources in Gujarat in order to generate 1 MW of electrical energy. CEGE has been actively and systematically investigating about the possibility of geothermal exploration in Gujarat. This project is one of its kind in India and such an extensive study has not been taken to the exploitation phase till now. CEGE team also had an interaction with officials at Ministry of New and Renewable Energy (MNRE) to discuss the status and future plans for the project. MNRE has shown a keen interest in the project and have proposed to declare the project as a Pilot Scale Research Project of National Importance. MNRE has also extended their full support to CEGE both

technically and financially. CEGE has also submitted two proposals to MNRE for Pilot Projects at Dholera and Unai, Gujarat. CEGE is also in the process of signing an MoU with MNRE.

The project is also being acknowledged by GSI, India and ONGC Energy Centre (OEC). CEGE also conducts frequent workshops, and discussion sessions with experts across the world for developing roadmaps and strategies for carrying the project further. CEGE has also signed an MoU with ONGC Energy Centre (OEC) in June 2015.

## 21. **Special research laboratories sponsored by / created by industry or corporate Bodies**

- **Drilling & Stimulation Centre:** SPT is setting up a Drilling & Stimulation Centre. Funding has been received from Department of Petroleum, Government of Gujarat for setting up the centre. Seven experiments on Cement Stability have been developed and an experiment on Proppant Conductivity is planned till date. Indent for the same has been submitted to the purchase committee of PDPU. This centre will cater the needs of teaching, research and the laboratory facilities can also be shared with researchers across the community.
- **Biofuels Lab:** SPT is setting up a Biofuels Lab with following objectives and focus areas  
**Objectives:**
  - ~ To design and develop energy efficient, environment friendly and industrially viable techniques for biofuel production.
  - ~ To develop characterization and world class testing facility.
  - ~ Research & Consultancy**Focus Areas:**
  - ~ Understanding the stability of biodiesel by ten different kinetic processes
  - ~ Application of the same in commercial vehicles & industrial uses
  - ~ Process optimization studies for biofuel production techniques.
  - ~ To develop new/alternate catalyst and new co-solvent for efficient biofuel production.
  - ~ To identify non-edible oil and other raw material sources for biodiesel production.
  - ~ Use of Fish viscera (Talapia) as a raw material for biodiesel production.

**22. Publications:**

- Number of papers published in peer reviewed journals/conferences (National / International): 87
- Monographs: 0
- Chapters in Books: 2
- Edited Books: Nil
- Books with ISBN with details of publishers: Nil
- Citation Index:

Sr. No.	Faculty Name	Grade	Citation Index
1	Dr. Anirbid Sircar	Director SPT	46
2	Dr. Ashish Sarkar	Associate Professor	125
3	Dr. Uttam Bhui	Associate Professor	92
4	Dr. Bhawanisingh Desai	Assistant Professor	161
5	Ms. Shreya Sahajpal	Lecturer	2

- Impact Factor – range / average: 0.46-4.0 (range)
- h-index:

Sr. No.	Faculty Name	Grade	H Index
1	Dr. Anirbid Sircar	Director SPT	3
2	Dr. Ashish Sarkar	Associate Professor	3
3	Dr. Uttam Bhui	Associate Professor	5
4	Dr. Bhawanisingh Desai	Assistant Professor	7
5	Ms. Shreya Sahajpal	Lecturer	1

**Book Chapters**

1. Sircar, A. and Patel, H. 2014, Petroleum Reserve & Resource Estimation: Stochastic Approach, Advances in Petroleum Engg: Refining, Ch 8, Stadium Press LLC, USA, Dec, 2014
2. Shah, N., Sircar, A., Misra, P., 2014, Hydrocarbon Production Optimization: Theory & Practices, Advances in Petroleum Engg: Petrochemical, Stadium Press LLC, USA, Dec, 2014

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1. Vaidya, D., Shah, M., Sircar, A., Sahajpal, S., Dhale, S. (2015), Geothermal Energy: Exploration Efforts In India, International Journal of Latest Research in Science and Technology, Volume 4, Issue 4, July-August 2015, ISSN:2278-5299, 61-69.

2. Gupta, A. and Sircar, A. (2015), Flow Assurance and Comparison of Modeling for Onshore Crude Oil Trunk Line Using SCADA Results, *International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS)*, Vol. IV, Issue VI, July 2015, ISSN 2278-2540, Impact Factor: 2.115, 52-60.
3. Sahajpal, S., Sircar, A., Singh, A., Vaidya, D., Shah, M., Dhale, S., (2015), Geothermal Exploration in Gujarat: Case Study from Unai, *International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS)*, Vol. IV, Issue V, June 2015, ISSN 2278-2540, Impact Factor: 2.115, 38-49.
4. Desai, B. G., & Saklani, R. D., (2015), Palaeocommunity Dynamics and Behavioral Analysis of Conichnus: Bhuj Formation (Lower Cretaceous), Kachchh-India, *Ichnos: An International Journal for Plant and Animal Traces*, 22:1, 43-55, DOI: 10.1080/10420940.2014.995377.
5. Ariketi, R., Behera, B. K., Bhui, U. K., (2015), Shale Gas in India: Opportunities & Challenges, *International Journal of Scientific Research*, Vol. 4, Issue 3, ISSN 2277-8179, DOI: 10.15373/22778179, 320-325.
6. Gupta, A. and Sircar, A. (2015) Need of Flow Assurance for Crude Oil Pipelines: A Review. *International Journal of Multidisciplinary Science and Engg*, Vol 6, Issue2, Feb 2015, ISSN: 2045-7057, 43-49 Impact Factor: 0.46.
7. Desai, B. G., (2015) Ichnological Analysis of the Pleistocene Dwarka Formation, Gulf of Kutch; Tracemakers Behaviours and Reworked Issues, *Geodinamica Acta*, Taylor & Francis (In press)
8. Anto, R., Rajshree, Sircar A., Sahajpal, S., “Crude Characterization on Rheometer for Flow Assurance”, *International Journal of Scientific Research (IJSR)*, Vol. 4, Issue 9, Sept 2015, ISSN 2277-8179, 206-209.
9. Ariketi, R., Bhui, U. K., Chandra, S., and Biswal, S. (2015) Evaluation of Organic Richness and Thermal Maturity of Cambay Shale Formation for Shale Oil/Gas Exploration-A study from Ankleshwar area, Cambay Basin, India. *Marine and Petroleum Geology* (under Review)
10. Sircar, A., Shah, M., Sahajpal, S., Vaidya, D., Dhale, S., Chaudhary, A., (2015), Geothermal Exploration in Gujarat: Case Study from Dholera, *Geothermal Energy*, Springer (under Review).
11. Jain, S and Desai, B. G. (2014), Biochronostratigraphic Implications of the Discovery of Late Bathonian Indonesian Ammonite *Macrocephalites* Cf. *Mantataranus* Boehm [M] from the Core of Jara Dome, Kachchh, Western India, *Journal of Paleontological Society of India*, 59(2), 169-180.

12. Desai, B. G. and Saklani, R. D. (2014), Ichnofabric Analysis of the Tithonian Shallow Marine Sediments (Bhadasar Formation) Jaisalmer Basin, India, Journal of Earth System Science, 123(6), 1413-1431.
13. Brahma, J. and Sircar, A., (2014), Estimation of the Effect of Anisotropy on Young's Moduli and Poisson's Ratios of Sedimentary Rocks Using Core Samples in Western and Central Part of Tripura, India, International Journal of Geoscience, Vol.5, No.2, 184-195. *(The paper has been downloaded 1432 times)*.
14. Singh Anil and Sircar A, (2014), Sources and Measurement of Velocity Anisotropy of Cambay Shale, Cambay Basin, India, International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS), Volume III, Issue V, 169-179.
15. Thander B, Sircar A and Karmakar, G P, (2014), Hydrocarbon Resource Estimation: Application of Monte Carlo Simulation, International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS), Volume III, Issue IV, 30-47
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### 23. Details of patents and income generated

- Students from 2013 batch – Deep Joshi, Bhagya Bhardwaj and Harshil Saradva, filed a patent on **“Pneumatically Operated Mechanical Bit using a Rotary Steerable System”**. The patent has been provisionally accepted. Indian Patent Application No. is 3733/MUM/2013. This is a unique work of its kind to improve the efficiency of the rotary system. This patent is a significant contribution to the prevalent Drilling technologies.

### 24. Areas of consultancy and income generated

Year	Amount (Rs)	Scheme	Sponsoring Agency	Faculties Involved
2011-12	25,00,000	Young Hydrocarbon Professionals	Larsen & Toubro Ltd.	Dr. Bhawanisingh Desai, Dr. Anirbid Sircar & Dr. G P Karmakar
2012-13	45,00,000	Prefeasibility study of 1 MW Geothermal Energy	Gujarat Power Corporation Ltd. (GPCL)	Dr. Bijay Behera
2013-14	2,50,000	Shale gas Property Evaluation of Crew Energy , Canada	Gujarat State Fertilizer Corporation (GSFC)	Dr. Anirbid Sircar
2014-15	7,50,000	Evaluation of five onshore marginal fields, Godavari onshore, India	KEI-Ross, Rajahmundry	Dr. Anirbid Sircar & Mr. Anshul Gupta

### 25. Faculty selected nationally/internationally to visit other laboratories / institutions/ industries in India and abroad

S.No	Faculty Name	laboratories / institutions	Year
1	Dr. J Brahma	University of Oklahoma	2015

2	Mr. Vinay Babu	University of Houston	2013
3	Dr. B K Behera	University of Oklahoma	2012
4	Dr. B G Desai	Georgia Institute of Technology	2011
5	Dr. G P Karmakar	University of Houston	2010
6	Dr. Ajit Shukla	University of Oklahoma	2010

**26. Faculty serving in (a) National committees (b) International committees (c) Editorial Boards (d) any other (please specify)**

Sr. No.	International & National Committees	Faculty Name
1	Central Advisory Board of Oil & Gas World Expo 2016	Dr. Anirbid Sircar
2	Subject Expert, UGC e-Pathshala, Jamia Milia Islamia University, Delhi	Dr. Anirbid Sircar
3	Member, Collaboration Committee, Department of Earth Science, IIT Kanpur	Dr. Anirbid Sircar
4	Jury Member for 1 <sup>st</sup> Research Poster Competition, PDPU	Dr. Anirbid Sircar
5	Advisory Committee of College of Fire Technology, Ahmedabad	Dr. Anirbid Sircar
6	Member, Faculty Selection Committee, 2014, PDPU	Dr. Anirbid Sircar
7	Member, Faculty Selection Committee, 2015, PDPU	Dr. Anirbid Sircar
8	Member, Examination Assistant Selection Committee, 2015, PDPU	Dr. Anirbid Sircar
9	Panel Member, GSPC Gas: Recruitment of Senior Engg., 2012 (Thru Internal Candidates)	Dr. Anirbid Sircar
10	Member, Preliminary Faculty Selection Committee, 2015, PDPU	Ms. Shreya Sahajpal
11	Member, Preliminary Faculty Selection Committee, 2015, PDPU	Mr. R Balasubramanian
12	Member, Preliminary Faculty Selection Committee, 2015, PDPU	Dr. B G Desai
13	Member, Committee: Campus Recruitment for Faculty Selection, 2015, PDPU	Ms. Shreya Sahajpal

14	Member, Committee: Campus Recruitment for Faculty Selection, 2015, PDPU	Mr. Anshul Gupta
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***Faculties on Editorial Boards/Review Boards of National & International Journals***

**(i). Dr. Bhawanisingh G Desai**

- ~ Editorial Board of International Journal of Geology, Earth and Environmental Science
- ~ Reviewer PLOS1, Palaeontologia Electronica, Current Science, Journal of Earth System Science
- ~ Reviewer of Project Completion Reports of DST and Earth Science

**(ii). Dr. Anirbid Sircar**

- ~ Editorial Board of Trends in Chemical Engg., STM Journals
- ~ Editorial Board of Recent Trends in Fluid Mechanics, STM Journals
- ~ Reviewer, Journal of Petroleum and Gas Engineering
- ~ Reviewer, Advances in Research
- ~ Reviewer, International Journal of Geoscience, Scientific Research Publishing
- ~ Reviewer, Current Science, Indian Academy of Sciences
- ~ Reviewer, The Palaeobotanist, Lucknow

**(iii). Dr. Uttam Bhui**

- ~ Reviewer, Journal of the Geological Society of India
- ~ Reviewer, Arabian Journal of Earth Science

**(iv). Dr. Ashish Sarkar**

- ~ Reviewer, Journal of the Geological Society of India

**(v). Dr. N Madhavan**

- ~ Reviewer, Journal of Hydrology, Elsevier

**27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).**

<b><i>Sr. No.</i></b>	<b><i>Faculty name</i></b>	<b><i>Refresher/ orientation programs, workshops, training programs and similar programs</i></b>
1	Mr. R Balasubramanian	International Oil and Gas Pipeline Conference-2015, New Delhi, India
2	Dr. A Sircar	International Oil and Gas Pipeline Conference-2015, New Delhi, India
3	Dr. A Sircar	International Conference on Geothermal Energy: Exploration & Exploitation, 2015

4	Ms. Shreya Sahajpal	AMA Program on Ph.D. Thesis Research: How to Write Research Proposal
5	Ms. Shreya Sahajpal	International Conference on Geothermal Energy: Exploration & Exploitation, 2015
6	Mr. Anshul Gupta	AMA Program on Ph.D. Thesis Research: How to Write Research Proposal
7	Dr. Bhawanisingh G. Desai	XIIth International Ichnofabric workshop at Channakale, Turkey
8	Dr. Bhawanisingh G. Desai	XIIIth International Ichnofabric workshop at Kochi, Japan
9	Dr. Bhawanisingh G Desai	Modern Practices in Petroleum Exploration, Petrotech Training Programm, Dehradun.

## 28. Student projects

- **percentage of students who have done in-house projects including interdepartmental projects**
- **percentage of students doing projects in collaboration with other universities/industry/institutes**

- *Percentage of students who have done in-house projects including interdepartmental projects: 100 %, as all the students compulsorily undertake in-house projects*
- *Percentage of students doing projects in collaboration with other universities/ industry/ institutes: 30% M.Tech students have done projects in collaboration with leading industries, since the inception of M.Tech program at SPT*

Recent research projects funded by Office of Research & Sponsored Projects (ORSP), sanctioned by Director General, PDPU for the R&D Project under Student Research Program are given below:

1. **‘Reservoir Characterisation of Cambay Shale Cambay Basin, India in Reference to Shale Gas Exploration and Exploitation’** by Kiran Bhatreja, Rajashree Saini and Rincy Anto, Final Year M.Tech. students of School of Petroleum Technology. (Project Guide – Dr. Anirbid Sircar & Ms. Shreya Sahajpal) at a total cost of **Rs. 2,25,000 ( Rupees Two Lac Twenty Five Thousand Only)**.
2. **‘Shallow Seismic Reservoir Characterization: Implication for P-Wave Velocity and Sub-Surface Thickness Estimation’** by Dharmesh Dhola, Final Year M.Tech. students of School of Petroleum Technology. (Project Guide – Dr. Bhawanisingh G. Desai) at a total cost of **Rs. 1,10,000 ( Rupees One Lac Ten Thousand Only)**.

3. **‘Optimization Of Oil Recovery Using Surfactant: Study On Cambay Basin Crude Oil’** by Mitesh Gor and Rahul Yadav, Final Year M.Tech. students of School of Petroleum Technology. (Project Guide – Dr. Uttam Bhui) at a total cost of **Rs. 90,000 (Rupees Ninety Thousand Only)**.

Recently, two projects have been completed by SPT students in collaboration with leading industries:

1. A group of Final Year B.Tech students of School of Petroleum Technology carried out an R&D Project entitled ‘A critical review of LNG Value Chain’ in collaboration with **Shell Hazira LNG & Port Pvt. Ltd.** (Project Guide – Ms. Shreya Sahajpal & Dr. Anirbid Sircar)
2. A group of Final Year B.Tech students of School of Petroleum Technology carried out an R&D Project entitled ‘Understanding City Gas Distribution Business in Gujarat’ in collaboration with **GSPC Gas** (Project Guide – Ms. Shreya Sahajpal & Dr. Anirbid Sircar)

## 29. Awards / recognitions received at the national and international level by

- Faculty
- Doctoral / post doctoral fellows
- Students

### *Faculty Awards*

#### *Dr. Anirbid Sircar*

- Awarded the Best Paper Award for “Geothermal Investigation in Cambay Basin, Gujarat, India” in the 2<sup>nd</sup> Annual International Conference on Earth and Environmental Sciences, June 2015, Athens, Greece.
- Honored with ‘Indira Gandhi Siromani Award’ for leadership, development, innovation and industry interface in 2011.
- Guest of Honor at Engineers Wissen, 2015, Season 2, Adani Gas Ltd.

#### *Dr. Uttam Bhui*

- Awarded the 3<sup>rd</sup> Best Paper Award for “Waxy Crude Oils From Cambay Basin, India: A Rheological Study”, in the Third International Conference on Petroleum Science and Technology 2014 (ICPST-2014), November 2014, IIT-Madras, India

#### *Dr. Ashish Sarkar*

- Awarded the ‘Best Professor Award in Petroleum Engineering’, awarded by *Devang Mehta*

*Foundation* in 2013.

**Ms. Shreya Sahajpal**

- Awarded the Best Paper Award for “Geothermal Investigation in Cambay Basin, Gujarat, India” in the 2<sup>nd</sup> Annual International Conference on Earth and Environmental Sciences, June 2015, Athens, Greece.
- Invited Jury at Engineers Wissen, 2015, Season 2, Adani Gas Ltd.

**Student Awards**

- Saurabh Pancholi from SPT secured 3<sup>rd</sup> position in Green Campus Challenge in IIT Bombay.
- SPT students Tushar Goyal and Kirtesh Mantri secured 1<sup>st</sup> position in 'MUD CHALLENGE' organized for their research on Drilling Mud, during UPES SPE Fest 2015 by UPES SPE Student Chapter, Dehradun
- Piyush Sharma from SPT presented a poster for his research on “Mitigation of Fouling Using Helixchanger Heat Exchanger in Oil Refinery” and secured 1<sup>st</sup> position at OYCE 2014, ICT Mumbai, event of IChE
- SPT students, Varun Pal and Navneet Raj presented a poster for their research on Stimulating Carbonate Reservoir Using Viscoelastic Surfactant and secured 1<sup>st</sup> position at ISM Petrotech Annual Fest 2014-15
- SPT students, Siddharth Pamnoor, Charmi Agarwal and Vikhyat Siyag presented a paper for their research on “Game-Changing Options: A Study Focused on Drilling with Casing and Technology-Coupling Solutions” and secured 1<sup>st</sup> position at UPES-SPE Fest 2014 at University of Petroleum and Energy Studies, Dehradun.
- SPT student Parag Bandhopadhyay won SPE Best Paper Award in SPE World Championship for his research on “Simulation on Reservoir Energy”
- SPT Students Deep Joshi, Bhagya Bhardwaj and Harshil Saradva filed a patent for their research on “Pneumatically Operated Mechanical Bit using a Rotary Steerable System”. Patent Provisionally Accepted. Indian Patent Application No. is 3733/MUM/2013

**30. Seminars/Conferences/Workshops organized and the source of funding (national/International) with details of outstanding participants, if any**

Sr. No.	Name of the Workshop/Training Program/Seminar/Conference	Month & Year
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1	Field Workshop on Jaisalmer Basin to understand its Hydrocarbon Potential and Linkages with Pakistan, Association of Petroleum Geologist (APG-India)	10 <sup>th</sup> to 16 <sup>th</sup> Jan, 2010
2	SEG Student Chapter PDPU organized an Honorary Lecture South & East Asia with 'Shell' on "Geophysical Issues and Challenges in Southeast Asia with Emphasis on Malay Basin".	22 <sup>nd</sup> to 24 <sup>th</sup> Oct, 2010
3	SPE Student Chapter organized <b>PETRAL Workshop</b> for B. Tech. Petroleum Engineering Students	22 <sup>nd</sup> to 24 <sup>th</sup> Oct, 2010
4	Society of Petroleum Engineers SUBREGIONAL MEET- student paper contest	7 <sup>th</sup> Dec, 2010
5	First lecture of Professor Kartic Khilar Memorial Lecture Series by Professor H. Scott Fogler, Professor of Chemical Engineering, University of Michigan	13 <sup>th</sup> November, 2010
6	Shale Gas: A Futurestic fuel in collaboration with Oklahoma University	6 <sup>th</sup> and 7 <sup>th</sup> Jan, 2011
7	Second Professor Kartic Khilar Memorial Lecture Series by Dr. Dilip Kale, Director General, ONGC Energy Centre	24 <sup>th</sup> Nov, 2011
8	India-US Bilateral Shale Gas Conference: A Global Energy Alternative	19 <sup>th</sup> -20 <sup>th</sup> Mar, 2012
9	Rotary Drilling Well control Training program" in collaboration with South Asia consultancy	28 <sup>th</sup> to 31 <sup>st</sup> July, 2012
10	Third Lecture of Professor Kartic Khilar Memorial Lecture Series by Prof. Arun Nigavekar, Sr. Advisor and Trustee Science and Technology Park-Pune	22 <sup>nd</sup> November 2012
11	5 <sup>th</sup> Annual Convention of Petrotech Chapters	March, 2013
12	Geothermal Energy Initiative and Development Seminar	26 <sup>th</sup> July, 2013
13	Advancement of Petroleum Product Testing by Anton Paar	27 <sup>th</sup> and 28 <sup>th</sup> Sep, 2013
14	2 <sup>nd</sup> HR conclave on Sustainable Growth in Oil and Gas Industry	28 <sup>th</sup> Oct, 2013
15	Fourth Professor Kartic Khilar Memorial Lecture Series by Dr. Avinash Chandra, Former Director General, DGH	26 <sup>th</sup> November, 2013
16	Field Excursion on Jaisalmer Basin to understand its Geological Field Excursion & Field work in Jaisalmer Basin, Rajasthan, Association of Petroleum Geologist (APG-India)	4 <sup>th</sup> to 11 <sup>th</sup> Jan, 2014
17	1 <sup>st</sup> "Distinguished Speakers Lecture Series" by Mr. Amit	14 <sup>th</sup> March, 2014

	Khera, Partner at Mc. Kinsey, New Delhi, India	
18	Petroleum Conclave – Recent Trends in Upstream and Downstream,	28 <sup>th</sup> March, 2014
19	2 <sup>nd</sup> “Distinguished Speakers Lecture Series” by Mrs. Kiran Majumdar Shaw, CMD, Biocon Ltd and Mr. AmitavaSaha, Head –HR, Biocon, Ltd, Bengaluru.	18 <sup>th</sup> Aug, 2014
20	Log Interpretation workshop by IRS, Ahmedabad,	6 <sup>th</sup> September, 2014
21	Energy Workshop by Mr. Sanjib Baruah, Oil & Gas Consultant	11 <sup>th</sup> September, 2014
22	Petroleum Downstream Conclave	12 <sup>th</sup> September, 2014
23	Enerasia: CEO Roundtable, Shell-PDPU stall in Enerasia	26 <sup>th</sup> September, 2014
24	Enerasia: HR Roundtable, Shell-PDPU stall in Enerasia	27 <sup>th</sup> September, 2014
25	Enerasia: Shell-PDPU stall in Enerasia	26-27-28 <sup>th</sup> September, 2014
26	International Conference on Geothermal Energy: Exploration & Exploitation	1 <sup>st</sup> May, 2015
27	E-Conclave: The Paper Presentation Competition	9 <sup>th</sup> May, 2015
28	Workshop on Introduction to HTRI	31 <sup>st</sup> July, 2015

Name of the Workshop/Training Program/Seminar/Conference	Funding Agency	Month & Year	Outstanding Participants
International Conference on Geothermal Energy: Exploration & Exploitation	ONGC Energy Centre (OEC) & Saket Engineering <b>Fund:</b> Rs. 3,10,000	1 <sup>st</sup> May, 2015	Mr. Will Osborn, VP, Geothermal Resource Inc., UK; Mr. George Lockette, Geothermal Consultant, USA
India-US Bilateral Shale Gas Conference: A Global Energy Alternative	The Indo-US Science and Technology Forum (IUSSTF) <b>Fund:</b> Rs. 12,09,000	19 <sup>th</sup> -20 <sup>th</sup> Mar, 2012	Prof. S. Chandra Rai; Prof. Subhash Shah; Prof. Carl Sondergald
Shale Gas: A Futurestic fuel in collaboration with Oklahoma University	Oklahoma University <b>Fund:</b> Rs. 5,00,000	6 <sup>th</sup> and 7 <sup>th</sup> Jan, 2011	Prof. S. Chandra Rai; Mr. Dario Stimbergeur; Mr. Prem Sawhney,

			Deep Industries; Dr. Avinash Chandra, DGH
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*Details of lectures from Industry Experts*

1. **Mr. Rajan Desai, International Coordinator, HTRI, India**
  - How HTRI Xchanger Suite Educational can be useful to bridge Academia with Industry
2. **Dr. Subhash Shah, Ph.D., P.E., Stephenson Chair Professor, Mewbourne School of Petroleum and Geological Engineering, University of Oklahoma**
  - Drilling and Well Completion
  - Shale Gas Development
3. **Mr. Dilip Lote, AGM-HSE, Gujarat Gas**
  - Process Safety in Oil & Gas Industry
4. **Mr. Sanjib Baruah, Oil & Gas Consultant**
  - Petroleum Business Challenges and Building Organizational Capabilities
5. **Amitava Saha – Head HR, Biocon**
  - Global Market: Local Talent
6. **Amit Khara, Partner, Mckinsey, India**
  - India Towards Energy Independence 2030
7. **Dr. S.K. Biswas (retd. Director KDMIPE-ONGC)**
  - Oil & Gas Exploration
8. **Dr. Rajan Chokshi, Director of Training and Business Development, Weatherford**
  - Multiphase Flow Metering

**31. Code of ethics for research followed by the departments**

Code of ethics for research in SPT in followed based on the following Research Ethics Principles:

- Honesty
- SPT has adopted standard Plagiarism checking tools
- Objectivity & Integrity
- Respect for Intellectual Property: Patents, copyrights, and other forms of intellectual property are acknowledged and honoured

- Protection of confidential communications, such as papers or grants submitted for publication, personnel records, and trade or military secrets.
- Research to promote social benefit and well-being as a part social responsibility
- Ethical practices for research involving animals are followed
- The strengths and culture of the participants must be respected and utilized whenever possible
- Written permission must be obtained from the partners before beginning the research projects.
- Permission from all individual participants must be obtained prior to collecting personal information.
- The confidentiality of all individuals, if required must be respected
- All research results, analyses and interpretations must first be reviewed by the participants to ensure accuracy and avoid misunderstanding.
- The participants must be involved in making decisions about the publication and the distribution of all or parts of the research results

**Composition of Research Advisory Board Members (RAB)**

<b>Sr. No.</b>	<b>Name</b>	<b>Designation</b>	<b>Affiliation</b>
1.	Prof. Dr. H.B Raghavendra	Chairman	Pandit Deendayal Petroleum University
2.	Dr. A. V. Chainulu	Member	Department of Scientific & Industrial Research
3.	Shri R.K. Vij	Member	ONGC
4.	Dr. Chandra Rai	Member	Mewbourne School of Petroleum & Geological Engineering The University of Oklahoma
5.	Dr. Vijay K. Madiseti	Member	School of Electrical & Computer Engineering Georgia Tech
6.	Prof N.R. Dave	Invited Member	Pandit Deendayal Petroleum University
7.	Prof. VC Shah	Invited Member	Pandit Deendayal Petroleum University
8.	Dr. B. G. Patel	Member	Charotar University of Science & Technology (CHARUSAT)
9.	Dr. Akshai Agarwal	Member	Gujarat Technological University
10.	Dr. Bharat H. Desai	Member	Jawaharlal Nehru Chair in International Environment Law, JNU

11.	Sh. Kumarpal Desai	Member	An eminent Litterateur
12.	Dr. T Harinarayana	Member	GERMI
13.	Dr. Avinash Chandra	Member	Petrobiz Consultant ( P) Ltd
14.	Dr. D.M. Kale	Member	ONGC Energy Centre
15.	Dr. Indrajit Mukhopadhyay	Secretary	Pandit Deendayal Petroleum University

### 32. Student profile program-wise (2014-15)

Faculty of Engineering & Technology consists of SPT and SoT

Name of the Program	Applications Received at FoET Level	Selected in SPT	Enroled in SPT		Pass Percentage
			Male	Female	
B.Tech.	5830	130	124	06	81%
M.Tech.	540	21	21	00	100%
Ph.D.	82	2	1	01	N.A.

### 33. Diversity of students (2014-15)

Name of the program	% of the students from the same university	% of the students from the other university within state	% of the students from universities outside the state	% of the students from other countries
M.Tech.	8 %	74%	18 %	00
Ph.D	00	00	100 %	00

### 34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

Student Progression (2014-15)	Percentage against enrolled
NET	0
SET	0

GATE	8
GMAT	2

### 35. Student progression

The following table depicts Student Progression for all PDPU students in the last 4 years:

Name of the Programme	Student Progression	Year Wise (%)			
		2012	2013	2014	2015
M.Tech.	PG to PhD	NIL	NIL	NIL	12
	Employed through campus selection	NIL	NIL	NIL	15
	Other than campus recruitment	25	50	88	15
MBA	Employed through campus selection	92	98	97	80
	Other than campus recruitment	NIL	NIL	NIL	17.5
	Entrepreneurs	NIL	NIL	NIL	2.5
	PG to PhD	8	2	3	NIL
B.Tech.	UG to PG	4	3.07	1.3	
	Employed through campus selection	84.16	50.8	48	39.3
	Other than campus recruitment	NIL	NIL	NIL	2.8
B.A. (Hons.)/BBA (Hons.) / BCom. (Hons.)	UG to PG	NA	40	45	22
	Employed through campus selection	NA	40	35	30
	Other than campus recruitment	NA	4	8	6
	PG to MPhil	NIL	7	NIL	NIL
	PG to PhD	NIL	7	8	NIL

*Note: The above data is given as per available record.*

**36. Diversity of staff**

<b>Percentage of faculty who are graduates</b>	
From the same University	15%
From other Universities within the state	15%
From Universities from other states	70%
From Universities outside the country	Nil

**37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period**

Nil

**38. Present details of departmental infrastructural facilities with regard to (a) Library**

<b>Particulars</b>	<b>FoET</b>
Number of Titles	7899
Number of Volumes	20443
National Journals	62
International Journals	10
National E-Journals	0
International E-Journals	404
Database	7
CD`s	1347
Newspapers	14
Case Study	-
Others	-

**(b) Internet facilities for staff and students**

- Internet bandwidth: 250 mbps internet speed with 1GB band width speed is provided for entire university.
- Computers: 190

**(c) Total number of class rooms**

5

**(d) Class rooms with ICT facility**

5

**(e) Students' laboratories**

10

**(f) Research laboratories**

2

**39. List of doctoral, post-doctoral students and Research Associates**

**a) from the host institution/university :**

**b) from other institutions/universities :**

<b>Sr. No.</b>	<b>Name (other institutions/universities)</b>	<b>Guide</b>
1	Rajendra Dutt Saklani	B.G. Desai
2	Ravinder Ariketi	Uttam Bhui
3	Anand Gupta	Anirbid Sircar
4	R. Balasubramanian	P. Sivakumar & Anirbid Sircar
5	Saheli Sanyal	Uttam Bhui
6	Kriti Yadav	Anirbid Sircar
7	Vaishali Sharma	Anirbid Sircar
<b>Sr. No.</b>	<b>Name (same institutions/universities)</b>	<b>Guide</b>
1	Manan Shah	Anirbid Sircar

**40. Number of post graduate students getting financial assistance from the university**

<b>Year</b>	<b>Number of M.Tech Students</b>	<b>Number of Ph.D. Students</b>
2013	4	--
2014	4	
2015	6	1

**41. Was any need assessment exercise undertaken before the development of new program(s)? If so, highlight the methodology**

Yes, a systematic process is followed for designing and development of curriculum. The focus is on factoring in all those academic areas which would prepare our students for Industry, different walks of society and life. The curricula are developed and reviewed by SPT Boards of Studies in consultation with domain experts from industry and academia. After ratification from BoS, the proposed changes/developments are presented to Faculty of Engineering & Technology (FoET). The suggestions of FoET are presented to Academic Council which is a blend of senior academia and industry experts. The broad role of the Academic Council as clearly defined in the Act and the Statutes of PDPU as follows:

- Prescribes and sanctions the number of academic programs in the University and their intake for each academic year.
- Approves curricula and syllabi for the courses and studies in various schools of the University
- Formulates the rules and regulations for academic matters including the structure of student evaluation, conduct of examination and ratification of results;
- Reviews and monitor the standards of instruction, education, training and research carried on or imparted in the University;
- Approves recognition and equivalence of the certificates, diplomas and degrees of other Universities and Institutions from where PDPU intakes it's students;
- The new programs/curricula are formally approved by the Academic Council after detailed deliberations and the minutes of the meetings are duly recorded.

**42. Does the department obtain feedback from  
a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?**

The school Director regularly monitors the progress of each faculty and keeps an update of the status of each course. Feedback is taken from internal as well as external faculties on the curriculum design, student performance and attendance, question paper design and industry-academia collaboration. A continuous evaluation process is followed by each faculty and they keep interacting with industry experts to include recent trends and developments in the course curriculum. If any changes/updates are suggested by any faculty member, the Director reviews

the same. The proposed suggestions are presented to the Board of Studies (BoS). The Board of Studies (BoS) is headed by a Chairperson and has faculty members from each specialization, prominent external academics, and noted industry experts as members. The functions of Board of Studies are as follows:

1. To recommend courses of studies in the subject's
2. To prescribe the detailed syllabus for each subject with related scheme of examination and credits.
3. To recommend and prescribe, where necessary, books for study in the subject.
4. To recommend programs for research and extension services.
5. To recommend organization of seminars, refresher courses and workshops to the Dean of the concerned Faculty.
6. To exercise such other duties and functions as may be assigned by the Academic Council and the concerned Faculty.
7. To review critically the question papers of the Mid-sem, End-sem & Re-examinations and also such other modes of evaluations regularly by every semester with reference to the learning objectives & the scope of the prescribed syllabus.
8. To review feedbacks received from faculty members for updation/modification of course curriculum.

### **Present Members of the Board of Studies**

#### **Chairman**

Dr Anirbid Sircar (Director, School of Petroleum Technology, PDPU)

#### **Members**

- i. Dr. Uttam Bhui (Faculty, School of Petroleum Technology, PDPU)
- ii. Ms Shreya Sahajpal (Faculty, School of Petroleum Technology, PDPU)
- iii. Dr. Bhawanisingh Desai (Faculty, School of Petroleum Technology, PDPU)

#### **Experts**

- i. Prof T Kumar (Director NIT, Durgapur)
- ii. Prof R A Sengupta (Professor, Chemical Engineering, MS University, Baroda)
- iii. Prof A P Vyas (Principal, Saffrony Institute of Technology, Mehsana)
- iv. Mr. Dilip Lote, AGM, HSE, GSPC Gas
- v. Mr. Rajesh Pathak, DGM, Drilling, GSPC
- vi. Mr. Peeush K. Bishnoi, Director General, GSFC University

The BoS reviews the suggestions and gives recommendations to FoET. The FoET, in turn after due deliberation recommends the matter to PDPU Academic Council for deliberation and approval.

**b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?**

Formal and informal feedback is taken from students at the end of each semester. Recently a system of inserting parametric responses in e-mode has been introduced wherein confidentiality is maintained. Parameter wise aggregate feedback of a faculty is obtained in the form of a bar chart. The access to this information is available only to the faculty concerned. Student feedback is taken on a 15 point questionnaire blank, as under:

**Student Feedback Questionnaire**

- Q.1** The course objective, structure and evaluation procedure have been clearly mentioned.
- Q.2** The presentation were nicely structured and netted with practical examples to keep them lively and interesting.
- Q.3** The lecture covered the total range of the subject starting from fundamental principle to practical application which made understanding of the subject through.
- Q.4** The instructions have successful in generating curiosity and developing independent thinking.
- Q.5** The instructor has exhibited a substantial amount of knowledge on the course; attending her/his lectures has been a good learning experience.
- Q.6** The instructor has delivered lectures with authority and excellent communication skills; her/ his lectures have been interesting to attend.
- Q.7** The instructor has interacted in fruitful manner with the students; it has been easy to raise doubts and to get explanations.
- Q.8** The instructor has been reachable out of the class; (S)/he could give extra attention whenever required.
- Q.9** The instructor has been able to manage the class; decorum of the class has been nicely maintained.
- Q.10** The instructor has taken care regarding the learning needs of the students he has successfully used different teaching aids to make course interesting.
- Q.11** The instructor has been able to make successful use of class time and modulate the rate of instruction according the class response.

**Q.12** The instructor has acted as a motivator and his activities, inside and outside the class, has personally motivated me.

**Q.13** The examinations/quizzes/assignments have been designed to check up understanding of the subject; they were designed in a balanced manner comprises of fundamental, logical, descriptive and illustrative problems.

**Q.14** Evaluation procedure has been judiciously followed and productive feedback has been given which helped me to continuously determine my strength and weakness in the subject.

**Q.15** Overall experience in the course

*Grading of each question should be between 1 and 5, if it is excellent put 5 and if it is unacceptable put 1; proportionate out your answer in a scale of 1 to 5.*

The feedbacks provided by the students are shared with the faculties. Based on the feedback received the faculties try to bring changes in the teaching methodology.

**c. alumni and employers on the programs offered and how does the department utilize the feedback?**

The feedback from the alumni, employers and industries are regularly invited and the school takes them positively. Such suggestions are incorporated during Board of studies meeting for curriculum design.

**43. List the distinguished alumni of the department (maximum 10)**

Sr.No	Name of the Alumni	Program of study at the Institute	Present designation of the Alumni
1	Mr. Jatin Agarwal	M.Tech Petroleum	University of Tulsa
2	Mr. Parag Bandhopadhyay	B.Tech Petroleum	Occidental Petroleum Corporation
3	Mr. Hiren Patel	M.Tech Petroleum	AlMansoori Directional Drilling Services
4	Ms. Pullkita Rohilla	B.Tech Petroleum	Halliburton
5	Ms. Aritri Roy	B.Tech Petroleum	Schlumberger

6	Mr. Satish Kumar	B.Tech Petroleum	Schlumberger
7	Mr. Gaurav Negi	M.Tech Petroleum	Weatherford International
8	Ajeet Yadav	B.Tech Petroleum	Indian Army
9	Disha Desai	B.Tech Petroleum	Baker Hughes
10	Sandeep Bose	B.Tech Petroleum	ONGC

**44. Give details of student enrichment programs (special lectures/workshops/seminar) involving external experts.**

Sr. No.	Name of the Workshop/Training Program/Seminar/Conference	Month & Year
1	Field Workshop on Jaisalmer Basin to understand its Hydrocarbon Potential and Linkages with Pakistan, Association of Petroleum Geologist (APG-India)	10 <sup>th</sup> to 16 <sup>th</sup> Jan, 2010
2	SEG Student Chapter PDPU organized an Honorary Lecture South & East Asia with 'Shell' on "Geophysical Issues and Challenges in Southeast Asia with Emphasis on Malay Basin".	22 <sup>nd</sup> to 24 <sup>th</sup> Oct, 2010
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	Energy Alternative	
9	Rotary Drilling Well control Training program” in collaboration with South Asia consultancy	28 <sup>th</sup> to 31 <sup>st</sup> July, 2012
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24	Enerasia: HR Roundtable, Shell-PDPU stall in	26-27 <sup>th</sup> September,

	Enerasia	2014
25	Enerasia: Shell-PDPU stall in Enerasia	26-27-28 <sup>th</sup> September, 2014
26	International Conference on Geothermal Energy: Exploration & Exploitation	1 <sup>st</sup> May, 2015
27	E-Conclave: The Paper Presentation Competition	9 <sup>th</sup> May, 2015
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***Details of lectures from Industry Experts***

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2. **Dr. Subhash Shah, Ph.D., P.E., Stephenson Chair Professor, Mewbourne School of Petroleum and Geological Engineering, University of Oklahoma**
  - Drilling and Well Completion
  - Shale Gas Development
3. **Mr. Dilip Lote, AGM-HSE, Gujarat Gas**
  - Process Safety in Oil & Gas Industry
4. **Mr. Sanjib Baruah, Oil & Gas Consultant**
  - Petroleum Business Challenges and Building Organizational Capabilities
5. **Amitava Saha – Head HR, Biocon**
  - Global Market: Local Talent
6. **Amit Khera, Partner, Mckinsey, India**
  - India Towards Energy Independence 2030
7. **Dr. S.K. Biswas (retd. Director KDMIPE-ONGC)**
  - Oil & Gas Exploration
8. **Dr. Rajan Chokshi, Director of Training and Business Development, Weatherford**
  - Multiphase Flow Metering

**45. List the teaching methods adopted by the faculty for different programs.**

- Explanation in classroom with real life examples and case studies
- Showing course related videos in the classroom

- Project based learning
- Assignments
- Simulators for solving numerical examples.
- Supplementary Video lectures/Animations
- Field visits complimenting theory lectures
- Quizzes
- Language lab assignments
- Student Seminars
- Laboratory projects
- Expert Lectures by Industry Experts from India & Abroad

**46. How does the department ensure that program objectives are constantly met and learning outcomes are monitored by the faculty for different programs?**

To assess the academic performance of students, a continuous evaluation system is followed. At the end of each semester, each student is awarded a letter grade in each of his courses by the concerned instructor, based on his performance in mid-semester examination, end-semester examination, quizzes, tests, assignments, tutorials, laboratory work, seminars, projects, etc, and also on regularity of attendance in classes. The assessment in a laboratory course is based on turn-to-turn supervision of the student's work, performance in viva voce examinations, and group discussions, the quality of work as prescribed through laboratory journals and an end-semester test that contains an experiment and/ or a written examination.

**47. Highlight the participation of students and faculty in extension activities**

**Faculty participation in extension activities (2014-15)**

ACTIVITY	FACULTY
Website Coordinator	Ms. Shreya Sahajpal
Academic coordinator for undergraduate and postgraduate students and Awareness programs for student admission	Dr. Anirbid Sircar - Patron Dr. Uttam Bhui - Upstream

	Ms. Shreya Sahajpal - Downstream
Preparation and update of NAAC document till it is submitted and reviewed	Ms. Shreya Sahajpal - Coordinator Ms. Vaishali Sharma – Faculty Support
SPT Time Table Coordinator	Dr. Anirbid Sircar Ms. Shreya Sahajpal Mr. Rangunathan Balasubramanian
SPT Laboratory Coordinator	Upstream – Ms. Vaishali Sharma/Mr. Maunish Shah Downstream – Prof. G S Negi
SPT Library Coordinator	Mr. Rangunathan Balasubramanian
Preparation and Updating of Centre of Excellence (COE) document till it is submitted and reviewed	Ms. Shreya Sahajpal
Preparation and Updating of ISO document till it is submitted and reviewed	Mr. Rangunathan Balasubramanian Ms. Shreya Sahajpal
Student Placement Activities	Dr. Anirbid Sircar Ms. Shreya Sahajpal
Kartik Khilar Memorial Lecture	Dr. Ashish Sarkar
Research activities at Centre of Excellence for Geothermal Energy (CEGE)	Dr. Anirbid Sircar Ms. Shreya Sahajpal Mr. Manan Shah
Development of Drilling & Stimulation Lab	Mr. Maunish Shah (Coordinator) Prof. G S Negi Prof. R K Jain Dr. A Sircar
Panel for Reviewing student papers for National & International Conferences for funding	Dr. Uttam Bhui Dr. N Madhavan Dr. Bhawanisingh Desai Ms. Shreya Sahajpal
Student Feedback & Attendance	Ms. Shreya Sahajpal Ms. Vaishali Sharma
SPT Examination Coordinator	Dr. Uttam Bhui
SPT coordinator for organizing Conclaves/Workshops/Conferences/Distinguished Lectures/Student Chapter Activities (Includes updating of details for all the past events organized by SPT)	Ms. Shreya Sahajpal Mr. Manan Shah

Coordinator for Shell & Petroskills courses on Reservoir Simulation and Offshore Drilling	Prof. S S P Singh Mr. Maunish Shah
SPT Research Coordinator (Includes updating of database)	Ms. Shreya Sahajpal
SPT Mirror (Editor/Co-Editor)	Ms. Vaishali Sharma Mr. Rangunathan Balasubramanian
SPT Student Chapters	Ms. Shreya Sahajpal Mr. Rangunathan Balasubramanian
SPT Alumni Coordinator	Ms. Shreya Sahajpal

**Faculties involved in extension activities:**

Sr. No.	Name of the Workshop/Training Program/Seminar/Conference	Faculties Involved
1	Field Workshop on Jaisalmer Basin to understand its Hydrocarbon Potential and Linkages with Pakistan, Association of Petroleum Geologist (APG-India)	Dr. Bhawanisingh Desai
2	SEG Student Chapter PDPU organized an Honorary Lecture South & East Asia with 'Shell' on "Geophysical Issues and Challenges in Southeast Asia with Emphasis on Malay Basin".	Dr. Uttam Bhui
3	SPE Student Chapter organized <b>PETRAL Workshop</b> for B. Tech. Petroleum Engineering Students	Dr. Bhawanisingh Desai
4	Society of Petroleum Engineers SUBREGIONAL MEET-student paper contest	Dr. Bhawanisingh Desai
5	First lecture of Professor Kartic Khilar Memorial Lecture Series by Professor H. Scott Fogler, Professor of Chemical Engineering, University of Michigan	Dr. T P Singh Dr. Ajit Shukla
6	Shale Gas: A Futurestic fuel in collaboration with Oklahoma University	Dr. Anirbid Sircar Dr. Chandra Rai
7	Second Professor Kartic Khilar Memorial Lecture Series by Dr. Dilip Kale, Director General, ONGC Energy Centre	Dr. Anirbid Sircar Dr. G P Karmakar
8	India-US Bilateral Shale Gas Conference: A Global Energy Alternative	Dr. Anirbid Sircar Dr. Chandra Rai
9	Rotary Drilling Well control Training program in collaboration with South Asia consultancy	Dr. G P Karmakar
10	Third Lecture of Professor Kartic Khilar Memorial Lecture	Dr. Anirbid Sircar

	Series by Prof. Arun Nigavekar, Sr. Advisor and Trustee Science and Technology Park-Pune	
11	5 <sup>th</sup> Annual Convention of Petrotech Chapters	Dr. Bhawanisingh Desai
12	Geothermal Energy Initiative and Development Seminar	Dr. B K Behera
13	Advancement of Petroleum Product Testing by Anton Paar	Dr. Anirbid Sircar Dr. Uttam Bhui
14	2 <sup>nd</sup> HR conclave on Sustainable Growth in Oil and Gas Industry	Dr. Anirbid Sircar
15	Fourth Professor KarticKhilar Memorial Lecture Series by Dr. Avinash Chandra, Former Director General, DGH	Dr. Anirbid Sircar Dr. Ashish Sarkar
16	Field Excursion to Pavagadh, Association of Petroleum Geologist (APG) Student Chapter	Mr. Vinay Babu Mr. Tushar Sharma
17	1 <sup>st</sup> “Distinguished Speakers Lecture Series” by Mr. Amit Khera, Partner at Mc. Kinsey, New Delhi, India	Mr. Anshul Gupta
18	Petroleum Conclave – Recent Trends in Upstream and Downstream,	Mr. Vinay Babu Mr. Sanjiv Kumar
19	2 <sup>nd</sup> “Distinguished Speakers Lecture Series” by Mrs. Kiran Majumdar Shaw, CMD, Biocon Ltd and Mr. AmitavaSaha, Head –HR, Biocon, Ltd, Bengaluru.	Mr. Anshul Gupta Ms. Shreya Sahajpal
20	Log Interpretation workshop by IRS, Ahmedabad,	Dr. Uttam Bhui Dr. Ashish Sarkar
21	Energy Workshop by Mr. Sanjib Baruah, Oil & Gas Consultant	Mr. Sanjiv Kumar
22	Petroleum Downstream Conclave	Ms. Shreya Sahajpal Mr. Anshul Gupta
23	Enerasia: CEO Roundtable, Shell-PDPU stall in Enerasia	Ms. Shreya Sahajpal Mr. Anshul Gupta Dr. Anirbid Sircar
24	Enerasia: HR Roundtable, Shell-PDPU stall in Enerasia	Ms. Shreya Sahajpal Dr. Anirbid Sircar
25	Enerasia: Shell-PDPU stall in Enerasia	Ms. Shreya Sahajpal Dr. Anirbid Sircar
26	International Conference on Geothermal Energy: Exploration & Exploitation	Ms. Shreya Sahajpal
27	E-Conclave: The Paper Presentation Competition	Mr. R Balasubramanian

28	Workshop on Introduction to HTRI	Ms. Shreya Sahajpal
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**48. Give details of “beyond syllabus scholarly activities” of the department.**

SPT believes in overall development of students beyond the scope of syllabus. SPT has various students clubs that support and facilitate beyond syllabus scholarly activities initiatives taken by students. The clubs operate as student led initiatives supported by respective subject faculty to organize discussions, workshops, debates, presentations and other exercises purposefully selecting topics and subjects beyond the syllabus.

SPT organizes various conclaves/conferences/seminars/roundtables that provide industry connect to the students. These events help students to develop holistically and keep them updated about the recent trends and advances in the industry. The industry professionals interact with the students and faculty on contemporary professional, industrial and academic issues. Students are encouraged to prepare and submit research papers and projects at National and International seminars and conferences.

SPT also has professional bodies and student chapters which are run by students under the guidance of faculty mentors. The student chapters organize training programs, workshops and field visits for students.

In addition to students clubs and chapters, SPT has introduced man-making and value added courses for overall personality development of students. Courses like Introduction to Research Methodology, Seminar, Group Assignment & Presentation, Earth Science & Hydrocarbon Exploration Field Work, Rural Internship, Industrial Training and Industrial Orientation are introduced to students for improving their orator skills, presentation skills and group dynamics. The main objective of these programs is to expose students to grassroots realities. This helps in the holistic development of a student and also makes them aware of the harsh climates and adversities they might be facing on the job. The idea behind these programs is to develop a sensitized workforce in energy sector who are socially concerned and willing to positively contribute to the society. It also helps to enhance other skills of students. i.e. observation skill, analytical skill, decision making skill, communication skill.

SPT through Office of Research & Sponsored Programs encourages and funds students to take up research projects in their area and also submit proposals to different funding agencies. Several training programs for the students are arranged by SPT to add value to their knowledge pool.

### **Professional Bodies/Student Chapters at SPT**

#### **Society of Petroleum Engineers (PDPU SPE Chapter)**

The Society of Petroleum Engineers (SPE) is a not-for-profit professional organization whose mission is to collect, disseminate, and exchange technical knowledge concerning the exploration, development and production of oil and gas resources and related technologies for the public benefit and to provide opportunities for professionals to enhance their technical and professional competence.

PDPU SPE Student Chapter was founded in 2007 and since its inception, the establishment has striven expeditiously to achieve the excellence and renown that it carries today. PDPU SPE Student Chapter has provided exposure to students in the oil and gas industry through guest lectures, panel discussions, exhibitions and workshops. They have hosted lecturers discussing “Challenges of Reservoir Studies”, “Sand Control Completion” and “Exploration to Exploitation”. PDPU SPE Chapter bears a plethora of events to its credit that were appreciated by the students and allied professionals who were part of the same.

Serving as a token of distinguished performance and appreciation, PDPU SPE Student Chapter stands the only SPE student chapter in India to have bagged five Gold Standard Awards (four consecutive) from SPE International for five times. The Gold Standard is a benchmark for exceptional performance in categories of membership, planning, education, professionalism, service, support and fundraising.

Dr. Bhawanisingh Desai was the faculty sponsor of SPE-PDPU Student Chapter from 2007-2015. The present faculty sponsor of this Chapter is Mr. Raghunatham Balasubramanian.

#### ***Major Events***

- Workshop on Well Construction Engineering and Decision Space Well Engineering Software by Robello Samuels, Chief Technical Advisor to Haliburton on Drilling
- Workshop for hands-on Training on Petrel G&G and Reservoir Simulation Software
- Guest Lecture on Multiphase Flow Metering by Dr. Rajan Chokshi of Weatherford.
- SPE Weekend and Petrika organized for 1<sup>st</sup> year students to provide orientation towards the oil and gas industries through quizzes and interactive sessions.

#### **SPG/EAGE/SEG PDPU CHAPTER**

Society of Petroleum Geophysicists/European Association of Geoscientists and Engineers/  
Society of Exploration Geophysicists

SPG, EAGE and SEG chapters of PDPU work in collaboration to facilitate the exchange of technical ideas and practical experience. They have been the names of great renown and have

been working extensively for the best interests of its student members. They have striven to acquire the excellence with which they are associated invariably when it comes to organising events and executing them efficiently.

The university chapters of these international societies help students connect to industry professionals affiliated to the field of Geophysics and Petrophysics applied to the petroleum industry. They also serve the geosciences community with events aimed at disseminating information and providing networking opportunities, all with the purpose of advancing geophysics as a study area for aspiring engineers of tomorrow.

The faculty mentor of this chapter is Dr. Uttam Kr. Bhui who provides valuable guidance for directing chapter activities.

### ***Major Events***

- Created SEG section in Library so that students can get updated with latest issues of magazines and journal published by SEG.
- Conducted a Well Log Interpretation Workshop which hosted by professionals from the Well Logging Services of ONGC.
- Organized events like Find the Faults and a one of a kind Well Log Interpretation Competition in the annual technical meet “Urjauday-2014” along with SPE, AAPG and Petrotech Chapters.
- The new initiative this year “Learning Thursdays”, which is a weekly newsletter to update students about various happenings in the industry is a huge success and has been applauded by the whole student community.

### **PETROTECH PDPU CHAPTER**

The Petrotech chapter, being highly dedicated towards achieving excellence, has organised seminars, conventions and several other competitions where students can come up and showcase their talents. It is because of their industrious and sincere efforts that they are trusted and eulogised extensively as an important component of the School of Petroleum Technology.

Weekly discussion sessions on various matters of practical importance relating to the Energy sector are also regularly organized by Petrotech. The chapter successful hosted the Petrotech Students Meet in 2013 in PDPU which was attended by all other student chapters in India. This chapter was awarded the best student chapter of Petrotech award in 2012.

Dr. Bhawanisingh Desai was the faculty mentor of Petrotech Student Chapter from 2009-2015. The present faculty mentor of this Chapter is Mr. Raghunatham Balasubramanian.

### **AAPG PDPU CHAPTER**

American Association Petroleum Geologists PDPU Chapter was founded in 2013. Despite being relatively new of all the extant student chapters in PDPU, AAPG has earned considerable encomium from students and faculty members. They are the fastest emerging chapter and have been creating benchmarks for other student chapters to match along.

#### ***Major Events***

- They conducted a hugely successful geological field trip to the Pavagadh Archaeological Park to study the geological formations in Pavagadh Hills.
- Geology Quiz was organized for all students which saw students racking their brains on various questions relating to the petroleum industry.

Dr. Vinay Babu was the faculty mentor of AAPG PDPU CHAPTER Student Chapter from 2013-2014. The present faculty mentor of this Chapter is Ms. Shreya Sahajpal.

#### **Student Achievements (Beyond Syllabus Scholarly Activities)**

- SPT Students, Deep Joshi, Bhagya Bhardwaj and Harshil Saradva, filed a patent on “**Pneumatically Operated Mechanical Bit using a Rotary Steerable System**”. The patent has been provisionally accepted. Indian Patent Application No. is 3733/MUM/2013. This is a unique work of its kind to improve the efficiency of the rotary system. This patent is a significant contribution to the prevalent Drilling technologies.
- The Society of Petroleum Engineering (SPE) student Chapter at PDPU achieved Prestigious International “**GOLD STANDARD AWARD**” from SPE-International for the Year **2015**
- Prakhar Sarkar from SPT has been awarded the SPE STAR Scholarship award for the year 2014-15.
- SPT Team consisting of Sudarsan Sai, Abhishek Kumar, Yatharth Shukla secured 2<sup>nd</sup> position in Amazing Champions of Energy Session 3 – An event organized by CAIRN Energy.
- Saurabh Pancholi from SPT secured 3<sup>rd</sup> position in Green Campus Challenge in IIT Bombay Tech Fest.
- Radhika Joshi from SPT participated in 8<sup>th</sup> International Petroleum Technology Conference (IPTC) Education Week 2014, at Kuala Lumpur Convention Centre, Malaysia

- SPT Team consisting of Naman Shah, Manan Parmar, Jaimin Prajapati secured 5<sup>th</sup> position and won a prize of Rs. 10,000 in Amazing Champions of Energy Session 2 – An event organized by CAIRN Energy.
- SPT students Neil Maurya, Kashyap Chaudhary and Gogineni Sudarsan Sai represented PDPU for the e.Xplore program 2014-15 for Entrepreneurship in Israel.
- SPT Team consisting of Gogineni Sudarsan Sai, Prakhar Sarkar, Abhishek Kumar Singh, Darshan Sharma and Pranshu Praleya represented SPE PDPU CHAPTER in SPE PETROBOWL 2015 at Kuala Lumpur, Malaysia.
- SPT students Tushar Goyal and Kirtesh Mantri secured 1<sup>st</sup> position in 'MUD CHALLENGE' organized during UPES SPE Fest 2015 by UPES SPE Student Chapter, Dehradun
- SPT students Shivam Pandey successfully completed NCC camp & exam for B certificate held in Ahmedabad, August 2014.
- SPT students Tushar Goyal and Kirtesh Mantri secured 1<sup>st</sup> position in 'SYMPOSIUM' competition organized during UPES SPE Fest 2015 by UPES SPE Student Chapter, Dehradun
- Shivam Pandey and Hitisha Dadlani from SPT presented and published a paper titled “BIONIC LEAF- Using Bacteria to Convert Solar Energy Directly into Liquid Fuel” in International Conference on Renewable Energy for Sustainable Environment (RESE-2015), at MCET, Coimbatore, Tamil Nadu
- Trisha Mishra, Shivani Garg and Prakhar Sarkar presented a paper on “Use of Heat Pump for Low Enthalpy Reservoirs”, International Conference on Geothermal Energy: Exploration & Exploitation, 2015, PDPU
- Parth Chauhan from SPT presented a paper on “Low salinity Waterflooding” at UPES, Dehradun Technical Fest 2015
- Atul Khatri & Parth Chauhan from SPT published a paper on "Hydrocarbon Prospectivity of Indian Sedimentary Basins-A Review" in International Journal of Scientific Research Indian (IJSR), Vol. 4, Issue 2, February 2015, ISSN No 2277 – 8179
- SPT students Akash Srivastava, Riddhiman Sherlekar, Sai Sudarshan presented a paper on “Geological Aspects of Enhanced Oil Recovery” at Cognizance 2015, IIT Roorkee.
- Akash Srivastava from SPT presented a paper on “Solar Pond” at NU-Tech 2015, at Nirma University.

- Navneet Raj and Varun Pal from SPT presented a paper on “Use of Nanoparticles to Enhance the Efficiency of HCl Based Stimulating Fluids” in 8<sup>th</sup> International Petroleum Technology Conference 2014, Kuala Lumpur Convention Centre.
- Piyush Sharma from SPT presented a poster and secured 1<sup>st</sup> position for poster titled, “Mitigation of Fouling Using Helixchanger Heat Exchanger in Oil Refinery” in Poster Presentation Competition at OYCE 2014, ICT Mumbai National Technical Poster Presentation, IChE
- SPT students, Varun Pal and Navneet Raj presented a poster and secured 1<sup>st</sup> position for poster titled “Stimulating Carbonate Reservoir Using Viscoelastic Surfactant” at ISM Petrotech Annual Fest 2014-15
- SPT students, Siddharth Pamnoor, Charmi Agarwal and Vikhyat Siyag presented a paper and secured 1<sup>st</sup> position for paper titled “Game-Changing Options: A Study Focused on Drilling with Casing and Technology-Coupling Solutions” at UPES-SPE Fest 2014 held at University of Petroleum and Energy Studies, Dehradun.
- SPT students, Abhishek Kumar Singh, Prakhar Sarkar and Darshan Sharma presented a paper and secured 3<sup>rd</sup> position for paper titled “Characterization of Waxy crude of Bakrol and Develop the Rheological Properties” in Third International Conference on Petroleum Science and Technology 2014 (ICPST-2014), IIT Madras, India
- Gogineni Sudarsan Sai, Abhishek Kumar Singh, and Mr. Prem Shah from SPT presented paper on “Gas hydrates: Frozen Natural Gas Repository” in International Conference on Chemical Industry (ICCI) 2014, PDP
- Ashish Agarwal & Kiran Chadayamuri from SPT presented a paper and secured 3<sup>rd</sup> position for paper titled “Global Oil Prices: A Chapter in Indian Economy” in Abhivyakti, Urjauday 2014 at PDP
- Gogineni Sudarsan Sai from SPT got selected in the prestigious Student Leadership Symposium (SLS) sponsored by Chevron to be held at SEG Annual Conference 17-18, October, 2015
- Yatharth Shukla, Prem Shah and Gogineni Sudarsan Sai from SPT presented paper on “Strategies to Mitigate Oil spill on Drilling Site” in Third International Conference on Petroleum Science and Technology 2014 at IIT Madras, India

### **Student Activities (Beyond Syllabus Scholarly Activities)**

#### **CRETUS - The Robotics Club**

- Work with the objective to study the latest technological developments in automation and robotics and fabricate miniature working models. To create a forum for interaction about hardware, electronics, fabrication and programming for robotics. To develop grass root ideas about robotics usage and implementation in the Energy and the Industrial sector.

### **Entrepreneurship Cell**

- An entrepreneur can be regarded as a person who has the initiative skill and motivation to set up a business or enterprise of his own and who always look for high achievements. He/she is the catalyst for social change and works for the common good.
- It is a firm belief at the Entrepreneurship Cell that original thoughts and radical ideas take shape in young minds. Students are the greatest natural resource and the Cell intends to nurture them and provide them with opportunities for excellence. It intends to pierce the corporate veil, to let the budding entrepreneurs get a feel of how the corporate world works.

### **Mind Ripple – the Quizzing Club**

- A quiz is a form of mind sport. In today's competitive world, keeping yourself updated is very important. Quiz is one of the best place for exchange of knowledge. In PDPU the quizzing club – Mind Ripple works with the objective of provide a platform for the students to develop interest in the quiz and related intellectual activities.

### **IYCN – G**

- The Indian Youth Climate Network (IYCN) is an association uniting Indian youth who are concerned about environment issues & climate change. PDPU Students formed an organization to represent IYCN, for awareness of climate change in campus.

### **Jharokha – The Literary Club of PDPU**

- The main objective of JHAROKHA is to discover the untouched shores of the sea of creativity within students of PDPU like Creative writing, Poem recitation, Designing, Debate, out of box thinking, etc.

### **Rang – The Fine Arts Club of PDPU**

- “Rang” aims to inspire young minds to have creative and artistic view and provide a strong base to showcase their talents, to make the students familiar to most types of Artistic methods used to make greeting cards, paint T-shirts and make Recycled

Goods and to conduct workshops and Exhibitions and help students to have monetary gain from the same.

#### **Soul Pepper – The Dramatics and Dance Club of PDPU**

- The Soul Pepper is said to be the most active club in PDPU. The Students work all throughout the year for some or the other activity. The Intra Events come up and then the inter college competitions all round the country. The club aims at developing the theater and performing arts culture in the university.

#### **VGA – Video Graphics Association, PDPU**

- The VGA is one of the oldest student organizations in PDPU that works with an objective to create a knowledge base and a platform for students to enhance and explore their creativity, ideas, messages, feelings, etc. The club develops short films. Also the club helps all other student organization in creating videos or covering the events.

#### **CII – YI Net**

- Young Indians (Yi) is an integral part of the Confederation of Indian Industry (CII), India's premier business association. CII initiated Yi with an objective of creating a platform for young Indians to realize the dream of a developed nation. The PDPU Yi net is formed to connect with other institutions and the industry through CII.
- Yi Net at PDPU is one of the active student organizations in PDPU. For the academic year 2012 – 13, Yi PDPU Net was awarded as Best Yi Net in Gujarat by CII.

#### **Sorriso – The Photography Club**

- The aim of Photography club of PDPU is to increase skills, knowledge and ability in craft and art of photography in members of the club and also to cover all the events that take place in the University. Also the club provides the platform to all its members for showing their creativity by conducting various competitions.

#### **Speculum – The Psychology Club of PDPU**

- The Psych Club provides opportunities for students who are interested in psychology to meet people with similar interests and to gain knowledge and experience in both the science and practice of psychology. By doing so, we are creating leaders for the future who have a psychological understanding of society and giving students valuable career development experience.

**49. State whether the program/ department is accredited/ graded by other agencies? If yes, give details.**

## **UGC**

This University has been established by an Act of the Gujarat Legislature, on 4<sup>th</sup> April, 2007. The University is recognized by UGC vide F.No. 9-17/2008 (CPP-L) dated 9th November, 2009. Moreover, the program is well recognized by the industry in terms of relevance, quality and earnestness to cater to the future.

## **SIRO**

Government of India, Ministry of Science and Technology, Department of Scientific and Industrial Research has accord recognition to Pandit Deendayal Petroleum University (PDP), Gandhinagar as Scientific and Industrial Research Organization (SIRO). On receiving this recognition PDP is entitled to all such administrative support from the Ministry of Science and Technology (DSIR) as may be required on all issues to promote or encourage scientific research activities. Also the University will be entitled to avail the custom/excise duty exemption on the import of equipments, instruments, spares thereof, consumables etc. DSIR, a Government of India body that undertakes promotion of research and transfer of technology to India, carries out thorough evaluation of the R&D unit and ensures compliance with all the Government of India regulations before awarding renewals.

The recognition and duty waiver is awarded every three years.

As an extension to SIRO, Government of India, Ministry of Finance, Department of Revenue (Central Board of Direct Taxes), 35(1)(ii) Income Tax, has been granted to PDP under which PDP will get 175% income tax waiver on donations for scientific research. PDP is the first university in India to receive such an approval.

## **ISO 9001:2008**

PDP has got ISO 9001:2008 certifications for Design, Development & Delivery of Higher Education Programs & Training

## **Association of Indian Universities**

PDP has been granted membership by the Association of Indian Universities. PDP for strategic planning process including guidelines for assessing on-campus international partnership capacity and developing practical strategic plans for partnership activities in India have planned a collaboration with The International Academic Partnership Program (IAPP), originally funded

by the U.S. Department of Education's Fund for the Improvement of Postsecondary Education (FIPSE), is a major initiative of IIE's Center for International Partnerships in Higher Education.

**50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.**

SPT contributes in generating new knowledge both basic and applied through various channels, such as Research & Consultancy, Expert Talks, Industry-Academia interaction, Skill Development programs, Trainings & Internships etc.

- SPT organizes Expert Lectures, Conclaves, Seminars and Workshops and also undertakes Projects in collaboration with industry. This helps the students in getting an update on the advances in the industry and the current practices. These sessions add value to the class room teaching and the students are exposed to the applications of the concepts taught in theory. Topics related to course curriculum where students need a better clarity are addressed in expert lectures by industry stalwarts. Organizing Conclaves, Seminars, Workshops for students, faculties, industry participants while keeping pace with recent trends and technologies in Oil and Gas sector makes the students and faculties aware of practices followed in industry and helps them in interacting and networking with professionals from industry and academics. This not only helps in overall development of students as well faculty members, but also makes the students aware of industry expectations, which in turn helps in making them not only employable but deployable as well. These sessions also helps the students as well as faculty members to gather and generate new knowledge.
- SPT faculty members take up joint research projects in collaboration with Industry. To name a few, currently Faculty members and B.Tech students from SPT are working on collaborative projects with companies like GSPC Gas, Shell Hazira LNG, etc. this helps the students in getting on-the job training and understanding.
- Special lectures of one week each are conducted every year by Petroskills/Shell Total on (a) Offshore Drilling (b) Reservoir Simulation. These lectures orient the students in acquiring knowledge on practical applications of theoretical concepts.
- SPT organizes Mock Interviews, Group discussions, seminars, Interaction programs for the students. Faculty members also conduct counseling sessions for students and also help them in designing and updating their resumes. In order to augment this, a credit course on Seminar is added in the curriculum in consultation with Board of Studies. The same has been ratified

by FoET and Academic council. This course also helps in enhancing the overall personality development skills of students and in improving their presentation and orator skills.

- SPT also conducts programs like Rural Internship, Industrial Orientation, Industrial Training and International Exposure Programs for students. The main objective of these programs is to expose students to grassroots realities, and also makes them aware of the harsh climates and adversities they might be facing on the job. The idea behind this is to develop a sensitized workforce in energy sector who are socially concerned and willing to positively contribute to the society. It also exposes students to various operations of oil and gas industry for enhancing their understanding about application of science and engineering principles studied in class.
- SPT also encourages students and faculties to carry out research projects and publish/present research papers at National & International levels. Attending conferences/workshops/seminars and training programs also helps faculties and students in acquiring new knowledge through networking with researchers, industry professionals and academicians. Students showing exceptional potential are also provided with Research Funds from the university, in order to procure lab equipments, conduct studies and attending trainings.
- The school has channels like Office of Research & Sponsored Projects (ORSP) that offer financial back up for the projects and ideas of students that are really worth. These types of programs help in adding new data and knowledge to the existing repository. This also creates a healthy competition among students and also encourages them to strive to be better. To highlight, SPT Students from 2013 batch – Deep Joshi, Bhagya Bhardwaj and Harshil Saradva have filed a patent on **“Pneumatically Operated Mechanical Bit using a Rotary Steerable System”**. The patent has been provisionally accepted (Indian Patent Application No. is 3733/MUM/2013). This is a unique work of its kind to improve the efficiency of the rotary system. This patent is a significant contribution to the prevalent Drilling technologies.
- SPT has signed some quality MoUs with leading industries and academic institutions on national and international level. SPT is also working in collaboration with many other companies and industrial bodies for student benefit.
  - Hazira LNG Pvt. Ltd., Ahmedabad for Shell Total Chair Professor ship
  - Institute of Seismology Research, Raisan for establishing academic & research collaboration and to share infrastructure facility/labs
  - Cairn India Ltd., Gurgaon for cooperation, collaboration, faculty development, reciprocal facilitation, guest lectures, internships, projects etc.

- GSPC Gas for joint B.Tech student projects, internships and faculty development programs.
  - Shell Hazira LNG for joint B.Tech student project
  - Joint stall by Shell Hazira LNG-PDPU was set up in ENERASIA, 2014 (A pre-vibrant Gujarat event), where students from Downstream worked in collaboration with Shell Hazira LNG team. PDPU is also working in collaboration with Shell Hazira LNG for setting up a stall in Vibrant Gujarat, 2015.
- SPT has signed MoUs with renowned international institutes and universities, such as University of Tulsa, Georgia Institute of Technology, University of Houston. Students adapt to the practical challenges they encounter by finding mechanisms to help them cope with their new surroundings. The practices followed in these institutes, are adopted by students of SPT, during student exchange programs, which in turn helps them in gathering new knowledge and imbibes values in them.
- *University of Tulsa*
    - ~ Consultation on curriculum and course content
    - ~ Opportunities for Joint research
    - ~ Exchange of undergraduate students
    - ~ Faculty participation in seminars and academic meetings
    - ~ Exchange of academic materials, publications and other information
    - ~ Joint quality assurance and benchmarking
  - *Georgia Institute of Technology*
    - ~ Opportunities for Joint research and educational activities
    - ~ Exchange of undergraduate students
    - ~ Joint research projects completed
    - ~ Students exchange program completed successfully
  - *University of Houston*
    - ~ Opportunities for Joint research
    - ~ Exchange of undergraduate students
    - ~ Students internship program completed successfully
- Faculty members of SPT also do consultancy in their domain of expertise. This helps in acquiring live data, which is used for student research projects. Enthusiastic students are also given an opportunity to assist and learn through active participation in such projects. Some of the data are also used in tutorial sessions in courses, to give hand-on experience to students, with prior permission from the concerned authority.

- Sponsored research projects taken up by faculties also help in generating new knowledge base and creating integrated inter-disciplinary data repository.

**51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.**

**Strengths**

- SPT has a good mix of earth scientists, upstream engineers and downstream engineers which caters the needs of the entire Oil & Gas value chain
- Research groups that bring in projects from various funding agencies, which helps in adding funds and data to the existing repository
- State-of-the-art laboratories with sophisticated equipments, existing and upcoming
- Regular industry-academia interaction for knowledge and technology exchange
- SPT offers a program of Rural Internship, to strengthen understanding on concepts of rural development with specific reference to the Indian context.
- Industrial Orientation & Industrial Training helps in skill development and holistic development of a student and also makes them aware of the challenges they might be facing on the job.
- Wi-Fi connected classrooms with multimedia facilities for interactive teaching and learning
- Providing Value based and Man-making courses for students
- Understanding and encouraging faculties who counsel students and motivate them for overall development

**Weaknesses**

- To get experienced core Petroleum Engineers with doctorate degree
- Research Labs and Library are not accessible after office hours
- Limited skill development trainings for the supporting staff
- Migration of faculties to other institutes/industries
- To get new faculties with prior experience in industry as well as academics

**Opportunities**

- Constant encouragement and support from Govt. of Gujarat for student and faculty research and industrial exposure
- Campus is well connected and placed in the Oil & Gas hub of the nation

- iii. MoUs with reputed National and International Universities, Industries and Research Organizations
- iv. Collaboration and recognition for research & development from Ministry of New & Renewable Energy (MNRE), a nodal Ministry of the Government of India for all matters relating to new and renewable energy
- v. Collaboration with ONGC Energy Centre (OEC). OEC functions under the aegis of the ONGC Energy Centre Trust and is a research and technology development centre, engaged in research of various renewable and clean energy options, specifically focusing on projects which have the potential to make an impact on India's energy scenario
- vi. Various funding agencies provide funds for many on-going research projects
- vii. SPT provides opportunities to students through its research arm, Office of Research & Sponsored Programs (ORSP), for research, publication, presenting papers and attending national and international conferences
- viii. Recognition from UGC, SIRO, ISO 9001:2008, AIU, Department of Revenue (Central Board of Direct Taxes), 35(1)(ii) Income Tax
- ix. Recognition from National and international professional societies such as SPE, Petrotech etc. for students as well as faculties
- x. Programs like Rural Internship, Industrial Orientation & Industrial Training provide opportunities to students to gain professionalism and make them industry ready

### **Challenges**

- i. Getting experienced manpower with requisite skill set and specialization
- ii. Attracting fresh and motivated manpower with petroleum engineering background, because of disparity in pay structures in industry and academia
- iii. Providing domain specific campus placement to students due to downtrend in Oil & Gas Industry
- iv. In spite of a good industry-academia interaction, it is a challenge to bridge the gap between industry and academia in terms of providing practical skill sets
- v. Generating technologically advanced talent pool for SPT
- vi. Providing campus placement opportunities to M.Tech students is a challenge, as industries have a mind-set of recruiting diploma and bachelor degree students.

## 52. Future plans of the department

The future plans of SPT are as follows:

### a) Development of Man Power Skills

The School is striving very hard to develop manpower skills. The School inducts faculties who have shown demonstrated capabilities in the field of Petroleum Engineering. The School has made dedicated research groups and has plans to send faculties for exchange programs, seminars and workshops. The school plans to send its young faculties to the National & International Industries and Institutes to understand and work on practical projects.

### b) Imparting world class education

The School has done quite well to train its students and make them suitable for industries locally. The School has plans to get international placement for students and make students globally employable. Chair professors are instituted in the School and efforts are on to have adjunct faculties/chair professors. The effort will bridge the gap between industry and academia.

### c) Development of new laboratories

- SPT believes in an application based teaching approach rather than a theoretical approach. Practical study is required along with classroom study to understand the concepts properly as well as to develop skills for applying the conceptual knowledge in the real world. In line with this belief SPT has set up state-of-the-art Lab Facilities for the students where they not only perform experiments designed based on the theoretical studies, but are also provided a platform to take up research studies as well. By performing experiments in Laboratory, students get a hands-on experience on equipments.
- SPT has identified Key Areas for development of labs, which is a continuous process. Some of the point highlighted below have been achieved and some are ongoing:
  - *Safety Training to Lab assistants, students, faculty members and researchers*
  - *Design of New Experiments*
  - *Preparation of New Lab Manuals*
  - *Updation of Old Lab Manuals*
  - *Procurement of New Sophisticated Lab Equipments*
  - *Training to Lab Assistants*
  - *Induction of Lab Assistants in upcoming labs*

SPT has developed over the years state-of-the-art laboratories not only for student experiments but also for research and consultancy. In the upstream sector we would like to add two more laboratories in the fields of: (i) Reservoir Characterization and Stimulation and (ii) Drilling and Stimulation. Efforts will be made to add more licensed student software's such as Crystal ball, Seis vision, MBal, Petrel-RE, HTRI, etc. This will enable the students to make inroads in the world of work, with due confidence and competence.

- Reservoir Characterization Lab is being planned. Space has been allocated for the same.
- SPT is setting up a state-of-the-art Drilling and Stimulation Lab for the growth of the university and research scholars. The lab is being set up with assistance received from Department of Petroleum, Government of Gujarat.

Drilling is the backbone of exploration and development activities in E&P industry. Development of the knowledge base in drilling is one of the most important reasons for conceptualization of the lab and research activities. Stimulation is the technique which improves upon the productivity of the oil & gas wells and enhances the overall recovery of the field. The objective of setting up the Drilling and Stimulation Lab at SPT is to provide a platform for Academia-Industry relation to fulfill the requirements of oil & gas operational activities and to work in tandem with industries in and around for R&D activities. This will help in designing suitable job operations under simulated conditions in oil field reservoirs which is the need of the day for students, researchers and scholars.

**d) Excellence in Applied Research and Consultancy**

The school has already developed the Centre of Excellence in Geothermal Energy. Multi disciplinary research is in progress and the Centre will strive to generate electrical energy from geothermal sources. The thermal energy of earth can be utilized for domestic heating cooling applications with the help of ground source heat pumps. The school has practiced the principle of research core groups and some other thrust areas evolved for future growth. These are Shale Gas Research, Ichnofabric studies and Drilling and Stimulation. Preliminary work on experimental basis is in progress. The school encourages consultancy work and has focused consultancy in the area of hydrocarbon reserve valuation in the upstream sector. The infrastructure for the same already exists but needs further augmentation in the future. The other sector in which the school will focus will be seismic interpretation and petrophysical evaluation. The school has dialogues with small and medium scale industries for collaborative works.

The school will also encourage and support faculties and researchers in filing and getting patents.

**e) Improvement in Library Resource**

A good library is the store house of knowledge for any school. In the last seven years the School added books mostly in the upstream sectors both in hard and soft forms. From the last year collective efforts are made to improve our collection in downstream sector also. The School targets to double this effort in the next three years.

**f) Choice Based Credit System**

Choice based credit system is being implemented from 2015-16. Students will be offered a basket of courses at school level as well as FoET level. Students will be able to choose from a variety of courses termed as Electives offered by the concerned school and FoET, with variable credits.

**g) Accreditation to School**

SPT is striving to seek Accreditation for all programs (UG and PG) by concerned bodies. In the near future, SPT will also try to seek accreditation for laboratories of school by agencies like National Accreditation Board for Testing and Calibration Laboratories (NABL).

**h) Student Research Projects**

As a part of research venture of SPT, certain guidelines are given to students as well as faculties for monitoring the quality of student research projects. B.Tech/M.Tech projects are the foundation of the school research and require proper monitoring and mentoring. SPT has constructed panels for review & monitoring of Undergraduate & Postgraduate Student Research Projects with publications envisaged and IPR. M.Tech students have been given a mandate of publishing at least one research paper based on the outcome of their respective projects. Faculties are also being encouraged to generate resource from industry and academia for facilitating student research, development of labs, and developments of centers of excellence. SPT also encourages students to publish and present papers at national & international levels with a proper scrutiny of various research ideas.

**i) Training Programs**

SPT is planning to conduct training programs for staff on soft skills, personality development, basic introduction to petroleum engg., and MS Office. Faculty members will also be encouraged to undergo trainings on soft skills, personality development, MS Office, Research Methodology. SPT has state-of-the-art laboratories with skilled Lab

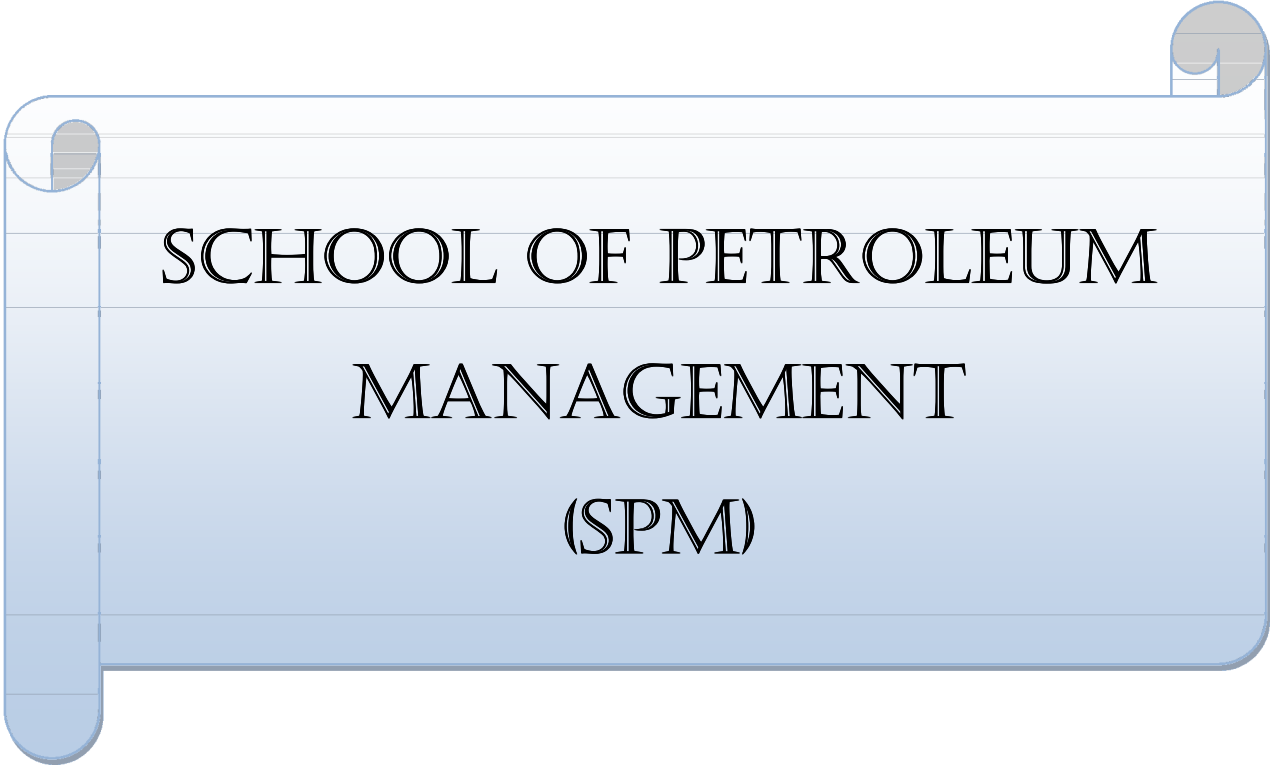
Assistants. Skilled/Experienced lab assistants will be stationed or inducted in each lab and proper training will be imparted to lab assistants. SPT will also organize Skill Development programs for faculty and staff and Group Dynamic sessions for faculty members and staff to help in group projects.

**j) Publications**

In the recent past, publications in SPT have improved a lot. Faculty members are working in varied areas of research such as Shale gas exploration and exploitation, ichnofabric studies, reservoir characterization, Geothermal exploration and exploitation, Extraction of thermal energies from Low Enthalpy reservoirs, City Gas Distribution, Sequence Stratigraphy and Biofuels production and kinetics. In the past one year, 13 research papers have been presented in national and international conferences by SPT faculties; and some have already been accepted for publication. SPT faculty members have published 11 research papers in reputed and peer reviewed national and international journals. 5 papers are already in press or under review, to be published in reputed journals. Since its inception, SPT faculty members have published over 47 research papers in reputed national and international journals; and presented over 40 research papers in national and international conferences/seminars.

*One book on City Gas Distribution and another on Ichnology are under preparation by SPT faculty members.*

SPT will keep on improving the rate of paper publication.



SCHOOL OF PETROLEUM  
MANAGEMENT  
(SPM)

**1. Name of the Institute**

School of Petroleum Management – SPM

**2. Year of establishment:**

‘School of Petroleum Management’ (SPM), earlier known as ‘Institute of Petroleum Management Gandhinagar’ (IPMG), was established in the year 2006.

**3. Is the Department part of a School/Faculty of the university?**

School of Petroleum Management is a constituent of ‘Pandit Deendayal Petroleum University’ (PDPU)

**4. Names of programs offered (UG, PG, M. Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.).**

**Postgraduate Programs:**

- Master of Business Administration (Full-time)
- Post Graduate Diploma in Petroleum Management – Executive (PGDPM-X) (Part-time)

**Doctoral Programs:**

- Ph. D. in Management (Full-time)
- Ph. D. in Management (External)

**5. Interdisciplinary programs and departments involved:**

Nil (Management is as such interdisciplinary programme with offers courses in Economics, Psychology, Quantitative Techniques etc.)

**6. Courses in collaboration with other universities, industries, foreign institutions, etc.**

Nil

Approximately 40 courses are offered by experts from other universities, institutions and industries.

UGC & MHRD are legislating to enable Universities in formalizing exchange programs. Guidelines are awaited.

**7. Details of programs discontinued, if any, with reasons**

15 Month Full Time Executive MBA has been temporarily suspended for revision and restructuring as recommended by an expert committee.

**8. Examination System: Annual/Semester/Trimester/Choice Based Credit System**

Trimester- for Postgraduate Programs

Semester- for Doctoral Programs

**9. Participation of the department in the courses offered by other departments**

- Faculty members of the institute serve as visiting faculty at other departments/institutes
- Faculty members are invited to judge various curricular, co-curricular and extra-curricular activities of other departments/institutes
- Faculty members are appointed as research expert in the Doctoral Review Committees of research scholars of other departments/institutes
- Students participate in events of other institutes

**10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)**

Name of the post	Sanctioned post*	Filled Post	Actual
Chair Professor		1	1
Professor Emeritus		1	1
Professor		3	3
Associate Professor		5	5
Assistant Professor		2	2

\*As University has been established only recently, post are being sanctioned on the basis of availability of Good candidates. In other words, there is no cap on his or her cadre.

**11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance**

Name of Faculty	Qualification	Designation	Specialization	Experience	No. of Ph.D/M.P hil.studens guided for the last 4 years
Prof. Hemant Trivedi	Ph. D.	Professor and Director	Strategic Management, Marketing, Brand	32 years	5 Ph. D. under

			Management, Retail Management		progress
Prof. Somdeb Lahiri	Ph. D.	Professor	Microeconomics, Game theory, Mathematical methods for economics	28 years	Nil
Prof. Pramod Paliwal	MBA; Ph. D.	Professor	Marketing/ Energy Sector	24 years	2 Ph. D. guided and 2 under progress
Dr. Sudhir Yadav	Ph. D.	Associate Professor	International Business Strategy, Operations Management, Marketing Management	24 years	5 M. Tech. Thesis guided and 2 Ph. D. under progress
Dr. Tanushri Banerjee	Ph. D.	Associate Professor	Information Systems and Decision Science	21 years	Nil
Dr. Subrat Sahu	MBA; Ph. D.	Associate Professor	Marketing	20 years	Nil
Dr. Ashutosh Muduli	Ph. D.	Associate Professor	Human Resource Management	19.5 years	5 Ph. D. under progress
Dr. Satish Pandey	Ph. D.	Associate Professor	Organizational Behaviour & HRM	19 years	2 Ph. D. under progress
Mr. Lalit Khurana	M.Com. MA, MBA, PhD (Thesis Submitted)	Assistant Professor	Conceptual - Management Control Sectoral – Power Sector	19 <sup>1</sup> / <sub>2</sub> years	Nil
Dr. Akash Patel	M. Com.; Ph. D.	Assistant Professor	Accounting and Finance	16 years	8 Ph. D. under progress
Mr. Kaushal Kishore	MA; MMM; Ph. D. (Thesis submitted)	Lecturer	Marketing of Petroleum Products Energy Policy Brand Management	5 years	Nil

## 12. List of senior Visiting Fellows, Adjunct Faculty, Emeritus Professors

Name	Qualification	Visiting Fellows/Adjunct Faculty/Emeritus Professors
Prof. D. M. Pestonjee	D. Lit.; Ph. D.	Chair Professor
Prof. C. Gopalkrishnan	Ph. D.	Professor-Emeritus

School of Petroleum Management has adequate number of full-time faculty. However as a value addition and in order to bring in the latest and best professional inputs for students, professionals of various disciplines from relevant industries are invited to deliver courses.

Name of Visiting Faculty	Qualification	Organization/Institute association
A. B. Raju	B.Tech, PGDRM	Biz Trans Consulting
A. Khandual	M. A.	Banking Industry Professional
Ajay Das	BE, MBA	Adani Welspun Exploration Ltd.
Ajit Desai	BE	Project Management Professional
Ankit Sanghvi	CFA, FRM	CARE Ratings
Ashish Verma	Masters in Management	Shell
Ashwani Kumar	B. Tech.	CEPT University
Bharati Pathak	Ph. D.	School of Commerce, Gujarat University
Capt. Sarabjit Butalia	Masters of Science in Maritime Affairs	Consultant
D. G. Shukla	LL. M.	Legal Expert-Gujarat High Court
D. K. Banik	M. Tech.	POGL Institute, Guwahati
Deepak Krishnan	MBA	IBS
Dhiren Desai	B. Tech.	Natural Gas Industry Professional
Divyesh Desai	BE, MBA	Shell
H. C. Shah	M. Com. LL. B., CS	Sadbhav Engineering
Jayesh Joshi	MBA	Claris Otsuka Limited
M. S. Satsangi	M.Sc., PGDOM	Operations Professional
Mahesh Chaudhary	MBA	Gujarat National Law University
N. Garimella	Ph. D.	3i Infotech Ltd.
Pankaj Jain	MBA	Cairn India
Pinky Desai	Ph. D.	St. Xavier's College
Ravi Gor	Ph. D.	Dr. Babasaheb Ambedkar Open University
Romit Kalra	MBA	Entrepreneur, Global Possessing Solution
Ruchi Tiwari	Ph. D,	Ahmedabad University
Samarth Kaji	MBA	Cairn India
Samir Pingle	Ph. D.	Nirma University
Satya Acharya	Ph. D.	Entrepreneurship Development

		Institute of India
Sujata Dalai	B. Sc., CPA	Finance Professional
Taral Pathak	CA	Ahmedabad University
Yogesh Joshi	Ph. D.	G. H. Patel Institute of Business Management, VV Nagar

**13. Percentage of classes taken by temporary faculty – program-wise information**

None

**14. Program-wise Student Teacher Ratios**

Name of Program	Total no. of students enrolled	No. of teachers	Student-Teacher Ratio
MBA PGP 13 and PGP 14	190	13	14.6:1
PGDPM-X 2013 and 2014 batch	21	13	1.6:1

**15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual**

Sanctioned post		Filled Post		Actual	
Administrative	Technical	Administrative	Technical	Administrative	Technical
3	1	8	1	8	1
			Out-sourced		Out-sourced

**16. Research thrust areas as recognized by major funding agencies**

- Energy Efficiency; Funding Agency: Institute of Energy Economics, Japan
- Strategic Review; Funding Agency: Gujarat State Electricity Corporation Ltd.
- Strategic Human Resource Management; Funding Agency: Gujarat State Electricity Corporation Ltd.

**17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.**

Faculty with ongoing research projects: Prof. Hemant Trivedi and Prof. Pramod Paliwal

International Funding Agency: Institute of Energy Economics, Japan

Funding: INR 18 lacks

Project Title: Promoting Energy Savings in India's Transportation Sector

**18. Inter-institutional collaborative projects and associated grants received  
a) National collaboration b) International collaboration**

A collaborative project titled "Promoting Energy Savings in India's Transportation Sector" is going on with Institute of Energy Economics, Japan. Associated grant received is Rs.18 lacks.

**19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.**

None

**20. Research facility / centre with**

- state recognition
- national recognition
- international recognition

National Recognition: Government of India, Ministry of Science and Technology, Department of Scientific and Industrial Research has accorded recognition to Pandit Deendayal Petroleum University.

**21. Special research laboratories sponsored by / created by industry or corporate Bodies**

Not applicable

**22. Publications:**

SPM faculty members have published research papers in national & international journals, chapters in edited books, monographs, case studies and articles in business magazines, newspapers. SPM faculty members regularly present their research papers in national and international conferences. Detailed information are as follows:

Sr No	Particulars	AP	SP	SY	PP	KK	SL	AM	SS	TB	C G K	LK	N u m b e r
1	Number of papers published in peer reviewed journals (national / international)	7	16	12	18	07	70	16	18	10	62	13	
2	Monographs	-	-	01	-	2	-	-	-	-	-	-	
3	Chapters in Books	-	4	04	1	1	9	1	2	-		-	
4	Books with ISBN with details of publishers	-	1 ISBN N: 978- 81- 321- 108 8-0	1 ISBN 13: 978- 1-25- 902656- 0	1 ISBN: 9781 2590 2656 0	-	-	-	-	-	4	-	
				Publish er: McGra w Hill Educati on (India) Pvt. Ltd.	Publi sher: McG raw Hill Educ ation (Indi a) Pvt. Ltd.								
5	Number listed in International	-	-	08	-	2		7	6	-	-	-	

	Database (For e.g. Web of Science, Scopus, Humanities International Complete, EBSCO host, etc.)												
6	Citation Index - range / average		38	5	-	-	11	21	-	-	-	-	
7	SNIP	-	-	-	-	-	-	-	-	-	-	-	
8	SJR	-	-	0.25	-	-	-	-	-	-	-	-	
9	Impact Factor - range / average		-	0.25-0.91	-	-	-	-	-	-	-	-	
10	h-index	-	4	1	2	-	4	3	-	-	-	-	-

### 23. Details of patents and income generated

In the field of management we do not have patents. However, SPM faculty gives consultancy to industry in their respective fields, from time to time.

### 24. Areas of consultancy and income generated

SPM faculty members provide consultancy to energy and infrastructure industry in different management fields, viz. Marketing, HR, Finance, Strategy & Operations Management. Detailed information is as below:

School of Petroleum Management Year	Scheme	Beneficiary
2013-14	Strategic Review of Gujarat State Electricity Corporation Ltd. (GSECL)	Gujarat State Electricity Corporation Ltd. (GSECL)
2012-13	Analysis of capacity utilization factors for wind farms in Gujarat for regulatory tariff determination process	Gujarat Urja Vikas Nigam Ltd.
2012-13	Analysis of tariffs for UMPPs based on imported coal	Gujarat Urja Vikas Nigam Ltd. (GUVNL)
2012-13	Advisory on procurement	GSPC LNG Ltd

	strategies for gas from North America and other sources	
<b>2013-14</b>	Advisory on procurement strategies for gas from North America and other sources	GSPC LNG Ltd
<b>2014-15</b>	Workshop on ‘Promoting Energy Savings in India’s Transportation Sector’	IEEJ – Institute of Energy Economics, Tokyo, Japan
<b>2015-16</b>	ERP Implementation at GSECL- Technical Innovation and Business Impact	Gujarat State Electricity Corporation Ltd. (GSECL)
<b>2015-16</b>	ICT Need Assessment Survey and Analysis for 2 of GSECL remote Power Plants villages along the lines of	GSECL

**25. Faculty selected nationally / internationally to visit other laboratories / institutions /industries in India and abroad**

SPM faculty members have visited several countries to disseminate their research in international conferences and conducted professional workshops/seminars.

Detailed information will be made available to the visiting committee.

**1. Faculty serving in:**

**a) National committees b) International committees c) Editorial Boards d) any other (please specify)**

SPM faculty members have been members on editorial boards of national & international journals, international academic associations, international award committees, reviewers for international journals and members of research review committees of other universities for Ph.D. research. Detailed information is mentioned separately and will be made available to the visiting committee.

<b>Sr No.</b>	<b>Editorial boards of national and international journals</b>	<b>Faculty Name</b>
	National Journal	Pramod Paliwal
	<ul style="list-style-type: none"> <li>Member, Editorial Board, Journal of Strategic Human Resource Management</li> </ul>	Ashutosh Muduli

	<ul style="list-style-type: none"> <li>Member, Advisory Board, Journal of Management, ISSN NO. 0976-8572</li> </ul>	Ashutosh Muduli
	<ul style="list-style-type: none"> <li>Editor-in-Chief, Studies in Microeconomics</li> </ul>	Somdeb Lahiri
	<ul style="list-style-type: none"> <li>Member Ed. Advisory Board of the Open Access Academic Book Publishing Programme in Economics.</li> </ul>	Somdeb Lahiri
	<ul style="list-style-type: none"> <li>Ed. Board Research and Applications in Economics</li> </ul>	Somdeb Lahiri

faculty serving as members of steering committees of international conferences recognized by reputed organizations / societies :

Sr No.	Name of the international conference where faculty served as steering committee member	Faculty Name
1	International Conference on Energy & Infrastructure (ICEI-2014), January 11-12, 2014 at School of Petroleum Management, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat	Kaushal Kishore Organizing Secretary:ICEI-2014
2	2 <sup>nd</sup> International Conference of Accounting & Finance (ICAF) 2012, University of Namibia	Pramod Paliwal
3	City Gas India, New Delhi organized by IQPC Dubai 2008	Pramod Paliwal
4	MENA Natural Gas Distribution Conference, Cairo-Egypt. ;2010	Pramod Paliwal
5	City Gas MENA 2010; Abu Dhabi, UAE; 2010	Pramod Paliwal
6	Natural Gas Distribution Conference 2010; Ankara, Turkey; 2010	Pramod Paliwal
7	International Conference on Energy & Infrastructure (ICEI-2012), January 11-12, 2012 at School of Petroleum Management, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat	Subrat Sahu Organizing Secretary:ICEI-2012
8	International Conference on Management of Petroleum Sector (ICOMPS-2010), January ,2010 at School of Petroleum Management, Pandit	Sudhir Yadav Organizing Secretary:

	Deendayal Petroleum University, Gandhinagar, Gujarat	ICOMPS 2010
8	Member, International Academic Committee of ELLTA Association ( <i>Exploring Leadership and Learning Theories in Asia</i> , <a href="http://www.ellta.org">www.ellta.org</a> ), 2014	Satish Pandey
10	AHRD Book of the Year Review Committee	Satish Pandey

## 26. Chairs Instituted by the University

The School/University is on a constant lookout for specialized faculty wherever required in the last 3 years. The School has created a Chair Professorship with industry support and that too without compromising on the academic qualifications/eligibility.

Name	Qualification	Designation
Prof. D. M. Pestonjee	D. Lit.; Ph. D.	Chair Professor

## 27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).

SPM encourages and recommends its faculty members to participate in faculty development programs of premier institutions like IIMs, MDI, XLRI in their respective fields. Detailed information is mentioned separately and will be made available to the visiting committee.

Prof. Kaushal Kishore

1. January 18-20, 2015. 3rd AIM-AMA Sheth Foundation Doctoral Consortium, organized by Academy of Indian Marketing (AMA) and American Marketing Association at IMT-Dubai.
2. January 5-7, 2014. 2nd AIM-AMA Sheth Foundation Doctoral Consortium, organized by Academy of Indian Marketing (AMA) and American Marketing Association at IIM-Ahmedabad.
3. August 31, 2015 to September 19, 2015 International Visitors Leadership Programme on U.S.A Foreign Policy and Energy Security' completely sponsored by the Department of State, U.S.A which was scheduled from in the four cities of U.S.A.

Prof. Ashutosh Muduli

1. Worksoop on Industrial Relations in the Context of Economic Slowdown, Ahmedabad Management Association, September, 2012
2. Workshop on Performance Management System and Balance Score Card organised by TV Rao Learning System, Mumbai, August, 2012

3. National Level Training on *Health and Safety Management* organised by National Safety Council, Mumbai, December, 2010.
4. Workshop on *Competency Mapping* organised by AHRD, Ahmedabad, October, 2010.

## 28. Student projects

- percentage of students who have done in-house projects including interdepartmental projects
- percentage of students doing projects in collaboration with other universities / industry / institutes

All the SPM students engage themselves with industry projects as part of their summer internships with different companies. Students also engage in projects related to various courses taught as part of their curriculum. Example of students project for the year 2014-15 is as follows:

Sr. No.	Roll Number	Name	Company Name - 1
1	20141001	Abhas Mittal	Mahanagar Gas Limited
2	20141002	Abhishek Banerjee	Ernst & Young LLP
3	20141003	AKANKSHA SONKER	SBI Capital Markets Ltd.
4	20141005	Akshay Shah	GSPC LNG Ltd.
5	20141006	ANJALI SINGH	Indian Oil Corporation Limited
6	20141007	Ankit Joshi	Essar Oil Ltd.
7	20141008	Apoorv Sharma	Headway Solar Pvt. Ltd.
8	20141009	APURVA MITTAL	Energy Research and Management Institute (GERMI)
9	20141010	Azlaan Tirmizi	Sabarmati Gas Limited
10	20141011	Bhaumik Gandhi	Sabarmati Gas Limited
11	20141012	BHAVNA DOLEY	Indian Oil Corporation Limited
12	20141013	BINITA RAWAT	GAIL (India) Limited
13	20141014	Chirayu Trivedi	Mittal Processors Pvt. Ltd.
14	20141015	Deep Tigga	Hindustan Petroleum Corporation Ltd
15	20141016	Deepak Mishra	Mittal Processors Pvt. Ltd.
16	20141017	DIVYA KALE	GVK EMRI
17	20141018	GARIMA HEERANI	Energy Research and Management Institute (GERMI)
18	20141019	Gaurang Agarwal	Sabarmati Gas Limited
19	20141020	Gaurav Jaiswal	Reliance Industries ltd.

20	20141021	Ghanshyam Bhavsar	Future Retail Ltd.
21	20141022	Hardik Doshi	Future Retail Ltd.
22	20141023	HEMALI KESARIA	Reliance Industries Ltd.
23	20141024	Indranil Joshi	Total Oil India Pvt. Ltd.
24	20141025	ISHITA JAIN	Ecozjee Marketing
25	20141026	Jai Bakliya	JK Cement
26	20141027	Jay Oza	PepsiCo India
27	20141028	Ketan Gyanchandani	AXIS Bank Ltd.
28	20141029	Kunal Sugandhi	Bharat Petroleum Corporation Ltd
29	20141030	Manishkumar Bhade	Gujarat State Electricity Corporation Ltd.
30	20141031	Masumraza Saiyed	Total Oil India Pvt. Ltd.
31	20141032	Maulik Patel	Total Oil India Pvt. Ltd
32	20141033	Mayank Gupta	Mittal Processors Pvt. Ltd.
33	20141034	MEHERNAZ PATHAN	GSPC LNG Ltd.
34	20141035	MITTALI SOLANKI	Future Retail Ltd.
35	20141036	Mohit Jaiswal	Ecozjee Finance
36	20141037	MONIKA SINGH	Mahanagar Gas Limited
37	20141038	Mridu Chakrabarty	Hindustan Petroleum Corporation Ltd
38	20141039	NIKITA SOOD	Indian Oil Corporation Limited
39	20141040	Nitin Lekhwani	Ernst & Young LLP
40	20141041	Onil Linus Christian	Adani Gas Ltd
41	20141042	PALAK DHAMECHA	Trident Udaipur
42	20141043	Parmarth Mishra	Bharat Petroleum Corporation Ltd
43	20141044	Parth P Sambhwani	DCB Bank Ltd.
44	20141045	Parth P Parekh	Ernst & Young LLP
45	20141046	Parth P Panchal	Gujarat Gas Ltd.
46	20141047	Parth Mehta	Mahanagar Gas Limited
47	20141048	POOJA AJMERA	DCB Bank Ltd.
48	20141049	Poras Shah	Gujarat Gas Ltd.
49	20141050	Pranjal Kishore	Hindustan Petroleum Corporation Ltd
50	20141052	Pratik Naker	Cadila Pharmaceuticals
51	20141053	PRIYANKA DOHRE	Oil & Natural Gas Corporation Limited

52	20141054	Pushpraj Singh	Total Oil India Pvt. Ltd.
53	20141055	RADHIKA GADARA	Future Retail Ltd.
54	20141056	Rajan P Zaveri	Gujarat State Electricity Corporation Ltd.
55	20141057	RIDDHI KANETKAR	Total Oil India Pvt. Ltd.
56	20141058	RIYA GIRI	Directorate General of Hydrocarbons
57	20141060	RUCHI PATEL	Future Retail Ltd.
58	20141061	Rushit Valera	Gujarat Gas Ltd.
59	20141062	SALONI SHAH	Future Retail Ltd.
60	20141063	Sanjeev Kumar	Directorate General of Hydrocarbons
61	20141064	Saurabh Ojha	GSPC LNG Ltd.
62	20141065	SAYALI S DHAVALIKA R	Ernst & Young LLP
63	20141066	SHIKHA SAH	Gujarat State Electricity Corporation Ltd.
64	20141067	Shivang Parmar	Nirmal Bang Securities
65	20141068	SUCHI YADAV	Future Retail Ltd.
66	20141069	Sudarshan Gupta	SBI Capital Markets Ltd.
67	20141071	Vikas Dugar	GSPC LNG Ltd.
68	20141072	Vikash Kumar	Total Oil India Pvt. Ltd.
69	20141073	Vivek Mehta	Bharat Petroleum Corporation Ltd
70	20141074	Yash Maurya	Hindustan Petroleum Corporation Ltd

**29. Awards / recognitions received at the national and international level by**

- Faculty
- Doctoral / post doctoral fellows
- Students

- Students

SPM faculty members have received awards, fellowships and recognitions at national & international institutions for their specific contributions to research or academic achievement. SPM MBA students have also won awards and recognitions in business competition events organized by industrial associations. Detailed information is mentioned separately and will be made available to the visiting committee.

- **Faculty**

Prof. Satish Pandey is awarded for highly commended paper by Journal of European Industrial Training (Emerald Group Publishing Ltd.). Prof. Satish Pandey is also invited as committee member for “2015 AHRD Book of the Year Committee & Special Nomination”

- **Students**

Sr No.	Name of Award/Recognition received	Student Name
1.	1. Winner of Financial Express Campus Mastermind 2. Winner of Business standard student Corner (twice) 3. 12 articles got published in The Indian Economist , an online weekly magazine 4. Stood second in Inter Dramatics Competition (Nirma University ) 5. Presented Paper in ICMI Dehradun 2014 6. Protagonist in the short movie Money Order (Winner of VGA )	Siddhartha Bhatnagar
2.	Our research paper " Road to Recovery for Debt Ridden SEBs" won the Best Paper prize( in Infrastructure domain) at International Conference on Management of Infrastructure 2014, held at UPES Dehradun.	Raman Shahi & Dhaval Shah
3.	1.Winner of Business Standard Weekly Strategist Quiz 2. Research Paper on " Shale Oil & Gas, Is India Ready?" ( 2nd ICMI 2014, UPES Dehradun) 3. Research Paper on " Role of Independent Directors, Issues and Challenges"( National Declamation Contest organized by NFCG, SIMS) 4. Research Paper on " Social Media, a new gadget for B2B marketing"(ICSMM 2014, Welingkar Bangalore)	Saumay Gupta
4.	1.Winner of Business standard student Corner 2.Published article “Stock market triggers Awaited this Season” as part of competition on mbaskool.com	Tanya Sehgal
5.	1. 1st Prize in Proscenium'13 for Drama competition held at PDPU	Dhwani Mandan

	2. Runners Up in Petro Cup 2013 in table tennis held at PDP 3. Runners up in Energy Cup 2013 in table tennis held at SPM 4. Runners up in Energy Cup 2013 in hand ball held at SPM 5. Runners up in Parakram 2014 in table tennis held at Nirma University 6. Winners in Shaurya 2014 in table tennis held at IIM Ahmedabad	
6.	Vestas Innovation Award	Vivek Kansara
7.	1. World Energy Council Young Energy Professionals (YEP) 2. TCS-IMCI Best Summer Project Award	Mohana Priya S.; Mukund Upadhayay & Saurabh Kothari

**30. Seminars/Conferences/Workshops organised and the source of funding (National / International) with details of outstanding participants, if any:**

SPM has organized 4 international conferences since its inception bi-annually (2007, 2010, 2012, 2014). SPM has also been organizing its sector-focused industry roundtables/conclaves for power, oil & gas, renewable energy and functional disciplines like HR, finance for last 6 years. Detailed information is given below:

ICEI 2014 (International Conference on Energy and Infrastructure); Jan. 11-12, 2014	2014	Prof. Latha Ramchand, Dean, and Professor, Finance, C.T. Bauer College of Business, University of Houston Prof. Timothy C. Coburn, Ph.D. Director, Master of Energy Business, Professor of Energy and Operations Management, Collins College of Business, The University of Tulsa Dr. Kirit S. Parikh, Chairman, IRADe & Chairman, Expert Group for Low carbon Strategy for Inclusive Growth, Planning Commission of India Shri D J Pandian, IAS, Additional Chief Secretary, Energy and Petrochemicals Department, Gujarat Govt. Dr. Anurag K. Agarwal, Professor, Indian Institute of Management Ahmedabad, Gujarat Shri B.S. Negi, Former Member, PNGRB, Govt. of India Dr. T. Harinarayana, Director ,GERMI-RIIC, Gandhinagar, Gujarat, India Shri Vasant Agarwal, Managing Director, ECOMAX
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		<p>Shri Kishore Nair, President, Welspun Energy Ltd &amp; President of Solar Power Developers Association (SPDA)</p> <p>Shri Rajsekhar Budhavarapu, Chief Technology Officer - Renewable Investments, IL&amp;FS Energy Development Company Ltd (IEDCL)</p> <p>Shri Shaleen Sharma, President and Managing Director BG India</p> <p>Shri Arun Kumar, GM (Geophysics) Head, Center of Delivery for Shale Gas, ONGC, Baroda</p> <p>Shri Divyesh Desai, Regional Marketing Manager Hazira LNG ,Shell</p>
Oil & Gas Conclave, Sep 8-9, 2014	2014	<p>Mr. Anwar Husen, Head of Petroleum Engineering, Cairn India</p> <p>Mr. Shashank Jha, Sales Director India, GE Oil &amp; Gas</p> <p>Mr. Kaushik Deb, Economist, British Petroleum</p> <p>Mr. Man Mohan Ahuja, President (Technical), Petronet LNG</p> <p>Ms. Indira Suresh, Global practice Head - Oil &amp; Gas Solutions and Sales Enablement, Energy and Utilities Business Unit, Tech Mahindra</p> <p>Mr. Hemant Kumar, Practice Head, Upstream Oil &amp; Gas, Wipro</p> <p>Mr. M D Agrawal , Senior Consultant, Oil &amp; Gas Global Practice, TCS</p> <p>Mr. Raghuram Avadhanam, SBU Head Asset Management, L&amp;T Technology Services</p> <p>Mr. Nitin Sharma, Senior Consultant-Business Consulting, Management Consulting Services, Energy &amp; Utilities, Infosys</p> <p>Dr. D M Kale, Former DG, ONGC Energy Centre</p> <p>Mr. Jagdeep Chhaya , Head Pipeline &amp; Land Acquisition, Cairn India</p> <p>Mr. Bharat Goswami, Sr. VP HR, GSPC</p> <p>Mr. Himanshu Amaliyar, Senior HR coordinator, Weatherford India</p> <p>Mr. P Elango, Energy Expert, Former CEO – Cairn India</p> <p>Mr. C D Joshi, MD, VGL</p> <p>Mr. Ravi Agarwal, MD, RSPCL GAIL</p> <p>Mr. B B Mandan, MD, SGL</p> <p>Mr. S Tambraparni, Joint President-Operations, Adani Gas</p>

		<p>Mr. G K Sharma, GM, MGL                  Mr. Rakesh Jain, Associate Director, Feedback Infra                  Mr. Ganesh Ramamurthy, Head – Audit (Refining &amp; Marketing) Reliance Industries                  Mr. Prashant Maniar, Founder, Encito Advisors                  Mr. Vivek Bhatia, Energy Advisory Consultant, PwC                  Mr. Yash Malik, Executive Director, ONGC Ahmedabad Asset                  Mr. Vijay Ranjan , Head-Aviation Marketing, BPCL</p>
<p>Business Management Symposium                  Nov 7-8, 2014</p>	<p>2014</p>	<p>Mr Subir Hazra Associate Vice President, Head of Strategic Planning, Delhi International Airport Limited at GMR Group                  Mr Prashant Mandke Vice President &amp; Head, Anugrah Madison                  Mr MS Ashok COO, Accentiv', Edenred                  Mr Ahmed Naqvi CEO &amp; Co-Founder, Gozoop                  Mr Shekhar Singh Head – Corporate Communication, Infibeam                  Mr Vijay Sharma Head – Operations, Hindustan Coca-Cola Beverages Pvt. Ltd. (HCCBPL)                  Mr Krishna Veer Singh Head of Operational Excellence, Operations, Ericsson                  Mr Rajesh Pednekar Supply Chain Excellence Expert                  Mr Ashish Mediratta Head – Vessel Performance, Maersk Line India Pvt. Ltd.                  Mr Vinod Wadhvani Director-Investment Banking M&amp;A, Ambit Corporate Finance                  Mr Mehul Pandya Executive VP, CARE Ratings                  Mr Tanmay Kedia Managing Partner, V Capital Services                  Mr Hemal Desai Senior VP, Yes Bank                  Mr Vishal Gada Partner, KPMG                  Mr Sunil Kanojia Group CEO, Sintex India                  Mr Rashmin Shah CEO, Zydus BSV Pharma                  Mr Arijit Ray Former CEO, Dentsu                  Mr A B Raju CEO, Biz Trans Consulting                  Mr Kaiser Masood Director, LifeWorks Unlimited</p>

<p>3rd Oil &amp; Gas Conclave, 20-21 Sep. 2013; SPM, PDPU</p>	<p>2013</p>	<p>Mr. Sashi Mukundan, India Head, BP India                  Mr. S K Tripathy, Head (OALP) &amp; DGM (Geology), DGH                  Dr. D.M Kale ,Independent Director, ONGC TERI Biotech Ltd.                  Mr. Sunil Bharati, Head Corporate Communication, Cairn India                  Mr. Shridhar Tambraparni, Joint President-CGD, Adani Gas                  Mr. Amin Petiwala ,VP (Finance &amp; Accounting), GSPC LNG                  Mr. Gyanendra Sharma ,General Manager, Mahanagar Gas Ltd.                  Mr.Prabhat Singh ,Director Marketing, GAIL                  Mr. Kumar Rudra Project Director, Oil &amp; Gas and Special Projects, Larsen &amp; Toubro ltd.                  Mr. Anil Joshi , Senior Vice President, GSPC LNG</p>
<p>3rd Infrastructure Conclave 4th Oct. 2013; SPM, PDPU</p>	<p>2013</p>	<p>Chief Guest and Keynote Speaker: Mr. Arun Kumar Jagatramka, Chairman &amp; MD, Gujarat NRE Coke Ltd.                  Distinguished Speaker and Panellists: Mr. J.G. Chaturvedi, ED- Ahmedabad Asset, ONGC                  Mr. Shyama Sunder, Zonal General Manager-Marketing, GAIL India Ltd                  Mr. Anurag Deepak, ED-Pipelines, Bharat Petroleum Corporation Ltd.                  Mr. Rakesh Kumar Vij, General Manager-Sub Surface &amp; Reservoir, ONGC                  Mr. Divyesh Desai, Regional Marketing Manager, SHELL Hazira LNG Ltd.                  Mr. Kalpesh Vithlani, General Manager Projects, Gujarat Maritime Board                  Mr. Kamal Dorabawila, Principal Investment Officer, IFC, World Bank Group, Sri Lanka                  Mr. Pankaj Sindwani, Head-Cleantech Finance, TATA Capital                  Mr. Manish Seth, GM (Finance), GSPL                  Mr. Anoop Sharma, DGM (Infrastructure Core Group), IDBI Bank                  Dr. D.M. Pestonjee, GSPL Chair Professor, School of Petroleum Management                  Mr. Rohintan Talati, Asst. General Manager-HR, Linde Engineering India Pvt. Ltd.                  Mr. Mohammad Athar, Manager- Capital Projects &amp; Infrastructure, PriceWaterhouse Coopers</p>
<p>Business Management Symposium 2013, 6 December</p>	<p>2013</p>	<p>Prof. G Raghuram - Dean(Faculty), IIM-Ahmedabad                  Mr Niteen Bhagwat - Executive Director &amp; CEO, Asterii Analytics                  Mr Kaiser Masood - Principal Consultant, Infosys</p>

SPM PDPU		<p>Mr Sanjay Chakraborty - Associate Vice President, Triton Communications  Ms Parul Mehta - Co-founder &amp; Site Head, Motif Inc.  Mr C M Mathew - Managing Director, Task Initiatives Private Limited  Mr Arindam Sen - Manager-Retail Credit Risk Management, HSBC Global Services  Mr Pradeep Mallik - Deputy Resident Editor, Ahmedabad Mirror  Mr Sandeep Agrawal – CEO, Credencys Solutions Inc.  Mr Sachanand Taurani - Manager-Merchant Acquiring &amp; Card Sales, IDBI  Mr Rajesh Mishra - Manager-HR, L&amp;T  Mr Mignesh Parekh - Founder &amp; Chairman, The Kamma</p>
ICEI 2012 (International Conference on Energy and Infrastructure); Jan. 3-4, 2012	2012	<p>Mr. Nitin Shukla, Managing Director and Chief Executive Officer of Hazira LNG and Port Companies  Mr. Mehul Pandya, Sr. Vice President with CARE Ratings  Mr. B.S.Negi, Former Member, PNGRB  Dr. Anurag K. Agarwal, Professor, Indian Institute of Management, Ahmedabad, Gujara</p>
2nd Oil & Gas Conclave, 7-8, Sep. 2012; SPM, PDPU	2012	<p>Mr. L. Mansingh, Foremer Chairman, PNGRB  Mr. T. P. Rao, Head (NELP &amp; NDR), Directorate General of Hydrocarbons (DGH),  Mr. Sanjay Sah, Associate Director, KPMG,  Mr. Debashis Roy Chowdhary, Chief Area Manager-LPG, Indian Oil Corporation Limited (IOCL)  Mr. Vivek Singh, Senior Officer, Gujarat State Petronet Limited (GSPL)  Mr. D. M. Katre, Site President – Operations, Reliance Industries Limited,  Mr. N Bose Babu, Head, Project, Gujarat State Petronet Limited (GSPL)  Mr. Anil Joshi, Sr. VP - Projects, GSPC LNG  Mr. Sumit Singhvi, Assistant Vice President, SBICaps  Mr. Ranajit Banerjee, Chief Consulting Officer, Pandit Deendayal Petroleum University  Ms. Elizabeth Praveen, Head-HR, L&amp;T Chiyoda Limited,</p>

		<p>Mr. Subhajit Sarkar, Consulting Manager, WIPRO                  Mr. A. R. Patel, Group General Manager, ONGC - Ahmedabad Asset                  Mr. S. Thangapandian, CEO-Marketing, Essar Oil Ltd.,                  Mr. Nabin Panda, VP-Marketing, Reliance Industries Limited (RIL)                  Mr. Sabyasachi Kumar, General Manager, Marketing, Reliance Industries Limited (RIL)                  Mr. Shridhar Tambrapani, Joint President - CGD, Adani Gas, Mr. M. Ravichandran, MD, Indraprastha Gas Limited (IGL), Mr. V.C. Chittoda, MD, Mahanagar Gas Limited, Mr. S. K. Kudaisya, MD, Sabarmati Gas Limited and Mr. B. S. Negi, former PNGRB Member (Infrastructure)                  Mr. D J Pandian, Principal Secretary, Energy &amp; Petrochemicals, Gujarat Govt</p>
Solar Conclave, 12th Oct. 2012; SPM, PDPU	2012	<p>Dr. Ketan Shukla, IFS                  Mr. Chandan Guha, CEO, Mahindra Solar                  Mr. Ranajit Banerjee, Director, Consulting-PDPU                  Mr. D. J. Pandian, Principal Secretary, Energy &amp; Petrochemical Dept., Gujarat Govt.</p>
2nd Infrastructure Conclave 2012; SPM, PDPU	2012	<p>Mr. K. V. Natarajan, Senior Port Consultant, Reliance Ports and Terminals, Navi Mumbai                  Mr. Suren Vakil, MD, BMT Consultants (I) Pvt. Ltd.                  Mr. K. K. Sinha, CEO- Essar Ports Ltd.                  Mr. Ramakant Jha, Director, GIFT, Gandhinagar</p>
Renewable Energy Conclave, 9 Sep. 2011	2011	<p>Mr. H. D. Khunteta, Chairman &amp; Managing Director, Rural Electrification Corporation Ltd.                  Mr. Pashupathy Gopalan, Country Head, Sun Edison                  Mr. Alok Das, Head-Business Development, Suzlon                  Mr. KN Ramesh, GM Business Development, Lanco Solar                  Mr. N Ranganath, Executive Director, EI Technologies                  Mr. Vinay Shetty, GM, GMR Energy                  Mr. Aditya Handa, CMD, Abellon Energy                  Mr. Mahendra Patel, CMD, Mamata Group                  Mr. Arvind Patel, MD, Sahajanand Laser Technology                  Shri P.K. Mishra (I.A.S. Retd.) Chairman, GERC                  Mr. D. J. Pandian, Principal Secretary, Energy &amp; Petrochemical Dept., Gujarat Govt.</p>
1st Infrastructure Conclave, 4th Nov. 2011;	2011	<p>Prof. Shivanand Swamy, Professor and Director, School of Planning, CEPT University, Ahmedabad                  Mr. S. N. Patel, Joint Development Commissioner, Kandla SEZ</p>

SPM, PDPU		<p>Ms. Jyotsna Bhatia, Manager-Privatisation, Gujarat Maritime Board                  Mr. Kailash Bahuguna, COO, Zydus Infastructure Pvt. Ltd.</p> <p>Mr. Vivek Kulkarni, IAS-Retd, Chairman, Brickwork                  Shri. Nitin Zamre, MD, ICF International                  Mr. Surendra Pal, GM-Marketing, Shell Hazira                  Mr. Sanjay Sah, Associate Director, KPMG                  Mr. Vishvanathan Narayanan, Sr Manager, PWC                  Mr. Nikhil Moghe, Manager, AF-Mercados EMI</p>
ICEI 2012 (International Conference on Energy and Infrastructure); Jan. 3-4, 2012	2012	<p>Mr. Nitin Shukla, Managing Director and Chief Executive Officer of Hazira LNG and Port Companies                  Mr. Mehul Pandya, Sr. Vice President with CARE Ratings                  Mr. B.S. Negi, Former Member, PNGRB                  Dr. Anurag K. Agarwal, Professor, Indian Institute of Management, Ahmedabad, Gujara</p>
2nd Oil & Gas Conclave, 7-8, Sep. 2012; SPM, PDPU	2012	<p>Mr. L. Mansingh, Foremer Chairman, PNGRB                  Mr. T. P. Rao, Head (NELP &amp; NDR), Directorate General of Hydrocarbons (DGH),                  Mr. Sanjay Sah, Associate Director, KPMG,                  Mr. Debashis Roy Chowdhary, Chief Area Manager-LPG, Indian Oil Corporation Limited (IOCL)                  Mr. Vivek Singh, Senior Officer, Gujarat State Petronet Limited (GSPL)                  Mr. D. M. Katre, Site President – Operations, Reliance Industries Limited,                  Mr. N Bose Babu, Head, Project, Gujarat State Petronet Limited (GSPL)                  Mr. Anil Joshi, Sr. VP - Projects, GSPC LNG                  Mr. Sumit Singhvi, Assistant Vice President, SBICaps                  Mr. Ranajit Banerjee, Chief Consulting Officer, Pandit Deendayal Petroleum University                  Ms. Elizabeth Praveen, Head-HR, L&amp;T Chiyoda Limited,                  Mr. Subhajit Sarkar, Consulting Manager, WIPRO                  Mr. A. R. Patel, Group General Manager, ONGC - Ahmedabad Asset                  Mr. S. Thangapandian, CEO-Marketing, Essar</p>

		<p>Oil Ltd.,                  Mr. Nabin Panda, VP-Marketing, Reliance Industries Limited (RIL)                  Mr. Sabyasachi Kumar, General Manager, Marketing, Reliance Industries Limited (RIL)                  Mr. Shridhar Tambrapani, Joint President - CGD, Adani Gas, Mr. M. Ravichandran, MD, Indraprastha Gas Limited (IGL), Mr. V.C. Chittoda, MD, Mahanagar Gas Limited, Mr. S. K. Kudaisya, MD, Sabarmati Gas Limited and Mr. B. S. Negi, former PNGRB Member (Infrastructure                  Mr. D J Pandian, Principal Secretary, Energy &amp; Petrochemicals, Gujarat Govt</p>
Solar Conclave, 12th Oct. 2012; SPM, PDPU	2012	<p>Dr. Ketan Shukla, IFS                  Mr. Chandan Guha, CEO, Mahindra Solar                  Mr. Ranajit Banerjee, Director, Consulting-PDPU                  Mr. D. J. Pandian, Principal Secretary, Energy &amp; Petrochemical Dept., Gujarat Govt.</p>
2nd Infrastructure Conclave 2012; SPM, PDPU	2012	<p>Mr. K. V. Natarajan, Senior Port Consultant, Reliance Ports and Terminals, Navi Mumbai                  Mr. Suren Vakil, MD, BMT Consultants (I) Pvt. Ltd.                  Mr. K. K. Sinha, CEO- Essar Ports Ltd.                  Mr. Ramakant Jha, Director, GIFT, Gandhinagar</p>
Renewable Energy Conclave, 9 Sep. 2011	2011	<p>Mr. H. D. Khunteta, Chairman &amp; Managing Director, Rural Electrification Corporation Ltd.                  Mr. Pashupathy Gopalan, Country Head, Sun Edison                  Mr. Alok Das, Head-Business Development, Suzlon                  Mr. KN Ramesh, GM Business Development, Lanco Solar                  Mr. N Ranganath, Executive Director, EI Technologies                  Mr. Vinay Shetty, GM, GMR Energy                  Mr. Aditya Handa, CMD, Abellon Energy                  Mr. Mahendra Patel, CMD, Mamata Group                  Mr. Arvind Patel, MD, Sahajanand Laser Technology                  Shri P.K. Mishra (I.A.S. Retd.) Chairman, GERC                  Mr. D. J. Pandian, Principal Secretary, Energy &amp; Petrochemical Dept., Gujarat Govt.</p>
1st Infrastructure Conclave, 4th Nov. 2011; SPM, PDPU	2011	<p>Prof. Shivanand Swamy, Professor and Director, School of Planning, CEPT University, Ahmedabad                  Mr. S. N. Patel, Joint Development Commissioner, Kandla SEZ                  Ms. Jyotsna Bhatia, Manager-Privatisation, Gujarat Maritime Board                  Mr. Kailash Bahuguna, COO, Zydus Infrastructure Pvt. Ltd.</p>

		<p>Mr.Vivek Kulkarni, IAS-Retd, Chairman, Brickwork                  Shri. Nitin Zamre, MD, ICF International                  Mr.Surendra Pal, GM-Marketing, Shell Hazira                  Mr.Sanjay Sah, Associate Director, KPMG                  Mr. Vishvanathan Narayanan, Sr Manager, PWC                  Mr.Nikhil Moghe, Manager, AF-Mercados EMI</p>
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**Oil & Gas India Roundtable,**

14th Oct. 2011 Mr Keith G Huggins, Director-Engineering, McDermott Engineering Services Pvt Ltd Mr.Harak Banthia, CFO, HMEL Mr.Vijay Malik, Sr VP, RIL Mr.S C Gupta, CEO-Offshore Division, ABG Shipyard Mr.K Ravichandram, Sr VP & Group Head, Corporate Ratings, ICRA Mr. Parthasarathi Chatterjee, L&T ENC Mr.N S Tanwar, GM Reservoir, DGH

**31. Code of ethics for research followed by the departments**

Code of ethics for research is important because, it helps in defining research objectives, values that are essential for collaborative work such as trust, accountability and mutual respect, accountable to the public and moral and social values. Research Advisory Board is responsible for formulating and overseeing implementation of policies related to Code of ethics for research. ORSP Charter defines guidelines for university research activities.

Structure and composition of the Research Advisory Board (RAB) of the University is given below.

**Composition of Research Advisory Board Members**

Sr. Nos.	Name	Designation	Organization
1.	Prof. H.B.Raghavendra	Director General	Pandit Deendayal Petroleum University
2.	Dr. A. V. Chainulu	Scientist –F	Department of Scientific & Industrial Research
3.	Shri R.K. Vij	DGM (Reservoir)	ONGC Ahmedabad Assets
4.	Dr. Chandra Rai	Director/ Eberly Chair	Mewbourne School of Petroleum & Geological Engineering The University of Oklahoma
5.	Dr. Vijay K. Madiseti	Professor	School of Electrical & Computer Engineering Georgia Tech
6.	Prof N.R. Dave	Educational Advisor	Pandit Deendayal Petroleum

Sr. Nos.	Name	Designation	Organization
			University
7.	Prof. VC Shah	Advisor-CSC	Pandit Deendayal Petroleum University
8.	Dr. B. G. Patel	Provost (Vice-Chancellor)	Charotar University of Science & Technology (CHARUSAT)
9.	Dr. Akshai Agarwal	Vice-Chancellor	Gujarat Technological University
10.	Dr. Bharat H. Desai	Professor	Jawaharlal Nehru Chair in International Environment Law, JNU
11.	Sh. Kumarpal Desai	Padmashree	An eminent Litterateur
12.	Dr. T Harinarayana	Director	GERMI
13.	Dr. Avinash Chandra	Chairman & Managing Director	Petrobiz Consultant ( P) Ltd
14.	Dr. D.M. Kale	Director General	ONGC Energy Centre
15.	Dr. H.B Raghavendra	Director	School of Technology, PDPU
16.	Prof. Tarun Shah	Registrar	Pandit Deendayal Petroleum University
17.	Dr. Indrajit Mukhopadhyay	Coordinator, ORSP	Pandit Deendayal Petroleum University

In its Evaluation meeting RAB takes note of different policies and implement them for facilitated research and development activities in its various schools.

Research Ethics:

- advancing funds for sanctioned projects -
- providing seed money
- simplification of procedures related to sanctions / purchases to be made by the investigators
- autonomy to the principal investigator/coordinator for utilizing overhead charges-
- timely release of grants
- timely auditing
- submission of utilization certificate to the funding authorities
- The strengths and culture of the participants must be respected and utilized whenever possible.
- Written permission must be obtained from the partners before beginning the research projects.
- Permission from all individual participants must be obtained prior to collecting personal information.
- The confidentiality of all individuals, if required must be respected
- All research results, analyses and interpretations must first be reviewed by the participants to ensure accuracy and avoid misunderstanding.
- The participants must be involved in making decisions about the publication and the distribution of all or parts of the research results

- Anti-plagiarism

SPM and PDPU follow strict ethical standards for research. Not only doctoral but MBA students are also educated by SPM faculty on plagiarism, intellectual property rights, copyright protection, scientific research citations and professional research ethics.

### 32. Student profile program-wise:

**MBA:** Profile of the students in terms of degrees and work experience is as follows(2014-15 batch):

Roll No.	Name	Graduate	Work Exp. (In Months)
20141001	Abhas Mahesh Mittal	B.E.	0
20141002	Abhishek Jaideb Banerjee	B.E.	35
20141003	AKANKSHA SONKER	B.Tech	0
20141004	Akash Baburao Rangari	B.Tech	26
20141005	Akshay Girish Shah	B.E	0
20141006	ANJALI SINGH	B.Tech	33
20141007	Ankit Joshi	B.E.	46
20141008	Apoorv Sharma	B.E.	0
20141009	APURVA MITTAL	B.Tech	11
20141010	Azlaan Tirmizi	B.E.	0
20141011	Bhaumik Rushikesh Gandhi	B.E.	0
20141012	BHAVNA DOLEY	B.E.	0
20141013	BINITA BHAGATSINGH RAWAT	B.E	0
20141014	Chirayu Amrishkumar Trivedi	B.E	18
20141015	Deep Tigga	B.Tech	0
20141016	Deepak Mishra	B.E.	0
20141017	DIVYA RAJESH KALE	B.E.	4.5
20141018	GARIMA HEERANI	B.com	0
20141019	Gaurang Agarwal	B.Tech	0
20141020	Gaurav Sohanlal Jaiswal	B.E	19
20141021	Ghanshyam Rameshbhai Bhavsar	B.E	0
20141022	Hardik Mahendrabhai Doshi	BBA	22
20141023	HEMALI PRAMODBHAI KESARIA	B.E.	0
20141024	Indranil Pravin Joshi	B.Tech	24
20141025	ISHITA ASHOK KUMAR JAIN	B.Com	12
20141026	Jai Bakliya	B.Com	0
20141027	Jay Satishbhai Oza	B.E	0
20141028	Ketan Mansukhlal Gyanchandani	B.Com	0
20141029	Kunal Sugandhi	B.Tech	12

20141030	Manish Kumar Bhade	B.E.	20
20141031	Masumraza Saiyed	B.E.	0
20141032	Maulik Kaushikbhai Patel	B.E.	0
20141033	Mayank Gupta	B.Tech	0
20141034	MEHERNAZ YAKUBKHAN PATHAN	B.Com	0
20141035	MITTALI BHAGIRATH SOLANKI	B.E.	0
20141036	Mohit Jaiswal	B.Com	0
20141037	MONIKA ANIL KUMAR SINGH	B.E.	0
20141038	Mridu Pavan Chakrabarty	B.E.	32
20141039	NIKITA SOOD	B.Tech	0
20141040	Nitin Lekhwani	B.Tech	0
20141041	Onil Linus Christian	B.E.	12
20141042	PALAK BHAVESH DHAMECHA	B.Com	0
20141043	Parmarth Mishra	B.Tech	12
20141044	Parth P Sambhwani	B.E.	20
20141045	Parth Pareshbhai Parekh	B.E.	0
20141046	Parth Pravinkumar Panchal	BBA	0
20141047	Parth Yashwin Mehta	B.E.	0
20141048	POOJA HITESH AJMERA	B.E.	0
20141049	Poras Naimishkumar Shah	B.E.	8
20141050	Pranjal Kishore	B.Tech	0
20141051	Pratik Kumar Dangi	B.E.	0
20141052	Pratik Satishbhai Naker	B.Pharm	6
20141053	PRIYANKA RANVIRSINGH DOHRE	B.Com	0
20141054	Pushpraj Singh	B.Tech	28
20141055	RADHIKA PRAGJIBHAI GADARA	B.Com	24
20141056	Rajan P Zaveri	B.E.	0
20141057	RIDDHI DILIP KANETKAR	B.E.	0
20141058	RIYA GIRI	B.Tech	22
20141059	Ronak Dineshchandra Agrawal	B.Tech	55
20141060	RUCHI SURESHBHAI PATEL	B.E.	0
20141061	Rushit Jaysukh Valera	B.E.	0
20141062	SALONI HIREN SHAH	B.Com	0
20141063	Sanjeev Kumar	B.E.	48
20141064	Saurabh Ojha	B.E.	0
20141065	SAYALI S DHAVALIKAR	B.E.	0
20141066	SHIKHA SAH	B.E.	18
20141067	Shivang Nalin Parmar	BMS	0
20141068	SUCHI SAMIR YADAV	B.Tech	0
20141069	Sudarshan Gupta	B.Tech	0
20141070	Tapan Kumar	B.Tech	0
20141071	Vikas Shrichand Dugar	B.E.	8
20141072	Vikash Kumar	B.E.	4

20141073	Vivek Krishnakant Mehta	B.E.	0
20141074	Yash Maurya	B.Sc	0

**PGDPMX:** This is an executive PG Diploma program where students come from oil, gas, energy industry to learn managerial skills for their own professional development. Many of them are also sponsored by their respective companies. This program requires 36 teaching contact hours for 8 weekly modules spread over 2 years. These students are selected through rigorous personal interview process.

2012-13			2013-14			2014-15			2015-16		
Applic ation Receiv ed			Applicat ions Receiv ed			Applications Received			Applications Received		
	M	F		M	F		M	F		M	F
<b>30</b>	19	0	<b>28</b>	12	0	<b>13</b>	10	1	16	09	0

**Ph.D.:** Ph.D. students are selected through Research Aptitude Test and Personal Interview by expert committee. Currently, most of students are registered as Part-time Ph.D. candidates.

Year	Application Received	Students Admitted	Male	Female
2012	8	1	0	1
2013	30	7	6	1
2014	22	3	1	2
2015 (January)	5	1	1	0
2015 (June)	13	5	5	0

**33. Diversity of students**

SPM students come from different educational and social backgrounds. There are students from weaker socio-economic sections, SC, ST, minorities and others.

Roll No.	Name	Gender	State
20141001	Abhas Mahesh Mittal	Male	M.P.
20141002	Abhishek Jaideb Banerjee	Male	Gujarat
20141003	AKANKSHA SONKER	Female	Maharashtra
20141004	Akash Baburao Rangari	Male	Maharashtra
20141005	Akshay Girish Shah	Male	Gujarat
20141006	ANJALI SINGH	Female	Delhi
20141007	Ankit Joshi	Male	M.P.
20141008	Apoorv Sharma	Male	Haryana
20141009	APURVA MITTAL	Female	U.P
20141010	Azlaan Tirmizi	Male	Gujarat
20141011	Bhaumik Rushikesh Gandhi	Male	Gujarat
20141012	BHAVNA DOLEY	Female	Assam
20141013	BINITA BHAGATSINGH RAWAT	Female	Gujarat
20141014	Chirayu Amrishkumar Trivedi	Male	Gujarat
20141015	Deep Tigga	Male	Chattisgarh
20141016	Deepak Mishra	Male	U.P
20141017	DIVYA RAJESH KALE	Female	Gujarat
20141018	GARIMA HEERANI	Female	Rajasthan
20141019	Gaurang Agarwal	Male	Rajasthan
20141020	Gaurav Sohanlal Jaiswal	Male	Gujarat
20141021	Ghanshyam Rameshbhai Bhavsar	Male	Gujarat
20141022	Hardik Mahendrabhai Doshi	Male	Gujarat
20141023	HEMALI PRAMODBHAI KESARIA	Female	Gujarat
20141024	Indranil Pravin Joshi	Male	Gujarat
20141025	ISHITA ASHOK KUMAR JAIN	Female	Gujarat
20141026	Jai Bakliya	Male	Rajasthan
20141027	Jay Satishbhai Oza	Male	Gujarat
20141028	Ketan Mansukhlal Gyanchandani	Male	Gujarat
20141029	Kunal Sugandhi	Male	A.P
20141030	Manish Kumar Bhade	Male	M.P.
20141031	Masumraza Saiyed	Male	Gujarat
20141032	Maulik Kaushikbhai Patel	Male	Gujarat
20141033	Mayank Gupta	Male	Delhi
20141034	MEHERNAZ YAKUBKHAN PATHAN	Female	Gujarat
20141035	MITTALI BHAGIRATH SOLANKI	Female	Gujarat
20141036	Mohit Jaiswal	Male	M.P.

20141037	MONIKA ANIL KUMAR SINGH	Female	Gujarat
20141038	Mridu Pavan Chakrabarty	Male	Assam
20141039	NIKITA SOOD	Female	Gujarat
20141040	Nitin Lekhwani	Male	Rajasthan
20141041	Onil Linus Christian	Male	Gujarat
20141042	PALAK BHAVESH DHAMECHA	Female	Gujarat
20141043	Parmarth Mishra	Male	Gujarat
20141044	Parth P Sambhwani	Male	Gujarat
20141045	Parth Pareshbhai Parekh	Male	Gujarat
20141046	Parth Pravinkumar Panchal	Male	Gujarat
20141047	Parth Yashwin Mehta	Male	Gujarat
20141048	POOJA HITESH AJMERA	Female	Gujarat
20141049	Poras Naimishkumar Shah	Male	Gujarat
20141050	Pranjal Kishore	Male	U.P.
20141051	Pratik Kumar Dangi	Male	Gujarat
20141052	Pratik Satishbhai Naker	Male	Gujarat
20141053	PRIYANKA RANVIRSINGH DOHRE	Female	Gujarat
20141054	Pushpraj Singh	Male	U.P
20141055	RADHIKA PRAGJIBHAI GADARA	Female	Gujarat
20141056	Rajan P Zaveri	Male	Gujarat
20141057	RIDDHI DILIP KANETKAR	Female	Gujarat
20141058	RIYA GIRI	Female	West Bengal
20141059	Ronak Dineshchandra Agrawal	Male	Gujarat
20141060	RUCHI SURESHBHAI PATEL	Female	Gujarat
20141061	Rushit Jaysukh Valera	Male	Gujarat
20141062	SALONI HIREN SHAH	Female	Gujarat
20141063	Sanjeev Kumar	Male	Bihar
20141064	Saurabh Ojha	Male	Gujarat
20141065	SAYALI S DHAVALIKAR	Female	Maharashtra
20141066	SHIKHA SAH	Female	Gujarat
20141067	Shivang Nalin Parmar	Male	Maharashtra
20141068	SUCHI SAMIR YADAV	Female	Gujarat
20141069	Sudarshan Gupta	Male	Rajasthan
20141070	Tapan Kumar	Male	U.P.
20141071	Vikas Shrichand Dugar	Male	Gujarat
20141072	Vikash Kumar	Male	Bihar
20141073	Vivek Krishnakant Mehta	Male	Gujarat
20141074	Yash Maurya	Male	Rajasthan

	Year 1 (2010)		Year 2 (2011)		Year 3 (2012)		Year 4 (2013)		Year 5 (2014)	
Category	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female

SC	8	1	4	1	8	1	5	1	4	4
ST	2	-	2	-	1	-	2	-	2	1
OBC	-	-	-	-	-	-	-	-		
General	46	3	43	13	46	10	81	32	44	19
Others	-	-	-	-	-	-	-	-		

**34. How many students have cleared Civil Services and Defense Services examinations,**

**NET, SET, GATE and other competitive examinations? Give details category-wise.**

We do not have this information available.

**35. Student progression**

<b>Student Progression</b>	<b>Percentage against enrolled (Batch 2012-14)</b>
UG to PG	NA
PG to M.Phil.	1 student (Percentage value will be very small)
PhD to Post Doctoral	None
Employed through Campus Selection	100%
Employed through other than Campus recruitment	None
Entrepreneurs	None

Students graduating from MBA take up corporate jobs. The PGDPM-X Executive Program students are working executives and continue to work in their existing organizations.

**36. Diversity of staff**

Percentage of faculty members who are graduates	100%
From the same University	None
From other Universities within the State	36%
From Universities from other States	55%
From Universities outside the Country	9%

**37. Number of faculty who were awarded M. Phil., Ph.D., D.Sc. and D.Litt. during the assessment period**

None

**38. Present details of departmental infrastructural facilities with regard to**

**a) Library**

a. Library Area in Sq. Mt.	: 273 sq mts.
b. Total number of books (volumes)	: 11350
c. Total number of national journals	: 80
d. Total number of international journals	: 12
e. Total number of e-books	: Nil
f. Databases	: 5
g. E-journals	: 2100
h. Open source software	: D-Space
i. CDs	: 890

**b) Internet facilities for staff and students**

Internet: 150 Mbps

LAN, Wi-Fi, Outlook Web Access, Team Viewer

**c) Total number of class rooms : 6 classrooms**

6 air conditioned classrooms equipped with multimedia and audio visual equipment.

**d) Class rooms with ICT facility :**

6 Classrooms

**e) Students' laboratories : 1**

1 Computer laboratory

**f) Research laboratories :**

None

**39. List of doctoral, post-doctoral students and Research Associates**

**a) from the host institution/university : 1**

**b) from other institutions/universities : 12**

Batch	Name	Area	Research interest	
2010	Rutvik Gandhe	HR	Role of Psycho-social Factors in Determining Energy Conservation Behavior	Part Time
2012	Dipti Yagnik	HR	Training and Development	Part Time
2013	Amit Agarwal	Operations Mgmt.	Application of IT/New Technology in Logistics & Supply Chain Management Operations Management in Retail Industry	Part Time
2013	Ashutosh Jani	HR	Role of technology for HR Transformation	Part Time
2013	Sanjiv Chaudhary	Marketing	Clean energy marketing with special focus on WIND-ONSHORE, SOLAR PV & BIOENERGY in India	Part Time
2013	Narpat Asia	Marketing	City Gas Distribution/NG Marketing	Part Time
2013	Darshit Shah	Finance	Stock Market	Part Time
2013	Siddharth Shukla	Finance	BASEL III: A Global regulatory framework for banking systems	Part Time

2013	Pallavi Vyas	HR	Competency Mapping	Part Time
2014	Jyoti Rajesh Maheshwari	GM	Public Policy	Part Time
2014	Rushi Sanatkumar Pandya	GM	The broad topic of the research is about understanding the entrepreneurial ventures and their challenges while the phase of scale up.	Part Time
2014	Savitha Sasidharan Pillai	HR	Challenges and issues facing HR in SME Sector	Part Time
2015	Mit Prashant Gandhi	Operations	Lean Management	Part Time

**40. Number of post graduate students getting financial assistance from the university.**

None

**41. Was any need assessment exercise undertaken before the development of new program(s)? If so, highlight the methodology.**

Yes, the need assessment exercise is undertaken before development of a new program:

- Through contact with our Alumni and Industry partners, there is a continuous effort to improve course content. New programs are suggested and discussed in the Board of Studies (B.o.S) meetings held twice a year.
- BoS members provide their inputs based on their experience which are weaved into the proposal
- The program structures and curriculum are first discussed in the academic area meetings followed by discussion at the BoS, then in the Faculty of Management and Academic Council.

**42. Does the department obtain feedback from  
a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how**

**does the department utilize the feedback?**

Yes, the institute collects feedback from faculty with regard to curriculum and also teaching-learning evaluation.

- The feedback of faculty regarding modification of course curriculum or addition of electives is used for curriculum evaluation, improvement and enhancement. The feedback outcome is first discussed in the Academic Area Committee meeting
- The recommendations are discussed in the Board of Studies, then in the Faculty of Management and on approval is sent to the Academic Council

**b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?**

Yes, the institute has a formal process of collecting feedback from students about the teaching-learning-evaluation process followed in each course. Student feedback is collected at the end of each course. The feedback is reviewed by the Director after every term and it is discussed with the concerned faculty to identify the areas of improvement. The feedback also reflects on the faculty performance evaluation submitted to the University authorities on annual basis.

**c. alumni and employers on the programs offered and how does the department utilize the feedback?**

Yes, the institute collects feedback from both alumni and recruiters. It collects feedback through various channels and during interactions such as:

- Alumni meet in various cities
- Conclaves, where they are invited
- Recruitments
- Inviting them as Experts on varied occasions
- Admissions
- Board of Studies
- Internship and Placement activities
- Faculty of Management

The feedback and valuable suggestions are acted upon promptly.

**43. List of distinguished alumni of the department (maximum 10)**

Sr. No.	Name of Alumni	Present Designation and Organization of the Alumni
1	Bhaskaraharish Tadinada	Business Analyst, Weatherford Drilling International, Dubai
2	Rajvi Pandya	Well Engineer, Schlumberger, Iraq
3	Mayank Gaur	Consultant, Marathon Oil, Houston, Texas, USA
4	Nalin Saurav	Senior Consultant, KPMG, Canada
5	Abhishek Jha	Manager, Group Internal Audit, Petrofac, Sharjah, UAE
6	Mrinal Madhav	Assistant Director (Int. Cooperation), Petroleum Planning and Analysis Cell (PPAC), Ministry of Petroleum and Natural Gas, Delhi/NCR
7	Nitin Yadav	Deputy Manager- Natural Gas, BPCL, Delhi/NCR
8	Ankit Jain	Associate Technical Professional-Well Design, Halliburton Offshore Services Inc., Mumbai
9	Manas Nanavaty	Senior Consultant, Advisory Services, Ernst & Young LLP, Mumbai
10	Krishnadev CS	Deputy Director (Energy), FICCI, Delhi/NCR

**44. Give details of student enrichment programs (special lectures / workshops / seminar) involving external experts:**

Students go on industry visits and also take up long term (6-8 weeks) internships for hands-on experience in their areas of interest and specialization. Aptitude test preparation is provided for students to clear entrance tests of various companies as well as institutions of higher education. Soft skills' training is provided through rigorous sessions in body language, verbal communication, CV Writing, and facing group discussion and interview panels. Various other training programs are arranged throughout

the academic cycle by the respective Department as well as Special Interest Groups (Student Clubs), for theme specific training and up gradation of knowledge. Competitions are organized for raising the level of academic competitiveness amongst students. Examples are model making competition, robot wars competition, poster making competition, paper presentation competition etc. Students are encouraged and funded to participate in national and international academic competitions organized by associations / institutions. Office of International Relations of PDPU organizes students' interaction with International university representatives in the campus to guide students regarding further study options. Industry interactions during seminars/forums/ round tables provide students new perspectives on competencies required for careers. Students publish SPM-Mirror, an in-house magazine of SPM at interval of every month. CEO lecture series, Alumni Lecture series, Faculty Seminar series and Distinguished Speakers Lecture series are conducted at regular intervals throughout the academic year. In addition, Business Management Symposium, Oil and Gas Conclave, Power Sector Conclave, Infrastructure Conclave, HR Conclave, etc. are organized every year to enrich the students' learning during the program. Specialised workshops for skill enhancement and specialised subject knowledge development are conducted from time to time. International Conference on Energy and Infrastructure (ICEI) is organized once in every two year at the campus.

**45. List the teaching methods adopted by the faculty for different programs:**

The pedagogical tools that are used by our faculty members to enhance learning experience are:

- (a) Lecture method
- (b) Lecture supplemented by videos
- (c) Role plays
- (d) Business simulations
- (e) Management Games
- (f) In-class Exercises
- (g) Mini as well as comprehensive projects
- (h) Newspaper discussions
- (i) Research paper presentation and discussion from reputed journals
- (j) Case study analysis and presentations
- (k) Industry visits

- (l) Expert lectures by Industry
- (m) Film analysis
- (n) Observational learning through field visits
- (o) Scenario building and analysis
- (p) Debates

**46. How does the department ensure that program objectives are consistently met and learning outcomes are monitored?**

The programme objectives can be met by designing the courses such that it leads to development of required skills as a decision maker in the industry. Each course of programme is mapped against about 10 attributes/skills. These attributes or skills are used to design the course objectives and learning outcomes from the courses are monitored and measured through the continuous evaluation system across different courses. Each course faculty designs unique evaluation criteria accordingly in their respective course plan. Students are required to give feedback formally at the end of each course with respect to (a) course and (b) instructor on the basis of learning outcomes.

**SCHOOL OF PETROLEUM MANAGEMENT**  
**TWO YEAR FULL TIME MBA**  
**Course evaluation**  
**Term MBA**

1. Course Title :
2. Name of the Instructor :

Please rank on the scale of 5

**Interpretation of scale**

**About Learning Outcomes:**

- |                   |                   |                           |
|-------------------|-------------------|---------------------------|
| 5-Fully Achieved  | 4-Fairly Achieved | 3-Satisfactorily Achieved |
| 2-Partly Achieved | 1-Not Achieved    |                           |

**About the Course and Instructor:**

- |                  |                     |             |
|------------------|---------------------|-------------|
| 5-Strongly Agree | 4-Agree             | 3-Undecided |
| 2-Disagree       | 1-Strongly Disagree |             |

ABOUT THE LEARNING OUTCOMES	Please rank on the scale of 5
Objectives of the course from course outline	
<b>ABOUT THE COURSE</b>	
The course is well designed and structured	
The contents of the course are useful	
The Text – Book prescribed is useful	
The reading materials are relevant	
<b>ABOUT THE INSTRUCTOR</b>	
He/she is clear with subject concepts	
He/she communicates clearly the ideas and information	
He/she relates subject matter with practical examples	
He/she involves students in the class	
He/she is able to handle the class	
He/she returns quizzes, tests and mid-term examinations on time	
He/she provides feedback on answer/analysis for mid-term examination	
He/she is fair in assessment	

**47. Highlight the participation of students and faculty in extension activities.**

SPM students through the program ‘Community Development Initiative – CDI’ of the University get engaged in the outreach programs. Apart from this they also get involved in the CDI through organisations like CII-Yi. SPM students organize Blood Donation Camp every year in collaboration with Prathma Blood Bank. The University has the NCC wing functional at its campus which has been recently established. Interested students of SPM are encouraged to join these activities. SPM students in collaboration with Prathma Blood Bank organize Blood Donation Camp at SPM-PDPU every year. Since last four consecutive years SPM has been receiving special trophies for donating more than 200 units of blood. To promote health and fitness awareness, students organize ‘Energy Run’ every year. Apart from these students have been engaging with the poor strata of the villagers in the vicinity and have been helping them by means of support for their children’s education, clean drinking water etc. The students have learnt the virtues of compassion and empathy through such engagements.

SPM has also been organizing Community development program through participation in rural educational activities. These programs helped the students in inculcating the value of social sensitization. They also helped in developing the planning and organizing skills of management students.

**48. Give details of “beyond syllabus scholarly activities” of the department.**

1. Consultancy Project on “Strategic review of GSECL (Gujarat State Electricity Corporation Ltd.)”
2. Faculty members have published two Books

S.N	Name of Faculty Member	Name of the Book	Name of the Publisher	Year of Publication
1	Pramod Paliwal & Sudhir Yadav	Cases in Business Marketing	McGraw Hill International	2013
2	D M Pestonjee & Satish Pandey	Stress and Work: Perspectives on Understanding and Managing Stress	Sage Publications	2013

3. SPM, PDPU and Institute of Energy Economics, Japan (IEEJ) designed and conducted a collaborative Study to 'Promote Energy Savings in India's Transportation Sector'.
4. SPM designed and developed written test to recruit GETs for GSPC group of companies.
5. Some of the innovative teaching methods adopted by the faculty during the last four years are as follows:
  - a. Using autobiographies as recommended texts
  - b. Using films and simulations to impart learning
  - c. Novel structuring of the courses by incorporating industry related applied notes
  - d. Joint / teaching team
  - e. Teaching by Industry practitioners
  - f. Combination of field based training and classroom learning

**49. State whether the program/ department is accredited/ graded by other agencies? If yes, give details.**

Not applicable

**50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.**

1. All faculty members have published research work in their area of interest. Faculty members have also published book. All the published work is used as teaching material in various courses.
2. Faculty members have also developed sector specific courses with reading material. In these courses research work / published papers are used as reading/teaching material.
3. So far SPM has organized four international conferences on oil and gas / energy sector. The conference proceedings are also published which contain research work of related area.

**51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.**

**Major Strengths:**

- i. Experienced faculty with research orientation. Faculty members have good number of publications in refereed international and national journals.
- ii. Some of the faculty members also have industry experience. This industry experience helps them bring practical issues in the class discussion.
- iii. Updated course curriculum (Course Review once in two years)
- iv. MBA program with focus on Energy and Infrastructure
- v. School gets support from promoting organization GSPC and other energy companies. Strong linkages with industry.

**Major Weaknesses:**

- i. International accreditation
- ii. Establishment of Centre of Excellence
- iii. Industry Sponsored Research and Consultancy
- iv. Unable to attract participants for Management Development Program
- v. Less number of applications for academic programs

**Major Opportunities:**

- i. Potential to offer Management Development Programs to international participants
- ii. Potential to offer specialized courses on Energy to academic institute abroad
- iii. School can become the resource centre for any needs of Energy industry
- iv. Still there are many sector specific courses (like ETRM, HSE, and Energy Financing etc.) which can be developed by internal faculty. Later those topics can be offered as MDP to industry executives.
- v. Look for placement opportunities abroad.

**Major Challenges:**

- i. New IIMs and increase of intake by established IIMs
- ii. Increase in intake by other reputed institutes based in cities like Delhi, Mumbai etc.
- iii. Decreased interest of students in MBA programs (number of candidates taking CAT is decreasing)

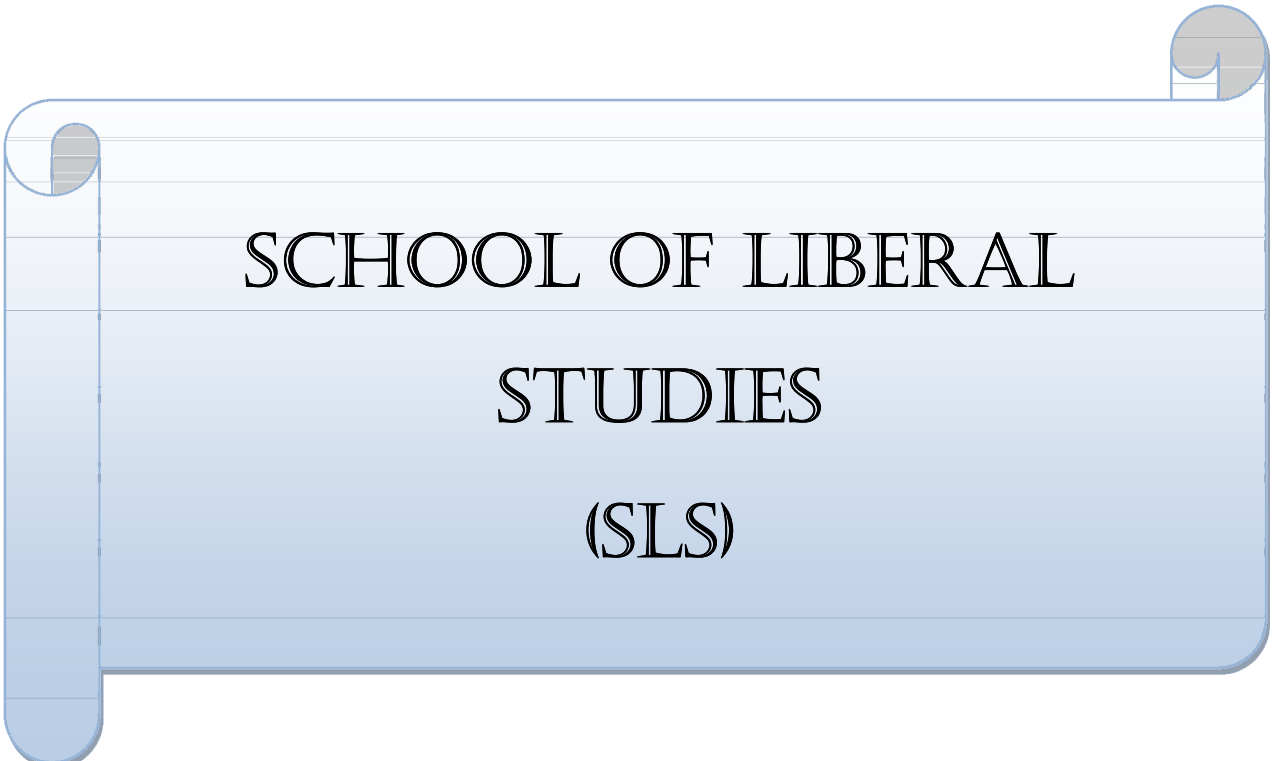
- iv. Identifying placement opportunities for students on a continuous basis i.e. every year
- v. To update the happenings in the energy sector as the sector is very dynamic

## **52. Future plans of the department.**

SPM plans to launch full time / part time MBA (Oil and Gas) program in the regions rich in oil and gas. Few short duration international programs can also be planned. To get more number of applications for admissions to our program school plans to promote the curriculum and career opportunities in cities like Mumbai, Kolkata, New Delhi, Bangalore, Chennai etc.

School also plans:

- i. to develop centre of excellence for management / regulatory studies in energy sector
- ii. to develop linkages with Government of India to undertake research projects related to energy sector.



SCHOOL OF LIBERAL  
STUDIES  
(SLS)

**1. Name of the Institute**

School of Liberal Studies (SLS)

**2. Year of Establishment:**

2009

**3. Is the Department part of a School/Faculty of the University?**

School of Liberal Studies is a constituent of 'Pandit Deendayal Petroleum University' (PDPU).

**4. Names of programmes offered (UG, PG, M. Phil, PhD, Integrated Masters, Integrated PhD, D.Sc, D.Litt, etc.)**

**a) Post-Graduate Programmes:**

- Masters of Arts in English
- Masters of Arts in Public Policy and Administration
- Masters of Arts in International Relations

**b) Under Graduate Programmes**

- B.A. (Hons.) / B.B.A. (Hons.) 4 Years Programme
- B.Com. (Hons.) 4 years Programme

**c) Doctoral Programme**

- PhD in English
- PhD in Public Policy and Administration
- PhD in International Relations
- PhD in Psychology
- PhD in Economics

**5. Interdisciplinary Programmes and Departments involved:**

UG program pedagogy is Interdisciplinary where a student is exposed to interdisciplinary course structure on choice based credit system.

**6. Courses in Collaboration with other Universities, Industries, Foreign Institutions, etc**

Nil

**7. Details of Programmes Discontinued, if Any, with reasons**

Nil

**8. Examination System: Annual/ Semester/ Trimester/ Choice based Credit System**

- Semester – for Doctoral Programme
- Four Semesters for Post Graduate Programme
- Eight Semesters for Graduate Honors Programme

SLS follows CBCS.

**9. Participation of the Department in the courses offered by other Departments:**

- Faculty members of the institute serve as visiting faculty at other departments/ Schools in the university.
- Faculty members are invited to judge various curricular, co- curricular and extra-curricular activities of other departments/ Schools in the university.
- Faculty members are appointed as Research Experts in the Doctoral Review Committees of research scholars of the other Departments/ Schools in the university.
- Students participate in events of the other Schools in the university
- SLS courses are offered to students of other Schools under CBCS.

**10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/ Asst. Professors/others)**

Name of the Post	Sanctioned Post	Filled Post	Actual
Chair Professor			
Professor Emeritus			
Professor	2	1	1
Associate Professor	4	3	3
Assistant Professor	16	9	9
Lecturer on Contract		3	3

**11. Faculty Profile with Name, Qualification, designation, area of Specialization, Experience and Research under Guidance**

Name of the Faculty	Qualification	Designation	Specialization	Experience	Research and Guidance
Prof. Nigam Dave	PhD	Professor, Dean and Director	English Literature	22Years	<ul style="list-style-type: none"> <li>• Guiding 6 PhD students</li> <li>• Guided 2 M.Phil. Students</li> <li>• Guided 7 B.A.</li> </ul>

					Dissertations
Dr. Ashvin Dave	PhD	Associate Professor	Finance, Project Management, Banking and Insurance	34 Years	65 MBA dissertations Guided,
Ms. Niyati Trivedi	MA, M.Phil	Lecturer	English Literature	10 years	
Dr. Tejas Dave	PhD	Associate Professor	Marketing, e-Commerce,	25 years	
Dr. Prashanta Panda	PhD	Associate Professor	Economics, Micro Economics	10 Years	
Dr. Ritu Sharma	PhD	Assistant Professor	Psychology, Clinical Psychology, Personality Mapping	12 Years	One PhD under progress
Dr. Neeta Sinha	PhD	Assistant Professor	Applied and Industrial Psychology	15 Years	4 PhD Under progress
Dr. Neeta Khurana	PhD	Assistant Professor	English Literature	20 Years	
Dr. Sanjay Pradhan	PhD	Assistant Professor	Political Science and International Relations	8 Years	1 PhD under progress
Dr. Chaitanya Vyas	PhD	Assistant Professor	Marketing, Digital Marketing, Marketing Communications	10 Years	
Dr. D. Sriram	PhD	Assistant Professor	Public Administration: Public Private Partnerships, Public Health	3 years	8 MA Dissertations Guided, 2 PhD under progress
Dr. Anurag Srivastava	PhD	Assistant Professor	Public Administration: E Governance	5 Years	6 MA Dissertations Guided
Dr.M.Venkat Ram Reddy	PhD	Assistant Professor	Public Administration, Police Administration	2 Years	
Ms. Urmi Satyan	MA, M.Phil,	Lecturer	English Literature	7 years	
Ms. Supriya Pal	MBA	Lecturer	Organizational Behavior,	3 Years	

Dr. Sitakanta Mishra	Ph.D	Assistant Professor	SHRM, Political Science and International Relations	4 Years	
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## 12. List of Senior Visiting Fellows, Adjunct Faculty, Emeritus Professors

School of Liberal Studies has adequate number of Full time faculty. However as a value addition and in order to bring in the latest and best professional inputs for students, professionals of various disciplines from relevant industries are invited to deliver courses.

Sl.No	Name of the Visiting Faculty	Qualification	Organization/Institute Association
1	Asha Mandappa		
2	Prof. Sangeeta Sharma	PhD	University of Rajasthan
3	Prof. Venkatraman	PhD	Veernarmad South Gujarat University
4	Dr. Nilesh Joshi	PhD	Veernarmad South Gujarat University
5	Prof.Preeti Garg	PhD	Veernarmad South Gujarat University
6	Dr. MV Reddy	PhD	Osmania University
7	Dr. Dhyan Mehata	PhD	Nirma University
8	Mr. Manoj Sahoo	MA, M.Phil	PDPU
9	Mr. Meena Bilgi	MA	PDPU Researcher
10	Mr. Ashwin Parwani	M.Com	Gujarat University
11	Mr. Abhinav Kapadia	CA	PDPU
12	Mr. Abhinav Banker	Professional Expert	Theatre Professional
13	Ms. Esha Shah		
14	Ms. Krishna Kanabar	Freelance Media Person	Freelance Media Person
15	Dr. Parna Mukharjee	PhD	Faculty, Nirma University
16	Ms. Nisha vyas		Professional Language Trainer
17	Ms. Lavanya Trivedi		Professional Language Trainer
18	Mr. Khoei		Professional Language Ttrainer
19	Ms. Poorvi Vyas	CCEE	Food Entrepreneur
20	Ms. Preeti Das		Freelance media Person
21	Ms. Rifat Quaadri	MA	GU
22	Dr. Minni Mathews	PhD	GU
23	Dr. Shilpa Das	PhD	GU
24	Dr. Geetanjali Dutta	PhD	GIDR
25	Dr. Arun Kumar Malik	PhD	GNLU
26	Dr. Sanjay Kumar Jha	PhD	GCU

27	Ms. Shilpa Parshurampur	MA	Research Scholar
28	Mr. Bansi Patel	MBA	NICM
29	Mr. Harshil Trivedi	CA	ICAI
30	Mr. Bhasin Mehata	MBA	PDP
31	Dr. Rohit Srivastava	PhD	PDP
32	Dr. Manoj Kumar Pandey	PhD	PDP
33	Dr. Bala Murali Mayya	PhD	PDP
34	Dr. Nirendra Mishra	PhD	PDP
35	Mr. Darshit Shah	M.Sc	PDP
36	Mr. Rajesh Jani	B.P.Ed	Freelance Sports Coach
37	Dr. Junera	PhD	NICM
38	Dr. Vijay Sinh Dandakihia	PhD	St. Xavier's College
39	Dr. Jigna Trivedi	PhD	NICM
41	Dr. Balaji Ranganathan	PhD	GCU

**13. Percentage of classes taken by temporary faculty –Programme wise information:**

None

**14. Programme wise Student Teacher Ratio -**

Name of the Programme	Total no of Students	No of Teachers	Student Teacher Ratio
MA English	7	4 + 3 Adjunct Faculty	1:1
MA Public Admin	17	3+1 Adjunct faculty	4.25:1
MA IR	4	2+3Adjunct faculty	1:1
BA/BBA/ B.Com Hons	668	17 + Adjunct Faculty	11.92:1

**15. Number of academic support staff (Technical) and Administrative staff: sanctioned, filled and actual:**

Sanctioned Post	Filled Post	Actual
4	4	4

**16. Research thrust areas as recognized by major funding agencies**

Nil

**17. Number of faculty with ongoing projects from a) National b) International Funding agencies and c) Total grants received. Give the names of the funding agencies, projects title and grants received project – wise:**

Sl.No	Project Details	Faculty involved	Funding Agency	Funding Amount
1	Impact India 2021: Elevating the Value of Women & Girls --- Pilot study	Prof. (Dr. ) Nigam Dave Ms. Neeta Khurana Dr. Ritu Sharma	World Bank	1500 USD
2	“Women’s Economic Empowerment in Asia: Psychosocial and Anthropological factors”	Dr Ritu Sharma (Project Head), Dr Neeta Sinha, Ms. Neeta Khurana, Ms. Supriya Pal, Prof D. M. Pestonjee (Mentor for Review)	Edith Cowan University, Australia	\$6,360.00 (AUD)
3	Slum Rehabilitation housing impact assessment- Ahmedabad-2015	Ms. Neeta Khurana  Dr. Ritu Sharma	B Safal Pvt Ltd	3,00,000 INR

**18. Inter- Institutional collaborative projects and associated grants received**

**a) National Collaboration b) International Collaboration**

SLS, PDPU and Raksha Shakthi University have collaborated for research collaborations and have hosted Psychology Symposium and national conference on Mental Health. The Conference was funded by American Psychologists Association.

**19. Departmental projects funded by UGC-SAP/CAS, DPE, ICSSR etc, Total grants Received:**

Nil

**20. Research Facility/ Center with**

- **State Recognition**
- **National Recognition**
- **International Recognition**

Not Applicable

## 21. Special Research Laboratories Sponsored by /created by industry or corporate Bodies

Nil. However, out of genuine research inclinations, PDPU has established Psychology Laboratory. The following is an illustrative list of Lab test/Instruments available at SLS:

- Muller Lyre Illusion with Stand Scale and Manual
- Mirror Drawing Apparatus Electronics with Digital reset error counter
- Human Maze Learning Electronics with Digital reset error counter and Timer
- Memory Drum Four Variable Speed Electrical
- Recall of Completed and In completed Task : (RCIT-B) Zeigarnik Effect-English
- Cattell and Cattell. Culture Fair (Free) Intelligence Scale Indian Print Kapoor, Rao and Singh. (Indian Adaptation)- (ii) Scale II (English) (CFIS-II E)
- Stop Watch (Timer) Racer Electronics Digital
- Metronome (Electronics Indian)
- Wooden/Metal Screen (12" × 16")
- Performance Intelligence Test of Adult- (Age group 15 to 45 years.)
- Pass-a-Long Test of Intelligence
- Koh's Block Design Test with Cards, Manual and 100 Scoring Sheet (KBDT-K) (Mental Age 5 years 7 months to 19 years 11 months)
- Bhatia. Battery of Performance Intelligence Test (BPIT-B) (A 11 to 16 years)
- R. B. Cattell 16 P. F. Questionnaire (16PFQ-CR)
- Cattell and Cattell. Technical Hand Book of HSPQ
- H. J. Eysenck. Maudsley Personality Inventory (MPI-E)
- Bender Visual Motor Gestalt Test Guidelines. Indian (BVMGTGI) (Age group 7 to 14 years.)
- H. Rorschach Ink Blot Technique
- Rorschach Record and Analysis Blank
- H. A. Murray. Thematic Apperception Test(TAT-MH)
- Draw-A-Man Test for Indian Children - Dr. P. Phatak
- Levenson's Scale for Locus of Control Indian Adaptation(English)-by Vohra
- Adjustment Inventory for School Students (AISS) English by A.K. P Sinha and R.P.Singh Set
- Adjustment Inventory for College Students English/Hindi specify -by A.K. P. Sinha and R.P.Singh
- P. G. I. General Well-being Measure PGIGWBM-VV) Hindi/ English S. K. Verma and Anita Verma.
- Parent Child Relationship Scale(PCRS)- NaliniRao (English).
- State-Trait Personality Inventory Measure Anxiety, Anger, Depression, & Curiosity in one Inventory Charles D. Spielberger: STPI
- Differential Aptitude Test (DAT)

## 22. Publications

Number of papers published in peer reviewed journals (National and International) = 49

1	Sanjay Kumar Pradhan	Appraisal of Gandhi and Indian Struggle against Racism in South Africa	World Focus	JAN	2011
2.	Sanjay Kumar Pradhan	Russia-US Relationship in the Post-Cold War Era: Can it be reset?	Journal of Peace Studies	JAN	2011
3.	Sanjay Kumar Pradhan	Problems of Tribal Education in India	Kurukshetra	JAN	2011
4.	Sanjay Kumar Pradhan	Contemporary Dimensions of the India-Africa Economic Relationship: An Indian Perspective	World Affairs	JAN	2011
5.	Sanjay Kumar Pradhan	Are the Elephant and Dragon in Brawl? A Comparative perspective of India and China in Africa	World Focus	JAN	2011
6.	Sanjay Kumar Pradhan	India and Africa: Quest for Oil and Gas	Indian Foreign Affairs Journal	JAN	2012
7.	Sanjay Kumar Pradhan	Spartly Dispute: Looking through Oil and Gas and India's Energy Approaches	World Focus	JAN	2012
8.	SANTOSH KUMAR	Challenges of Good Governance in India: Changing Role of CAG	The Discussant: journal of Centre for Reforms, Development and Justice	JUL	2012
9.	Dr.Anurag Kumar Srivastava	Climate change: Global response"	"Scholarly Journal of Engineering Research"	OCT	2012
10.	Sanjay Kumar Pradhan	The NREGA and Rural Women: Employment Opportunities and Challenges	International Journal of Academic Conference Proceedings	NOV	2012
11.	Ritu Sharma	"A Comparative Analysis of Managerial Competencies across Business Domains: An Indian Perspective"	International Journal on Research and Development –A Management Review (IJRDMR)	JAN	2013
12.	Ritu Sharma	• "Depression Management through Psycho Spiritual Package: An Indian Perspective"	in Indian Journal of Health & Well being	JAN	2013
13.	Sanjay Kumar	The Myanmar-Bangladesh-	World Focus	JAN	2013

	Pradhan	India Gas Pipeline: Intricacies, and Indian Foreign Policy Discourse			
14.	Sanjay Kumar Pradhan	Stable Oil and Unstable Sudans: Implications for Indian Energy Security	International Interdisciplinary Research Journal	JAN	2013
15.	Sanjay Kumar Pradhan	India's International Quest for Oil and Gas Resources: A Foreign Policy Perspective'	World Focus	JAN	2013
16.	Ritu Sharma	• "Mood State Study: An Indian Perspective"	-Social and Behavioral - (ELSEVIER)	FEB	2013
17.	D Sriram	Public Private Partnerships in safeguarding Maternal Mortality and Neonatal Helath: The Gujarat Model(Chiranjeevi Yojana))	Public Affairs and Governance	MAR	2013
18.	Ritu Sharma	"Mentoring for Effective Positive Workforce: A Case Study"	Global Journal of Finance and Management	APR	2013
19.	NEETA SINHA	1. A Comparative Analysis between Gender, Age groups and levels of teaching of perceived Organizational Role Stress among faculties of Management Education	International Journal of Business and General Management	JUL	2013
20.	Ritu Sharma	Global Talent-Create to Sustain"	Journal of Global Studies (JGS)	SEP	2013
21.	NEETA SINHA	6. Organization Culture and its Dynamics – A Case Study	International Journal of Business, Management and Social Sciences,	OCT	2013
22.	NEETA SINHA	1. An exploratory study on the feasibility and challenges of implementation of Right to Education Act (RTE)	The International Journal of Indian Psychology, IJIP	OCT	2013
23.	Ashvin R. dave	Customer Satisfaction In Banking Sector – Evidence from India	Global Management Horizon	DEC	2013
24.	Chaitanya Vyas	What do Indian customers want in a cell phone? Strategies for network providers and handset manufacturers	International Journal of Indian Culture and Business Management, Inderscience	DEC	2013

			Publisher		
25.	Sanjay Kumar Pradhan	India-Iraq Energy Cooperation: Boost with Accomplishments, Twisted with Anomalies	World Focus	JAN	2014
26.	NEETA SINHA	A Comparative Analysis between Gender, Age groups and levels of teaching of perceived Organizational Role Stress among faculties of Management Education	International Journal of Business and General Management (IJBGM),	JUL	2014
27.	Sanjay Kumar Pradhan	Iraq and Energy 'insecurity'	Geopolitics	AUG	2014
28.	NEETA SINHA	An Analysis of the Effect of Emotional Intelligence and Gender on Stress Levels of Management Students	International Journal of Education and Management Studies	DEC	2014
29.	Neeta khurana	Lonliness	Research Scholar : An International Refereed e-Journal of Literary Explorations	FEB	2015
30.	Neeta khurana	Vaccuum	Research Scholar An International Refereed e-Journal of Literary Explorations	FEB	2015
31.	Sanjay Kumar Pradhan	Shale gas in Indo-US cooperation	Geopolitics	FEB	2015
32.	Ritu Sharma	Cognitive-Behavioral Approach in Mentoring College Students For Personal Effectiveness: An Empirical Study	Scholedge International Journal of Multidisciplinary & Allied Studies	MAY	2015
33.	NEETA SINHA	Effects of growing mobile usage at workplace and its impact on work productivity - A detailed analysis	Global Journal of Research in Business & Management	JUN	2015
34.	Sanjay Kumar Pradhan	Geopolitics and Cooperation between India and Russia on the Hydrocarbon Sector	Indian Foreign Affairs Journal	JUN	2015
35	Dr. D. Sriram	Role of Public Private Partnerships in controlling Tuberculosis: A Study with Reference to Hyderabad	Osmania Journal of Social Science	Dec	2010

36	Dr. Venkat Ram Reddy	Information and Communication Technology and Police reforms in India	KU Journal of Social Sciences		2013
37	Dr. Sitakanta Mishra	“Nuclear Rehabilitation of Pakistan!”	Defence and Diplomacy (New Delhi)	Oct-Dec	2014
38	Dr. Sitakanta Mishra	Defence Beyond Design: Towards a New Nuclear Paradigm	Air Power (New Delhi)	July-Sep	2014
39	Dr. Sitakanta Mishra	India’s Nuclear Grand Bargain	Defence and Diplomacy (New Delhi)	July-Sep	2013
40	Dr. Sitakanta Mishra	Safety, Security, Safeguards: The Intricate Interface”	Air Power (New Delhi)	July-Sep	2013
41	Dr. Sitakanta Mishra	Nuclear Waste: India’s Gordian Knot?	Air Power (New Delhi)	Oct-Dec	2012
42	Dr. Sitakanta Mishra	“Social Acceptance of Nuclear Power in India”	Air Power (New Delhi)	July-Sept	2012
43	Dr. Sitakanta Mishra	“Cyber Threat to Nuclear Installations”	Scholar Warrior (New Delhi)	Autumn	2012
44	Dr. Sitakanta Mishra	“Gaze China – The Most Favoured Nuclear Guest”	Defence and Diplomacy (New Delhi)	July-Sep	2012
45	Dr. Sitakanta Mishra	Siting of India’s Nuclear Plants: The Modus Operandi”	Air Power (New Delhi)	April-June	2012
46	Dr. Sitakanta Mishra	“Safety and Security of India’s Nuclear Facilities”	Defence and Diplomacy (New Delhi)	Jan-Mar	2012
47	Dr. Sitakanta Mishra	The Nuclear Factor in India’s Foreign Policy”, (co-authored)	Journal of Indian Studies, The Korean Society for Indian Studies (South Korea)	November	2009
48	Dr. Sitakanta Mishra	Nuclear Security Governance in India: Institutions, Instruments, and Culture (co-authored)	Sandia Report, SAND2015-0233, Sandia National Lab, Albuquerque, USA	January	2015
49	Dr. Sitakanta Mishra	Cooperative Measures to Support the Indo-Pak Agreement on Reducing Risk from Accidents Relating Nuclear Weapons (co-authored)	Sandia Report, Sandia National Lab, Albuquerque, USA	April	2014

**Full papers in Conference Proceedings: 08**

1.	Sanjay Kumar Pradhan	ICTs and its Impact on Rural Women in India	AUG	2012
2.	Sanjay Kumar Pradhan	Visualizing Women Entrepreneurship in South Africa: A Post-Apartheid Scenario	FEB	2013
3.	Dr. Anurag Kumar Srivastava	Policies On Water: An Analytical Study On Water Allocation Priorities	MAY	2013
4.	Dr. Anurag Kumar Srivastava	Island Biodiversity: Impact of Climate Change on of Small Islands”	MAY	2013
5.	D Sriram	Proliferation of Private Sector in Service Delivery: An Experience from India	OCT	2013
6.	D Sriram	Public Private Partnerships in helath Services in India: Arogyasri as a Benchmark	NOV	2013
7.	Dr. Sanjay Kumar Pradhan	Indo-Nigerian Ties: Geopolitics for Energy Security and Challenges	JAN	2014
8.	Chaitanya Vyas	Limitations of Selected e-Governance Services in India: Policy Change as Solution for Experience Enhancement of Citizen Services	JAN	2015

**Chapters in Books: 13**

1	Rupakjyoti Borah	India and Japan in the Emerging Asian Equation	October 2012
2	Rupakjyoti Borah	India’s Engagement With New Zealand: What Ails The Relationship	December 2012
3	Dr.Anurag Kumar Srivastava	Applying Service Quality Metrics for E – Urban Governance: A Case Study of Lucknow Municipal Corporation	February 2013
4	Dr. Neeta Sinha	Perceived Role Efficacy of faculties of Management Institutes in Saurashtra Region: A comparison between two genders	February 2015
5	Dr. D. Sriram	Organizational Structure for better work culture in Academic institutions	December 2014
6	Dr. Venkat Ram Reddy	Governance	2014
7	Dr. Sitakanta Mishra	“Zero Justifiable Gains: Lessons from Cold War TNWs Experience”, in Vinod Patney <i>edited Asian Defence Review 2014-2015</i> , KW Publishers.	August 2015
8	Dr. Sitakanta	“India’s Nuclear Diplomacy: From Apartheid to	2014

	Mishra	Multi-Alignment”, in Badrul Alam edited <i>Contours of Indian Foreign Policy: Challenges and Opportunities</i> , New Delhi: Reference Press	
9	Dr. Sitakanta Mishra	“Cruise Missile Defence: The Supersonic Challenge”, in the Project Report to DRDO on <i>Threats, Challenges and Capabilities 2050</i> led by Jasjit Singh, Centre for Air Power Studies, New Delhi	2013
10	Dr. Sitakanta Mishra	“Introspecting on China’s India War” in Jasjit Singh edited <i>China’s India War 1962</i> , New Delhi: KW Publishers, pp. 309-322	2013
11	Dr. Sitakanta Mishra	“Nuclear Waste: India’s Gordian Knot?”, in Jasjit Singh edited <i>Asian Defence Review 2012</i> , New Delhi: KW Publishers Pvt. Ltd., pp. 79-102.	2013
12	Dr. Sitakanta Mishra	“Fukushima Nuclear Disaster: Breakdown of Events”, in Manpreet Sethi edited <i>Nuclear Power: In the Wake of Fukushima</i> , New Delhi: KW Publishers Pvt. Ltd.	2012
13	Dr. Sitakanta Mishra	“Securing India’s Nuclear Facilities: Defence by Design and Beyond”, in Jasjit Singh edited <i>Asian Defence Review 2011</i> , New Delhi: KW Publishers Pvt. Ltd.	2012

**Books Edited : 02**

1	Prof. Nigam Dave	Ruskin Bond: A Critical Evaluation	Jan 2012
2	Dr. Sanjay K Pradhan	The People of Indian Origin (PIO) in South Africa: Past Trajectory and Present Discourse	Jan 2013

**Papers Presented in the conference: 65**

1.	Nigam Dave	Black Donnellys Vs. Reaney’s Donnellys: An Attempt by a Dramatist to Re-Write History	FEB	2009
2.	Nigam Dave	Ruskin Bond’s Dehra: A Town with Grey Heads and Green Hedges	DEC	2009
3.	Nigam Dave	The Language I speak becomes Mine: Appreciating Kamla Das the Poet and the Person	JAN	2010
4.	Nigam Dave	Translating Literature through SMS Language	SEP	2010
5.	Nigam Dave	Translating Literature through SMS Language	SEP	2010
6.	Sanjay Kumar Pradhan	Critical Theory in International Relations	MAR	2011
7.	Nigam Dave	Digital Resources and Research Methods	JUN	2011
8.	Nigam Dave	You Tube for US	DEC	2011
9.	Urmi Satyan	Bama’s Karukku—A Journey and Search with a Hope	DEC	2011

		for Integrity and Humility		
10.	Urmi Satyan	The Inside-Outside Conflict between Spiritual Hollowness and Materialistic Wish-Fulfillment: An Approach to Study the Fiction Writings by Bharati Mukherjee and Chitra Banerjee Divakaruni	JAN	2012
11.	Nigam Dave	Afro-American Identities in Painting	MAR	2012
12.	Sanjay Kumar Pradhan	Theorizing Patriarchy in India	AUG	2012
13.	Sanjay Kumar Pradhan	ICTs and its Impact on Rural Women in India	AUG	2012
14.	Sanjay Kumar Pradhan	Education of Tribal Women in India: Opportunities and Challenges'	OCT	2012
15.	Sanjay Kumar Pradhan	Impact of e-Governance on Rural Women in India	NOV	2012
16.	Sanjay Kumar Pradhan	Rise of India and China in African Oil and Gas Market: Strategies, Competition and Assessment	DEC	2012
17.	Urmi Satyan	Food as a Symbol of Culture: A Study of Jhumpa Lahiri's The Interpreter of Maladies	DEC	2012
18.	Ritu Sharma	"A Comparative Analysis of Managerial Competencies across Business Domains: An Indian Perspective"	JAN	2013
19.	Sanjay Kumar Pradhan	Indo-Nigerian Ties: Geopolitics for Energy Security and Challenges	JAN	2013
20.	Sanjay Kumar Pradhan	Gender Budgeting in India: An Overview	JAN	2013
21.	Sanjay Kumar Pradhan	Gandhiji and Non-Violent Action in South Africa: Theory and Practice'	JAN	2013
22.	Sanjay Kumar Pradhan	Visualising Women Entrepreneurship in South Africa: A Post-Apartheid Scenario	FEB	2013
23.	Urmi Satyan	Existentialism and "A Leap into the Abyss": A Study of The Immigrant by Manju Kapur	FEB	2013
24.	D Sriram	Public Private Partnership in Safeguarding of Maternal Mortality and Neonatal Health	MAR	2013
25.	D Sriram	Technological Innovations in India with Reference to time and Drudegry saving for Women	MAR	2013
26.	Dr. Anurag Kumar Srivastava	"National Food Security Bill"	MAR	2013
27.	Sanjay Kumar Pradhan	Natural oil and gas in Africa: opportunities, strategies and challenges for India	MAR	2013

28.	Sanjay Kumar Pradhan	Cooperatives in South Africa: An Assessment through Third World Perspective	MAR	2013
29.	Dr.Anurag Kumar Srivastava	Discourses on Indian Politics: Post-Coalition Era- Technology and Development: Trends and Policies of Alliance an Overview	APR	2013
30.	Dr.Anurag Kumar Srivastava	The Rights Discourse: Concerns Regarding the Implementation of National Food Security Act 2013”	APR	2013
31.	Sanjay Kumar Pradhan	Right to Education in India: Challenges for Rural Girl Children	APR	2013
32.	Urmi Satyan	Young India and the 16 <sup>th</sup> Loksabha Election	APR	2013
33.	NEETA SINHA	2. An exploratory study on the feasibility and challenges of implementation of Right to Education Act (RTE)	JUL	2013
34.	Neeta khurana	“Feminist Perspective on Maternity Benefits: Disparities in the Law”	AUG	2013
35.	Niyati Shah	Performing Artists and Autobiography: Embedded Gender Roles	AUG	2013
36.	Ritu Sharma	‘Mood State Study: An Indian Perspective’	AUG	2013
37.	Neeta khurana	“A Gynocritical Reading of Nalini Jameela’s The Autobiography of a Sex Worker and Amen : The Autobiography of a Nun by Sister Jesme”	SEP	2013
38.	Neeta khurana	‘Engendering Law : A Feminist Perspective’	SEP	2013
39.	NEETA SINHA	1. An analysis of the effect of Emotional Intelligence on gender and stress levels of Management students	SEP	2013
40.	Sanjay Kumar Pradhan	Piracy in the Malacca Strait: Maritime Insecurity and Implications for the World Energy Flow	SEP	2013
41.	NEETA SINHA	5. Organization Culture and its Dynamics – A Case Study	OCT	2013
42.	Rupakjyoti Borah	India-China Strategic Ties in the Asian Century: Problems and Prospects	OCT	2013
43.	Sanjay Kumar Pradhan	Corporate Social Responsibility (CSR): A Reference to Oil and Gas Companies in India	OCT	2013
44.	Sanjay Kumar Pradhan	The PIO and shaping of South Africa-India relationship in the post-apartheid era: A foreign policy perspective	DEC	2013
45.	SANTOSH KUMAR	MODERNIZATION, SOCIAL EXCLUSION AND EMPOWERMENT OF OTHER BACKWARD CASTES IN INDIA: A STUDY OF GUJARAT	MAR	2014
46.	SANTOSH KUMAR	KEY NOTE ADDRESS: DEMOCRACY AND DEVELOPMENT IN INDIA: THE ISSUES IN	MAR	2014

		INCLUSION AND EXCLUSION		
47.	SANTOSH KUMAR	DEMOCRATIC GOVERNANCE AND BUREAUCRATIC ETHICS IN INDIA	MAR	2014
48.	Ritu Sharma	“Mentoring for Effective Positive Workforce: A Case Study”	APR	2014
49.	Urmi Satyan	M G Vassanji’s The Book of Secrets: A Study of Engendered Culture of Colonized East Africa	AUG	2014
50.	Urmi Satyan	“Ability” “Delight” and “Ornamentation” in Technological ELL	OCT	2014
51.	Nigam Dave	Higher Education Vision 2030	NOV	2014
52.	NEETA SINHA	Perceived Role Efficacy of faculties of management institutes	FEB	2015
53.	S. VENKATA KRISHNAN	India’s Capabilities, Perceptions and Influence	FEB	2015
54.	Ritu Sharma	‘Cognitive Behavior Approach in Mentoring College Students for Personal Effectiveness: An Empirical Study’	MAR	2015
55.	Ritu Sharma	Gender Equality and Women Empowerment in Higher Education: A Comparative analysis in the Indian Context	JUN	2015
56	Dr Sitakanta Mishra	“Security of Nuclear Assets in South Asia”, in a seminar on "Technology and Aerospace Power" jointly conducted by CAPS and HQ MC at 3 BRD, Chandigarh	25 August	2015
57	Dr Sitakanta Mishra	“Fallouts of US-Iran Nuclear Deal”, at the seminar on Geopolitics and Air Power, organized by Centre for Air Power Studies & HQ South Western Air Command, 36 Wing Air Force, Vadodara	25 June	2015
58	Dr Sitakanta Mishra	“India’s Nuclear Doctrine: A Regional Perspective”, presented in the CAPS-CAC Allahabad, India	10 December	2014
59	Dr Sitakanta Mishra	Co-presented paper on “Nuclear Security Governance in India: Institutions, Instruments, & Culture” at the Sandia National Lab, Albuquerque (USA)	9 July	2014
60	Dr Sitakanta Mishra	“Social Acceptance of Nuclear Power in India”, presented at CAPS organised National Seminar on Nuclear Power: An Assessment Three Years after Fukushima at Air Force Auditorium, Subroto Park, New Delhi	03 March	2014
61	Dr Sitakanta Mishra	Co-presented paper on India’s Nuclear Security Culture at the Nuclear Threat Initiative (NTI), Washington DC	17 July	2014
62	Dr Sitakanta	Co-presented paper on India’s Nuclear Security Culture	16 July	2014

	Mishra	at the Stimson Centre, Washington DC		
63	Dr Sitakanta Mishra	Roundtable Discussion at the Carnegie Endowment, Washington DC on Nuclear Security in India	15 July	2014
64	Dr Sitakanta Mishra	Paper on “Social Acceptance of Nuclear Power in India”, presented at CAPS organised National Seminar on Nuclear Power: An Assessment Three Years after Fukushima at Air Force Auditorium, Subroto Park, New Delhi	03 March	2014
65	Dr Sitakanta Mishra	Co-presented a paper on “Cooperative Measures to Support India-Pakistan Agreement on Reducing Risk from Accidents Relating to Nuclear Weapons” at the Cooperative Monitoring Centre of Sandia National Lab, USA	09 December	2013

SLS faculty members have published research papers in National and International Journals, Chapters in Edited books, Monographs, Case studies and Articles in Business magazines and NEWS papers.

SLS faculty members regularly present their research papers in national and international conferences. There are four edited books also authored by SLS faculty Members. Detailed information is mentioned separately and will be made available to the visiting committee.

### 23. Details of patents and income generated

Nil

### 24. Areas of consultancy and income generated

PDPU has given internal consultancy project to School of Liberal Studies in managing Rural Internships/ CSSI for all Engineering students. The funds transferred every year. Detailed information will be made available to the visiting committee.

### 25. Faculty selected nationally/ Internationally to visit other laboratories / institutions/ Industries in India and abroad

SLS faculty members have visited several countries to disseminate their research in international conferences and conducted professional workshops/seminars.

Detailed information will be made available to the visiting committee.

S.No	Name of the Faculty	Institutes and Universities	Year
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1	Prof .Nigam Dave	University of Houston, US	2009
2	Prof .Nigam Dave	Tulsa University US	2009
3	Prof .Nigam Dave	Oklahoma University US	2009
4	Prof .Nigam Dave	Texas A&M University US	2009
5	Prof .Nigam Dave	National University of Singapore	2013
6	Prof .Nigam Dave	Singapore management University	2013
7	Prof .Nigam Dave	TAFE, Sydney	2013
8	Prof .Nigam Dave	University of Melbourne	2013
9	Prof .Nigam Dave	University of Wollongong	2013
10	Prof .Nigam Dave	RMIT, Melbourne	2013
11	Prof .Nigam Dave	University of Adelaide	2013
12	Prof .Nigam Dave	Edith Cowan University	2013
13	Prof .Nigam Dave	Curtin University, Perth	2013
14	Prof .Nigam Dave	University of Western Australia, Perth	2013
15	Dr. Ashvin Dave	Oxford University, UK	2014
16	Dr. Ashvin Dave	Asia Pacific International Academy, Singapore	2014
17	Dr. Ritu Sharma	ICSB 2015 60 <sup>th</sup> World Conference UAE	2015
18	Dr. Ritu Sharma	University of Wollongong, Australia	2014
19	Dr. Ritu Sharma	American Psychological Association (APA), Turkey	2013
20	Dr. D. Sriram	UNREDD, Bnagkok	2014
21	Dr. D. Sriram	UESTC, China	2014
22	Dr. D. Sriram	IASIA, Louis Lycee Le grand, Paris	2015
23	Dr. Neeta Sinha	IAAR, Singapore	2013
24	Dr. Neeta Sinha	University of Wollongong	2015
25	Dr. Chaitanaya Vyas	World Association of Science, Engineering & Technology, Zurich,	2015
26	Dr. Chaitanaya Vyas	University of Wollongong	2015
27	Ms. Niyati Trivedi	University of Paris, pantheon, France	2015
28	Dr. Sitakanta Mishra	Naval War College, USA in Istanbul, Turkey	2014
29	Dr. Sitakanta Mishra	Sandia National Labs, New Mexico, USA	2014

## 26. Faculty serving in

- a) National Committees b) International Committees c) Editorial Boards d) any other (please specify)**

SLS faculty members have been members on editorial boards of national and international journals, International academic associations, International award committees, reviewers for International journals and members of research review committees of other universities for PhD research. Detailed information is mentioned separately and will be made available to the visiting committee.

- a. Dr. Neeta Sinha Has been appointed as member of RDC as an external expert at the Department of Labour and Social Welfare, Gujarat University.
- b. Dr. Neeta Sinha Has been appointed as member, Board of Studies, Department of Psychology, Calorx University
- c. Dr.D. Sriram has been appointed as PhD Research Review committee Member, Department of Planning, CEPT University.
- d. Dr. Ritu Sharma has been appointed as External PhD Supervisor at Raksha Shakti University.

#### **Chairs instituted by the University**

The School/ university is on a constant lookout for specialized faculty whenever required in the last 3 years.

### **27. Faculty recharging strategies UGC, ASC, (Refresher/ orientation programmes, Workshops, training programmes and similar programmes)**

SLS encourages and recommends its faculty members to participate in faculty development programmes of premier institutions like IIMs, Central Universities, and Academic Staff Colleges of various universities. Detailed information is mentioned separately and will be made available to the visiting committee.

1. Ms. Anju Musafir, Founder and Principal of Mahatma Gandhi International School, lecture on 'Male Gaze and Objectification of Women', February 13, 2015
2. Dr. Niladri Chatterji, lecture on 'Male Body Politics' on April 3, 2015
3. Prof. Bharat Desai, JNU, lecture series on 'Role of International Law in International Politics' on April 27-28, 2015
4. Prof. Ranjana Harish, Former HOD, Dept. of English, Gujarat University, Lecture on 'Shakespeare and Mirabai' on April 17, 2015.
5. Mr. Mahesh Pandya, Paryavaran Mitra, lecture on 'The role of a student and a citizen in the field of environmental protection with the help of law' on April 20, 2015
6. Mr. Manvendra Saraswat, State Head, Adecco India, lecture on 'CEO for a Month Program' on July 15, 2015.
7. Shri. Hariom Gandhi, Zonal Director, Narcotics Control Bureau, lecture on 'Happy and Healthy Life' on July 31, 2015.
8. Prof. Arvind Kudchadker, lecture on 'Exciting Times – Challenges and Opportunities for Young India' on August 11, 2015.
9. Mr. Ajay Ramasubramaniam, Director of Business Development, Reyerson Futures Inc. and the Program Head, Xone Startups India, lecture on 'Innovation and Entrepreneurship' on August 12, 2015.
10. 1<sup>st</sup> Distinguished Lecture by the famous poet Makarand Paranjape on April 1, 2014
11. 2<sup>nd</sup> Distinguished Lecture by Google India Head, Mr. Lalitesh April 15, 2014
12. 3<sup>rd</sup> Distinguished Lecture by RBI Regional Head, Prakash Chandra Sahu on April 15, 2014

13. 3<sup>rd</sup> Public Diplomacy Lecture Series, lecture by Ambassador of India to Japan Dr. Aftab Seth, July 22, 2014
14. 1<sup>st</sup> Teachers' Day Lecture Series, Lecture by Prof. Ghanchi, Former VC of NGU September 5, 2014

## **28. Student Projects**

- **Percentage of students who have done in house projects including interdepartmental projects.**
- **Percentage of Students doing projects in collaboration with other universities/ Industries/ Institutes**

SLS students engage themselves with industry projects as a part of their summer internships with different companies. Students also engage in research and development projects for industries and other institutions. Detailed information will be made available to the visiting committee.

## **29. Awards/ recognitions received at the national international level by**

- **Faculty**
- **Doctoral/ Post Doctoral Fellows**
- **Students**

SLS faculty members have received awards, Fellowships, and recognitions at national and international institutions for their specific contributions to research and academic achievements. SLS students have also won awards and recognitions in various events organized by different institutions. Detailed information is mentioned separately and will be made available to the visiting committee.

## **30. Seminars/Conferences/ Workshops organized and the source of funding (National/ International) with details of outstanding participants, if any**

SLS has organized 4 national seminars since its inception annually. SLS has also been organizing subject related workshops, conclaves; roundtables etc. detailed information is mentioned separately and will be made available to the visiting committee.

## **31. Code of ethics for research followed by the departments**

SLS and PDPU follow strict ethical standards for research. Not only doctoral but PG and UG students are also educated by SLS faculty on plagiarism, intellectual property rights, copyright protection, scientific research citations and professional research ethics. In the paper of research methodology modules of research and academic ethics are discussed.

- To consult the Primary Sources
- To follow the international parameter for research

- Preparation of Index as per research guidelines
- To encourage the scholars to produce original research work

### 32. Student Profile programme –wise

**UG (BA/BBA Honors, B.Com Honors):** students are selected through a rigorous process that includes written test, personal interview. UG students come from different academic, professional and social backgrounds from across the country. Total 668 students are enrolled in UG programmes.

**MA:** MA students are selected through an entrance exam. SLS offering MA in English, Public Administration and International Relations. Total 28 students are enrolled in PG programmes.

**PhD:** PhD students are selected through research aptitude test and personal interview by expert committee. Total 17 students are enrolled in PHD programmes.

Student profile programme-wise (2015):

Name of the Programme	Applications Received	Selected	Pass Percentage	
			Male	Female
<b>B.A/BBA/BCOM</b>	868	264	45	55
<b>M.A</b>	18	15	40	60
<b>Ph.D.</b>	6	01	0	100

### 33. Diversity of Students

Name of the program	% of the students from the same university	% of the students from the other university within state	% of the students from universities outside the state	% of the students from other countries
B.A/BBA/B.Com	NA	NA	NA	3
M.A	18	82	0	00
Ph.D	00	100	0	0

### 34. How many students have cleared Civil service and Defense Service Examinations:

**NET, SET, GATE and other competitive examinations? Give Details Category Wise.**

Nil

### 35. Students Progression

Students Progression	Percentage against Enrolled
UG to PG	50%
PG to PhD	10%
PhD to Post Doctoral	Nil
Employed through Campus Selection	20%
Employed through other than campus recruitment	20%
Entrepreneurs	15%

Students graduating from SLS going for Higher education in the Indian and Foreign institutes and Universities and very small percentage of students take up corporate jobs.

### 36. Diversity of Staff

Percentage of faculty members who are graduates	100%
From the same University	None
From other University within the state	50%
From the Universities from other states	50%
From Universities outside the County	None

### 37. Number of faculty who were awarded M. Phil, PhD, PDF, D.Sc, and D.Litt during the assessment period

Mr. Anurag Srivastava awarded PhD from University of Rajasthan

### 38. Present details of Departmental infrastructural facilities with regard to

#### A) Library

- a) Library Area in Sq.Mt : 256 Sq.Mts
- b) Total Number of Books : 7710
- c) Total number of National Journals : 23
- d) Total Number of International Journals : 07
- e) Total number of E-books : 00
- f) Databases : 02 (Jstor, India Stat)
- g) E-journals : 1046
- h) Open source software : Dspace(Digital Library Software)
- i) CDs : 286

#### B) Internet facilities for staff and Students

**Internet: 150 MBPS**

**LAN, Wi-Fi, Outlook Web Access, Team Viewer**

**C) Total number of Class rooms:**

20 Class Rooms equipped with multimedia and audio visual equipment

**D) Class rooms with ICT facility:**

18 Class Rooms

**E) Student's Laboratories:**

2 Computer laboratories, 1 Physics Lab, 1 Chemistry Lab, 1 Psychology Lab

**F) Research Laboratories:**

**39. List of Doctoral, Post-Doctoral students and research Associates**

**a) From the host Institution/ University:**

**b) From other Institutions/ University:**

Sl.No	Batch	Name	Area	Research interest	
1	2009	Devang Rangani	English	Contemporary Pakistani Fiction	PhD Student
2	2010	Niyathi Shah	English	Autobiography and performing Arts	PhD Student
3	2011	Urmi Satyan	English	Diaspora	PhD Student
4	2011	Sneha Patel	English	Campus Novels	PhD Student
5	2012	Purvi Dave	English	Film Studies	PhD Student
6	2012	Kshama balaji	English	Portrayal of Metro cities in English fiction	PhD Student
7	2010	Daljeet kaur	Economics		PhD Student
8	2011	Meena Bilgi	Public Policy and Administration	Women Empowerment	PhD Student
9	2011	Elamathi Dhanaraju	Public Policy and Administration	Public Health	PhD Student
10	2012	Heatal Thakkar	Public Policy and Administration	E-Governance	PhD Student
11	2013	Bhagesh Jha	Public Policy and Administration	Service Delivery	PhD Student
12	2013	Sharon Writer	Psychology		PhD Student
13	2014	Sandhya Sree kumar	Public Policy and	Service Delivery	PhD Student

			Administration		
14	2014	Shilpa parasurampurua	International Relations		PhD Student
15	2015	Madhu bharathi Boni	Public Policy and Administration	Service Delivery	PhD Student
16	2015	Sakshi Jain	Psychology		PhD Student
17	2015	Neeta Khurana	English		PhD Student

**40. Number of Post Graduate Students getting Financial assistance from the University**

None

**41. Was any need assessment exercise undertaken before the development of new programme(s)? if so, highlight the methodology**

**Yes, the need assessment exercise is undertaken before development of a new programme:**

- Through contact with our alumni and industry partners, there is a continuous effort to improve course content. New programmes are suggested and discussed in the Board of Studies (BoS) meeting held for every year.
- BoS members provide their inputs based on their experience which are weaved into the proposal.
- The programme structures and curriculum are first discussed in the academic area meetings followed by discussion at the BoS, then in the faculty of Liberal studies and Academic Council.

**42. Does the Department obtain feedback from**

**a) Faculty on curriculum as well as teaching –learning-evaluation? If yes, how does the department utilize the feedback?**

Yes, the institute collects feedback from faculty with regard to curriculum and also teaching – learning evaluation.

- The Feedback of faculty regarding modification of course curriculum or addition of electives is used for curriculum evaluation, improvement and enhancement. The feedback outcome is first discussed in the academic area committee meeting.
- The recommendations are discussed in the Board of Studies, then in the faculty of Management and on approval is sent to the academic council.

**b) Students on staff, curriculum and teaching- learning – evaluation and how does the department utilize the feedback?**

Yes, the institute has a formal process of collecting feedback from students about the teaching-learning –evaluation process followed in each course. Student feedback is

collected at the end of each course. The feedback is reviewed by the Director of every term and it is discussed with the concerned faculty to identify the areas of improvement. The feedback also reflects on the faculty performance evaluation submitted to the University authorities on annual basis.

**c) Alumni and Employers on the programmes offered and how does the department utilize the feedback?**

Yes, the institute collects feedback from both alumni and recruiters. It collects feedback through various channels and during interactions such as:

- Alumni meet in various cities
- Conclaves, where they are invited
- Recruitments
- Inviting them as experts on varied occasions
- Admissions
- Board of Studies
- Internship and Placement activities
- Faculty of Liberal Studies

The Feedback and valuable suggestions are acted upon promptly.

**43. List of distinguished alumni of the department (maximum 10)**

Sr.No	Name of the Alumni	Present designation and Organization of the Alumni
1	Ms. Harneet Kaur	Masters from Columbia university, US
2	Ms. Aditi Manke	Masters from Drexel University US
3	Ms. Juhi Sharma	Masters from De Montford University, UK
4	Mr. Dixit Patel	Masters from Drexel University US
5	Ms. Jainisha Chavda	Masters From Birmingham University
6	Ms. Anupriya Raol	Masters From RMIT, Australia
7	Ms. Riva Patel	Masters From Sheffield University, UK
8	Ms. Ashvini srinivas	Masters From John Hopkins University
9	Ms. Isha Gandhi	Masters From Ohio State University, US
10	Ms. Archita Bhaloita	Masters From Mary wood University, US
11	Ms. Mansi patel	Masters From North Island College, Canada
12	Ms. Krishna Bodwala	Masters From Humber College, Canada
13	Mr. Devarsh Trivedi	Masters From Fanshawe College Canada
14	Mr. Ms. Kinjal Gandhi	Masters From Perdue university, US
15	Mr. Hetansh Desai	Masters From Boston University, US
16	Mr. Twikle Thakkar	Masters From Lancaster University, UK
17	Mr. Ashima Agarwal	Masters From Cardiff University, UK

**44. Give details of student enrichment programmes**

**(Special lectures/Workshops/seminar) involving external experts:**

Students go on industry visits and also take up long term (6-8 weeks) internships for hands-on experience in their areas of interest and specialization. Aptitude test preparation is provided for students to clear entrance tests of various companies as well as institutions of higher education. Soft skills training is provided through rigorous sessions in body language, verbal communication, CV writing, and facing group discussion and interview panels. Various other training programmes are arranged throughout the academic cycle by the respective department as well as Special Interest Groups (Student Clubs), for theme specific training and up gradation of knowledge. Competitions are organized for raising the level of academic competitiveness amongst students. Examples are poster making presentation, Model United Nations, Paper presentation competition etc. Students are encouraged and funded to participate in national and international academic competitions organized by associations/Institutions. Office of International relations of PDPU organizes students interaction with international university representatives in the campus to guide students regarding further study opinions. Industry interactions during seminars/forums/round tables provide students new perspectives on competencies require for careers. Students publish SLS-Mirror, an in-house magazine of SLS at interval of every month. Distinguished lecture series, Faculty Seminar series are conducted at regular intervals throughout the academic year. In addition, psychology symposium, economic conclave, roundtable on gender studies etc. are organized every year to enrich the students learning during the programme. Specialised workshops for skill enhancement and specialized subject knowledge development are conducted from time to time.

#### **45. List of teaching methods adopted by the faculty for different programmes**

The pedagogical tools that are used by our faculty members to enhance learning experience are:

- a) Lecture Method
- b) Lecture supplemented by videos
- c) Role plays
- d) In-class exercises
- e) Mini as well as comprehensive projects
- f) News paper discussions
- g) Research paper presentation and discussion from reputed journals
- h) Case study analysis and presentations
- i) Industry visits
- j) Expert lectures by industry
- k) Film analysis
- l) Observational learning through field visits
- m) Scenario building and analysis
- n) Debates

**46. How does the department ensure that programme objectives are consistently met and learning outcomes are monitored?**

Programmes and objectives and learning outcomes are monitored and measured through the continuous evaluation system across different courses. Each course faculty designs unique evaluation criteria accordingly in their respective course plan. Students are required to give feedback formally at the end of each course with respect to a) Course and b) instructor on the basis of learning outcomes.

**47. Highlight the participation of students and faculty in extension activities**

SLS students through the programme ‘Community Development Initiative-CDI’ of the University get engaged in the outreach programmes. Apart from this they also get involved in the CDI through organizations like CII-Yi. SLS students organize blood Donation Camp every year in collaboration with Government Civil Hospital. The University has the NCC wing functional at its campus which has been recently established. Interested students of SLS are encouraged to join the activities. SLS students in collaboration with Government Civil Hospital organize blood donation bank at SLS-PDPU every year. Since last four consecutive years SLS has been receiving special trophies for donating more than 200 units of blood. To promote health and fitness awareness, students organize 10k run every year. Apart from these students have been engaging with the poor starta of the villagers in the vicinity and have been helping them by means of support for their children’s education, clean drinking water etc. The students have learnt the virtues of compassion and empathy through such engagements.

SLS has also been organizing Community development programme through participation in rural educational activities. These programmes helped the students in inculcating the value of social sensitization. They also helped in developing the planning and organizing skills of SLS students.

**48. Give details of “beyond Syllabus scholarly activities” of the department**

1. Faculty Members have published two Books

Sl.No	Name of Faculty Member	Name of the Book	Name of the Publisher	Year of Publication
1	Dr. Ashvin Dave	Financial management	AV Akademikerverlag GmbH&Co. KG	2013
2	Dr. Chaitanya Vyas	Permission Marketing: Awareness, Perception, and Preferences in	LAP	2012

		Gujarat		
3	Dr. Chaitanya Vyas and Dr. Darshan Dave	Publishing in high impact management journals	Humming Words Publications	2012
4	Dr. Sanjay kumar Pradhan	The people of Indian origin (POI) in south Africa : Past trajectory and present Discourse	Scholars press, Germany	2013
5	Prof. Nigam Dave	Ruskin Bond	Co-author, Atlantic publications	2012
6	Dr. Sitakanta Mishra	Parmanu Politics: Indian Political Parties and Nuclear Weapons	Kalpaz Publications, Gyan Books, New Delhi	2015 ISBN: 978-93-5128-093-4
7	Dr. Sitakanta Mishra	Cruise Missiles: Evolution, Proliferation and the Future	KW Publishers, New Delhi	2011 ISBN: 978-93-80502-81-6

2. Some of the innovative teaching Methods adopted by the faculty during the last four years are as follows:
- Using autobiographies as recommended books
  - Using films and simulations to impart learning
  - Novel structuring of the courses by incorporating industry related applied notes
  - Joint/teaching method
  - Teaching by industry and practitioners
  - Combination of field based training and classroom learning

**49. State whether the programme/ Department is accredited/ graded by other agencies? If yes, Give details**

**ISO 9001-2008**

**50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied**

- All faculty members have published research work in their area of interest. Faculty members have also published books. All the published work is used as teaching material in various courses.

- b) Faculty members have also developed sector specific courses with reading material. In these courses research work /Published papers are used as reading/ teaching material.
- c) So far SLS has organized three national conferences on multi disciplinary research in social sciences.

### **51. Detail five Major strengths, weaknesses, opportunities and challenges (SWOC) of the School.**

#### **Major Strengths:**

- Focus on interdisciplinary study and choice based credit system in curriculum
- Internship focused pedagogy
- Research Dissertation at the UG and PG level
- International / National Acceptance of the alumni
- Holistic Grooming of Students

#### **Major Weaknesses:**

- Less Number of PG students
- International Faculty are still to be attracted to start full time
- Less international students for the enrollment

#### **Opportunities:**

- Acceptance of students at the International platform
- Industry acceptance
- Skilled Human resource with the community sensitization
- CBCS offering for the engineering students on the campus
- Hosting International students for short term

#### **Challenges:**

Creating awareness for the importance of interdisciplinary study.

### **52. Future Plans of the Department**

To see that the Objectives and the Academic Philosophy of the School is implemented into practice, Strategic plan 2009-13 is designed. The strategic plan would broadly look at following points: Teaching-Learning Experience at the Undergraduate Level. Managing cultural identity with the openness to global changes. Support for research driven activities. Contribution to community and the nation building.

#### **1. Teaching-Learning Experience at the Undergraduate Level:**

- To provide breadth and depth of learning experience for relevant subjects.

- To design and implement innovative curriculum that adheres to UGC, industry and the global requirements.
- To design and implement innovative methods of teaching and interaction.
- To include a pool of highly talented and sensitive faculty from academics, industry and Arts.
- To arrange for orientation and training program for faculty in areas of innovative practices of teaching.
- To find out unconventional methods of teaching learning that make academic sessions interesting and at the same time meaningful.
- To balance the number of students and teachers. Preferably smaller classes.
- To acquire and use infrastructure for ICT enabled classroom teaching.
- To teach life-skills along with subject knowledge through week-end activities.
- To balance classroom hours with practical exposure to the subjects with the help of laboratory sessions, creative sessions, visits, tours, students' exchange etc.
- To design and implement academic schedule to ensure smooth functioning of the academic work.
- To design and implement Activities Calendar to ensure students' exposure to sports and cultural activities.
- To design and implement examination schedule in consultation with the Exams Department, Director Academic and the office of the Registrar.
- To provide access to large number of subjects for Majors and Minors.
- To ensure smooth and transparent procedures for admissions.
- To provide excellent administrative support to the school.
- To provide excellent ICT support for academic and administrative work.
- To establish good library and reading room with large number of study books, leisure reading, research journals, newspapers, magazines, audio video resources.
- To form and work through different academic committees.
- To involve students in committees to create sense of 'ownership'.
- To ensure study material in the form of archives on the intranet.
- To show willingness to feedbacks from all levels.
- To design academic and infrastructural facilities for the physically challenged students.
- To interweave adequate practical and theoretical curricula of sports.

## **2. Support for research driven activities.**

- To implement the initiative of mandatory 'research dissertation' by all UG students.
- To encourage both the faculty and students for research activities.
- To facilitate research activities through travel assistance and other financial assistance.
- To encourage joint research projects of students-faculty.
- To add postgraduate research programs like M.A. and M.Phil.
- To ensure smooth functioning of Ph.D. program in the area of Humanities, Studies and Social Sciences.
- To generate and allocate sufficient revenue for research activities.
- To arrange for meaningful national and international seminars, conferences, symposiums and workshops.
- To coordinate the Students' research seminar every year

## **3. Contribution to community and the nation building**

- To design and implement a yearlong community development program.
- To encourage faculty and students for participation in community work.
- To inculcate the spirit of nation building and responsibility in young minds.
- To voluntarily submit services in times of national, international crises or natural calamities.
- To ensure that all stakeholders of the society benefit through the community work.
- To play the part of a bridge between industry and society.
- To create awareness in the society about the community work

**4. International Study Centre:** - SLS proposes to plan and execute International Study Centre in coordination with the office of international relations, PDP. The proposed centre would offer Diploma and Certificate programs in International Trade, Commerce, Culture, Art and Languages. The centre proposes to coordinate with the Consulates and Govt. of various countries. The centre proposes to start with Canadian Studies and American Studies. It would also plan and implement International workshops and conferences.

**5. Art Gallery:** - SLS, PDP offers Art electives like 'Styles of Painting' and 'World Civilization'. SLS PDP already possesses Performing Arts Room. It proposes to have

the Art Gallery which would showcase paintings of famous painters of the world and also creative forays of students.

**6. International Students:** - SLS, PDPU proposes to start the programs for international students with short term programs, field trips. It is already working with various international universities and consulates in this regard. AISEC Students Chapter at PDPU would also facilitate for this. Already, SLS has the honour of having the first international student intern on campus from China. In the year 2011 9 students from Bhutan had enrolled in SLS for MA Programme. SLS conducts international admissions through agencies like EDUCIL and as per the guidelines of UGC.

**7. Public Policy/Governance Centre:** - SLS, PDPU proposes to revive and provide new vigour to the Centre of Good Governance started by PDPU.

**8. Publications:** SLS proposes to publish an Bi-annual basis and International Research Journal.

**9. New Majors:** SLS proposes to introduce new majors in History, Sociology and International Trade.

**10. Programs for International Students:** - SLS would like to strongly contribute in PDPU vision of having the international students' population on campus. SLS proposes to conduct workshops/ cultural exposure programs/ study programs for International students/industry people.

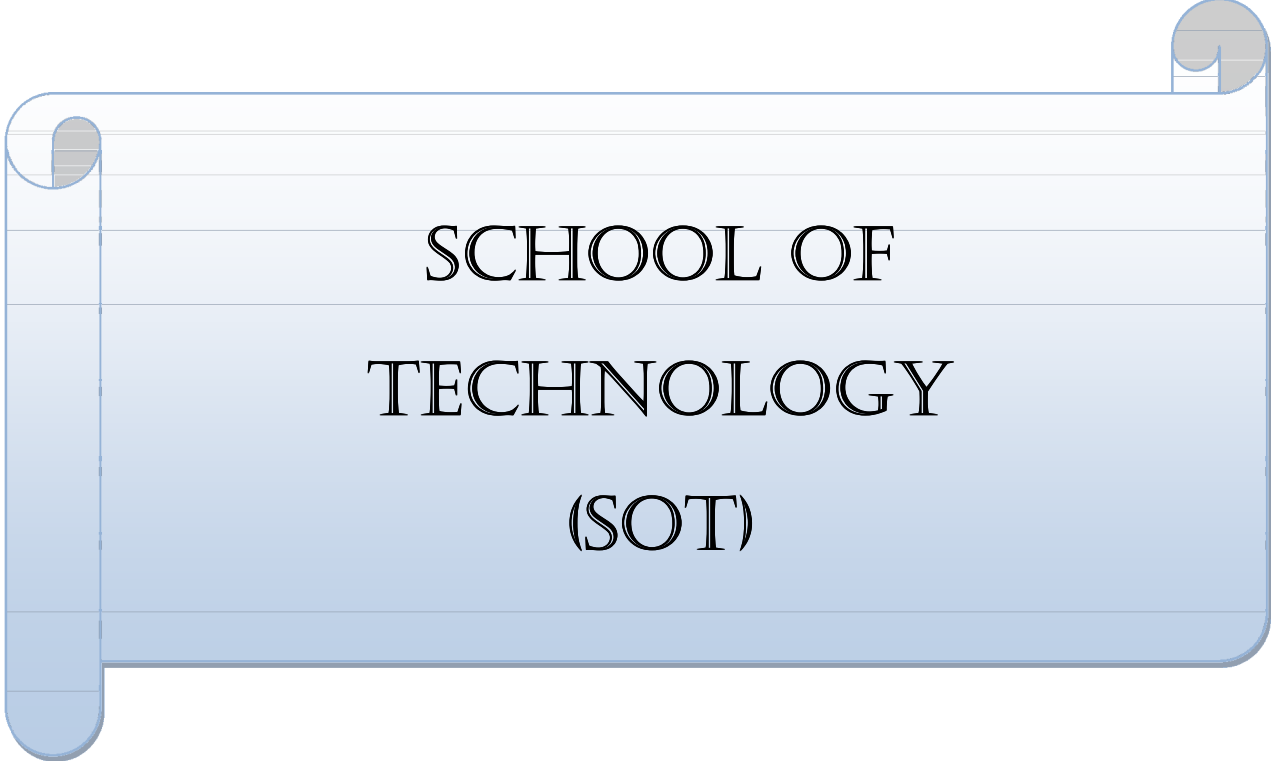
**11. Dynamic Placement initiatives:** - SLS proposes to prepare a database of recruiters and industries which would provide guided career opportunities in various domains. All industry people and important stakeholders would be apprised monthly about the activities at SLS through monthly newsletter and interactions on and off the campus. SLS has already initiated the concept of corporate internship successfully. Year round, every Wednesday industry exposure for students would be arranged to enable students to understand industry requirements.

**12. Working with Industry and Government:** - SLS proposes to join hands on a triple helix model with the government and industry through research, extension and consultancy projects. It also proposes to work as its CSR with government agencies during times of natural calamities or national crises. SLS already has started working with the Municipal Corporation to create awareness on civic duties.

**13. Joint Study Programs with International Universities:** - PDPU has MOUs with number of Universities abroad. SLS proposes to start joint Degree/Diploma

programmes with international universities of repute. A detailed credit transfer policy has already been prepared.

School of Liberal Studies at Pandit Deendayal Petroleum University is committed in its efforts of creating a better world. With generous support of all stakeholders, it will continue its sincere efforts.



SCHOOL OF  
TECHNOLOGY  
(SOT)

**1. Name of the Institute :**

School of Technology

**2. Year of establishment of the private University :**

2007

**3. Is the Department part of a School/Faculty of the university?**

Yes. The Institution, School of Technology (SOT), is a constituent of Pandit Deendayal Petroleum University (PDPU).

**4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.).**

Undergraduate Programmes:

- B.Tech. (Civil Engineering)
- B.Tech. (Mechanical Engineering)
- B.Tech. (Electrical Engineering)
- B.Tech. (Chemical Engineering)
- B.Tech. (Industrial Engineering)

Post graduate Programmes:

- M.Tech. (Infrastructure Engineering)
- M.Tech. (Thermal Engineering)
- M.Tech. (Power Systems)
- M. Tech. ( Energy Systems & Technology)
- M. Tech. ( Nuclear Energy)
- M. Tech. ( Environmental Engineering & Studies)

Ph.D Programme :

- Full Time
- Part Time

**5. Interdisciplinary programmes and departments involved:**

The new interdisciplinary programmes established by the involvement of one or more departments of engineering:

- 1) Environmental Engg. studies ( Civil Engg., Chemical Engg. and Chemistry)
- 2) Solar Energy ( Solar Energy, Electrical Engg. and Mechanical Engg. )
- 3) Nuclear Engg. ( Nuclear Engg. and Physics)

**6. Courses in collaboration with other universities, industries, foreign institutions, etc.**

PDPU at present is not offering any formal degree programs and would like to do the same as per the guidelines of UGC/AICTE. However, PDPU interacts with several Universities abroad through M.O.U's signed for training, study abroad, and summer internships, the details are as under.

<b>Sr. No.</b>	<b>MoU with</b>	<b>Objectives</b>	<b>Date of Signing</b>	<b>Period of MoU</b>
1	University of Wollongong, Australia	Students from PDPU can participate in the Study Abroad Program UOW & programs at its college including English & Summer (Exposure program).	28.04.14	5 Years
2	University of Toronto, Canada	<ul style="list-style-type: none"> <li>• Joint research/publications</li> <li>• Student mobility such as Internships, study abroad and fellowships.</li> <li>• Exchange of faculty, trainee and staff</li> <li>• Participating in, &amp; co-hosting of lectures, meetings, seminars, conference.</li> <li>• Joint application for funding for collaborative projects from relevant funding agencies.</li> <li>• Collaboration in other areas that foster research and educational cooperation.</li> </ul>	05.02.14	5 Years
3	University of Manitoba, Canada	<ul style="list-style-type: none"> <li>• To facilitate the practical training &amp; graduate study of PDPU students in UM Faculty of Engg.</li> </ul>	05.02.14	5 Years
4	University of Bahrain, Bahrain	<ul style="list-style-type: none"> <li>• Exchange of Faculty and Students</li> <li>• Joint research activities</li> <li>• Participation in seminars and academic meetings</li> <li>• Exchange of academic materials and other information</li> <li>• Special short term academic programmes</li> <li>• Exchange of Administrative Managers/ Coordinators</li> <li>• Joint cultural programmes</li> </ul>	21.02.14	3 Years
5	National Mineral Resource University, Russia	<ul style="list-style-type: none"> <li>• Joint Educational and Research Activities</li> <li>• Exchange of Academic materials and academic publications</li> <li>• Exchange of faculty members for research. Lectures and discussions</li> <li>• Exchange of students and research</li> </ul>	09.01.13	5 Years
6	University of Saskatchewan, Canada	<ul style="list-style-type: none"> <li>• To exchange information on research and educational programmes</li> <li>• To exchange information on teaching, learning material and other literature relevant to their educational and research programmes</li> <li>• To jointly organize short-term continuing education programmes on</li> </ul>	10.01.13	5 Years

Sr. No.	MoU with	Objectives	Date of Signing	Period of MoU
		<p>topics of mutual interest and to invite each other's faculty to participate, therein.</p> <ul style="list-style-type: none"> <li>• To jointly propose and engage in research or training programmes sponsored by funding agencies and to invite each other's faculty to participate therein.</li> <li>• To exchange, on a reciprocal basis, faculty and students for limited periods of time purpose of education and /or research</li> </ul>		
7	ICCC (Indo Canada Chamber of Commerce)	<ul style="list-style-type: none"> <li>• Opportunity to work for one month in India or in Canada to SLS Students</li> </ul>	12.01.13	5 Years
8	Texas A & M University, USA	<ul style="list-style-type: none"> <li>• The exchange of faculty for joint teaching and research programs</li> <li>• Encouraging the enrollment of qualifies students in the other's academic programs</li> <li>• Avenues for strengthening their relationship and furthering excellence in US and Indian education</li> <li>• The development of a more detailed Program Agreement.</li> </ul>	16.01.13	5 Years
9	University of Manitoba, Canada	<ul style="list-style-type: none"> <li>• Development of mutually beneficial academic programmes and courses</li> <li>• Coordination of academic staff mobility for purposes of teaching, research and training</li> <li>• Coordination of student mobility programs for study and research</li> <li>• Coordination of academic activities such as joint research, publications and symposia.</li> <li>• Exchange of documentation and research materials in fields of mutual interest provided that, to the best knowledge of the respective institutions, there is no publications at law or otherwise against the exchange and;</li> <li>• Other activities considered by the parties to be of benefit to each party's education and research programs.</li> </ul>	06.02.13	5 Years
10	Edith Cowan	<ul style="list-style-type: none"> <li>• To develop study tours</li> </ul>	13.03.13	3 Years

Sr. No.	MoU with	Objectives	Date of Signing	Period of MoU
	University, Australia	<ul style="list-style-type: none"> <li>• To develop collaborative research projects</li> <li>• Staff presentations</li> <li>• Delivery of external units of PDPU's students</li> <li>• Delivery of articulation arrangements in the areas of Psychology, IT, Business, Communication and Engineering.</li> </ul>		
11	Edith Cowan University, Australia	<ul style="list-style-type: none"> <li>• To promote joint education and student mobility by enabling the Home Institution to send its student abroad to undertake a program of study with the Host Institution.</li> </ul>	27.10.13	5 Years
12	Memorial University of Newfoundland, Canada	<ul style="list-style-type: none"> <li>• Exchange of Faculty Members</li> <li>• Undergraduate and graduate student mobility</li> <li>• Exchange of publications, research material, newsletters etc.</li> <li>• Joint projects related to research, teaching and faculty development</li> <li>• Development of joint initiatives with partner institutions, including joint collaborative degree programmes</li> <li>• Opportunities for full- degree fee paying undergraduate/ graduate study.</li> </ul>	31.12.13	5 Years
13	University of Trinidad & Tobago	<ul style="list-style-type: none"> <li>• To promote advancement in the quality of education delivered to students at the respective institutions through collaborative activities and exchange among faculty, students and staff, the sharing of teaching and laboratory facilities and the development of a framework for articulation between the programmes of the respective institutions.</li> </ul>	10.01.12	3Years
14	University of Alberta, Canada	<ul style="list-style-type: none"> <li>• Mobility of Faculty/staff/ students / graduate and undergraduate.</li> <li>• Collaboration on graduate programming, including the co-supervision of graduate students.</li> <li>• Joint research activities and publication</li> <li>• Participation in seminars and academic meetings</li> <li>• Exchange of academic materials and</li> </ul>	12.10.12	5 Years

Sr. No.	MoU with	Objectives	Date of Signing	Period of MoU
		other information • Special short- term academic programs.		
15	ICBC (Indo Canada Business Chambers) & SLS (School of Liberal Studies)	• SLS - PDPU will offer to its students, an opportunity to work for one month in an • Indo Canadian Company either in India or in Canada. This offer will be valid for all the students, studying in any year. • ICBC - Gujarat will identify the Indo Canadian company & facilitate the offer for one month work to SLS - PDPU students	12.10.12	---
16	University of Wollongong, Australia	• Joint Research & Development Activities • Participating and co-sponsoring of International conferences, seminars, workshops and academic meetings. • Academic visits and incorporating short and long term visits of research and teaching staff. • Participation of students in “ International exchange and cultural educational programs of a short term nature • Options for collaborative programs at undergraduate and post graduate levels • Facilitation in admission of graduate and doctoral program in respective Universities for interested students in interested course offered at Institute.	30.10.12	3 Years
17	Seneca College, Canada	• To establish Specific educations relations and cooperation between the two Universities in order to promote academic linkages and to enrich the understanding of culture of the two countries. • To organize Student Abroad (Summer) Programs	09.11.12	5 Years
18	University of Western Ontario	• Exchange of Faculty for joint teaching and research programs • Encouraging the enrollment of qualifies students in other academic programs • Avenues for strengthening their	10.01.11	1 Year

Sr. No.	MoU with	Objectives	Date of Signing	Period of MoU
		relationship and furthering excellence in Canada and Indian Education <ul style="list-style-type: none"> <li>• The development of an official MOA or Program Agreement</li> </ul>		
19	University of Saskatchewan, Canada	<ul style="list-style-type: none"> <li>• To exchange information on research and educational programmes</li> <li>• To exchange information on teaching, learning material and other literature relevant to their educational and research programmes</li> <li>• To jointly organize short-term continuing education programmes on topics of mutual interest and to invite each other's faculty to participate, therein and also seminars, conferences, workshops, training programmes on topics on mutual interest.</li> <li>• To exchange, on a reciprocal basis, faculty and students for limited periods of time purpose of education and /or research</li> </ul>	10.01.11	5 Years
20	Mewborne School of Petroleum & Geological Engineering, University of Oklahoma	<ul style="list-style-type: none"> <li>• Promote Education and research on Shale Gas</li> </ul>	10.01.11	2 Years
21	Ministry of Infrastructure Republic of Rwanda	<ul style="list-style-type: none"> <li>• Possibilities to admit students Rwanda in PDPU on mutual understanding subject to terms and conditions of national statutory bodies.</li> <li>• The development of an official Memorandum of Agreement at a later date within next two months with the Ministry of Education.</li> </ul>	13.01.11	5 Years
22	University of Regina, Canada	<ul style="list-style-type: none"> <li>• Joint educational and research activities</li> <li>• Exchange of academic materials and academic publications</li> <li>• Exchange of faculty members for research, lectures and discussions</li> <li>• Exchange of students for study and research</li> </ul>	25.05.11	5 Years
23	University of	<ul style="list-style-type: none"> <li>• To establish student exchange</li> </ul>	03.10.11	5 Years

Sr. No.	MoU with	Objectives	Date of Signing	Period of MoU
	Regina, Canada	programs		
24	Mewbourne School of Petroleum & Geological Engineering, University of Oklahoma and Gujarat State Petroleum Corporation Ltd.	<ul style="list-style-type: none"> <li>Promote Education and research energy.</li> </ul>	12.01.10	Expired
25	Georgia Tech Research Corporation	<ul style="list-style-type: none"> <li>In respect to the transmission of Propriety information exchanged between PDPU and GTRC.</li> </ul>	23.07.10	5 Years
26	Texas A&M University System, USA	<ul style="list-style-type: none"> <li>Faculty exchange for research, teaching/ encouraging enrolment of qualified students/ avenues for strengthening relationship &amp; furthering in US &amp; India education</li> </ul>	14.08.10	----
27	Georgia Institute of Technology, USA	<ul style="list-style-type: none"> <li>Creation of Centre of Excellence in energy education &amp; research</li> <li>Collaboration to enhance international experience faculty &amp; students in various areas.</li> <li>Innovative programmes</li> <li></li> </ul>	21.09.09	2 Years
28	University of Houston System	<ul style="list-style-type: none"> <li>To contribute further to the regional understanding between US and India, both cities, Gandhinagar and Houston and both Universities. Through mutual cooperation programs.</li> <li>To further collaboration between UHS and PDPU through academic programs in instruction, research and faculty development among faculty and students of both institutions.</li> <li>To enhance the International experience of faculty and students in the areas of :                             <ol style="list-style-type: none"> <li>Research</li> <li>Joint Programs and Collaboration</li> <li>Exchange of Faculty and students</li> </ol> </li> </ul>	29.10.09	5 Years

**7. Details of programmes discontinued, if any, with reasons**

Nil.

## 8. Examination System: Annual/Semester/Trimester/Choice Based Credit System

An academic year consists of two semesters. The autumn semester generally starts from July to November & the spring semester generally starts from December to April. The student registers for course(s) during a given semester, on the basis of the program as prescribed in the Curriculum. Examinations of the students, who clear minimum attendance criteria i.e. 80%, are conducted in the middle and at the end of the semester. Students, who do not fulfill the criteria, are not permitted to take the end-semester examination in that course. They are permitted to take re-examination in subsequent semester.

The percentage allocation for evaluating a Theory course will generally remain as 30% for Mid Semester examination, 60% for End Semester and 10% for the Internal Assessment like Quiz, Class Assignments. The percentage allocation for evaluating a Practical course will generally remain as 50% for the Laboratory Work and 50% for the Laboratory related Examination. Each course is assigned a numerical weightage termed as credits for that particular course. A letter grade is awarded to students as the final evaluation in each course, and each letter grade carries numerical points, known as grade points. Based on the grades and their numerical equivalents, Semester Performance Index (SPI) and Cumulative Performance Index (CPI) of the student are calculated at the end of each semester: SPI and CPI are calculated up to the second decimal.

Choice Based Credit System (CBCS) is a flexible system of learning that permits students to,

1. Choose electives from a wide range of elective courses offered by the University departments,
2. Adopt an inter-disciplinary approach in learning, and
3. Make best use of the expertise of available faculty.

To assess the academic performance of students, a continuous evaluation system is followed. At the end of each semester, each student is awarded a letter grade in each of his courses by the concerned instructor, based on his performance in mid-semester examination, end-semester examination, quizzes, tests, assignments, tutorials, laboratory work, seminars, projects, etc, and also on regularity of attendance in classes. The assessment in a laboratory course is based on turn-to-turn supervision of the student's work, performance in viva voce examinations, and group discussions, the quality of work as prescribed through laboratory journals and an end-semester test that contains an experiment and/ or a written examination.

## 9. Participation of the department in the courses offered by other departments

- Production Operations management, Workshop, Manufacturing process, Metallurgy - Interdisciplinary having Industrial Engg. and Mechanical Engg. Dept.
- Elements of Civil Engineering, Applied Mechanics are the subjects of Civil Engineering which are taught to all the streams of Engineering during first year of their respective B.Tech. programme.
- The department of Electrical Engineering teach the subject named as “Elements of Electrical Engineering” all the streams of Engineering during the first year of their

respective B. Tech Programme. The subject named as “Electrical Technology” is taught to the students of Mechanical and Industrial Engineering branches by the faculties of Electrical Engineering Department. The subject named as “Electrical and Electronics for Chemical Engineers” is taught to the students of Chemical Engineering branch by the faculties of Electrical Engineering Department.

**10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)**

**No. of sanctioned Faculties**

<b>UG</b>				
Sr. No.	Department	Prof.	Asso. Prof.	Asst. Prof./Lect.
1.	Civil Engg.	2	4	18+4*
2.	Chemical Engg.	1	2	9
3.	Electrical Engg.	2	4	18+3*
4.	Industrial Engg.	1	2	9
5.	Mechanical Engg.	2	4	18+5*
6.	First Year Faculty requirement of B.Tech. for courses of Humanities, Sciences and Computers	<b>Required Faculties:</b> Science – 10* Maths – 08* Communication skill- 1* Environment- 1* Computer Science-2*		
<b>PG</b>				
1.	Civil Engg.	1	1	3
2.	Electrical Engg.	1	1	3
3.	Mechanical Engg.	1	1	3
4.	Nuclear Engg.	1	2	3
5.	Solar Energy.	1	2	3
6.	Environmental Engg.	1	1	1
7.	Mathematics	-	2	2

\* indicates faculty involved in handling first year students

**Available Faculties:**

Department	Prof.	Asso. Prof.	Asst. Prof.	Lect.	Total
Civil Engg	1	2	4	10	17+6 <sup>###</sup>
Chemical Engg	1 <sup>##</sup>	--	2	6	9
Electrical Engg	--	2	2	14+1 <sup>#</sup>	19
Industrial Engg	--	1	2	5+1 <sup>#</sup>	09
Mechanical Engg	1	2	5	16	24
Nuclear Energy	--	--	--	2	2
Solar Energy	1 <sup>##</sup>	1	1	--	3
Environmental Studies	--	--	1	--	1

Mathematics & Computer Sciences	1	--	7	2	10
Sciences	1	1	7	--	09
English	--	--	--	1	1
Computer Science	--	--	1	--	1

# indicates number of available Adjunct Faculty;

## indicates number of available Professor Emeritus;

### indicates number of available Temporary/Visiting faculty

**11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance**

Currently the institute, SOT, has 102 faculty members. The following table gives more details:

**Department of Chemical Engineering**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D/M.Phil.s tudents guided for the last 4 years
Dr. Pravin Kodgire	PhD in Chemical Engineering from IIT Bombay and Post doctoral Research experience from Colorado School of Mines, CO, USA	Assistant Professor & HOD	Polymer Science & Technology	12 yrs and 1 yr of international experience	4 (Guiding)
Dr. Sukanta K. Dash	PhD in Chemical Engineering; IIT Kharagpur	Assistant Professor	Chemical Engineering	10.5 yrs	5 (Guiding)
Mr. Himanshu H. Chokshi	ME-Chemical Engineering; MS University, Baroda	Lecturer	Polymer Science & Technology	18.5 yrs	Nil

Ms Anvita Sharma	ME-Chemical Engineering; DDIT, Nadiad,	Lecturer	Computer aided design and control	4 yrs	Nil
Ms Bharti Saini	M Tech in Chemical Engineering ; IIT Roorkee	Lecturer	Environmental Engineering	3 yrs	Nil
Mr. Abhishek Kumar	M Tech in Chemical Engineering ; IIT BHU	Lecturer	Catalysis, Separation Processes	3 yrs	Nil
Mr. Anirban Dey	M Tech in Chemical Engineering ; IIT Guwahati	Lecturer	Nanotechnology aided separation Processes, Catalysis	2 yr	Nil
Ms. Sweta Balchandani	M Tech in Chemical Engineering ; DDU,Nadiad	Lecturer	Process Control, CCS	2.5 yr	Nil

**Civil Engineering:**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D/M.Phil. students guided for the last 4 years
Dr.H.B. Raghavendra	B.E. (Civil), MS (Research) (IIT Madras), PhD (IISC Bangalore)	Professor, Director SoT	Geotechnical Engineering	31	Ph.D: 03 Completed
Dr. Debasis	B. E. (Civil), M. Tech (IIT Delhi)	Associate Professor, & i/c HOD	Building Science & Construction	19	PhD : 03 (Guiding)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D/M.Phil.st u dents guided for the last 4 years
Sarkar	[Building Sc & Construction Mgmt], PhD (Civil Engg. :Project Management) , DDU, MIE.		Management; Project Management		
Dr. H. R. Dhananjaya	B.E. (Civil), M. E. (Structures), PhD (IISC Bangalore)	Associate Professor	Structural Engineering	26	PhD -2 (Guiding)
Dr. Tejas Thaker	B.E. (Civil), M.E., PhD (IIT Delhi)	Asst. Professor	GeoTechnical Engineering	5	PhD -1 (Guiding)
Dr. Manas K Bhoi	B.E. (Civil), M.E., PhD (IISC Bangalore)	Asst. Professor	GeoTechnical Engineering	6	PhD -1 (Guiding)
Dr. Anurag Kandya	B. E. (Civil), M. Tech, PhD (IIT Delhi)	Asst. Professor	Environmental Engineering	8	Nil
Dr. Anantha Singh	B. E. (Civil), M. Tech, PhD(NIT Trichi)	Asst. Professor	Environmental Engineering	6 months	Nil
Mr Rajesh	B.E. (Civil), M.E (Constn	Lecturer	Construction Engg. &	19	Nil

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D/M.Phil.st u dents guided for the last 4 years
Gujar	Engg. & Mgmt.), PhD (Pursuing)		Management, Transportation		
Mr Apurva Dave	B.E. (Civil), M.E. (CASAD), PhD (Pursuing)	Lecturer	Structural Engineering	20	Nil
Mr. Akshay Jain	B.E. (Civil), M.Tech (Geomatics in Civil Engineering) PhD (Pursuing)	Lecturer	Geomatics in Civil Engineering	3	Nil
Mr. Naimish Bhatt	B.E. (Civil), M.E. (Water Resources Engg.) PhD (Pursuing)	Lecturer	Water Resources and Irrigation Engg.	8	Nil
Mr. Niragi Dave	B.E. (Civil), M.E., PhD (Pursuing)	Lecturer	Structural Engineering	8	Nil
Mr Shivam Kapoor	B. Tech (Env.), M.Tech (SVNIT)	Lecturer	Environmental Engg.	6 months	Nil
Mr	B. E. (Civil), M. Tech	Lecturer	Water	6 months	Nil

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D./M.Phil. students guided for the last 4 years
Sudhanshu Dixit	(SVNIT)		Resources		
Mr Ronak Motiani	B. E. (Civil), M. Tech (SVNIT)	Lecturer	Structural Engineering	6 months	Nil
Mr Sharan Baswa	B. E. (Civil), M. Tech (SVNIT)	Lecturer	Structural Engineering	6 months	Nil
Ms Sonal Dharne	B. E. (Civil), M. Tech (SVNIT)	Lecturer	Environmental Engg.	6 months	Nil

**Electrical Engineering:**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D./M.Phil. students guided for the last 4 years
Dr. Vivek Pandya	B.E., M.E., Ph.D.	Associate Professor & HOD	Power System Protection	20	Ph.D.-02 (Guiding)
Dr. Jitendra G. Jamnani	B.E., M.Tech., Ph.D.	Associate Professor	Power Systems, High Voltage Engg.	21	Ph.D.-02 (Guiding)
Dr Pratik Shah	B.E. M.Sc PhD	Assistant Professor	Image Processing, Computer Vision, Embedded Systems	10	Nil
Dr. Chandrasekaran	B.E., M.E., PhD	Assistant Professor	Grid Synchronization	10	Nil

			Techniques		
Anilkumar Markana	M.Tech, B.E. (PhD Pursuing)	Lecturer	Systems and Control	13	Nil
Siddharth Joshi	M.E. B.E. (PhD Pursuing)	Lecturer	Power System	5	Nil
Astik Dhandhia	M.E. B.E. (PhD Pursuing)	Lecturer	Power System	5	Nil
Vatsal Shah	M.Tech, B.E.	Lecturer	(Power Electronics & Drives)	4	Nil
Nitin Prajapati	M.E. B.E.	Lecturer	Applied Instrumentation	1	Nil
Leena Santosh	M.E. B.E.	Lecturer	Power Systems	6	Nil
T. Phani Swecha	M.Tech. B.E.	Lecturer	Power Electronics	10- Months	Nil
Mr. Elijah T. Toppo	B.Tech M.Tech	Lecturer	Power Electronics and Drives	3	Nil
Mr. Bandopant Pawar	B.Tech. M.Tech.	Lecturer	Power Systems	11 Months	Nil
Mr. Gaurav Khare	M.Tech. B.E.	Lecturer	Power System	2.3 Years	Nil
Mr. Vipin Shukla	M.Tech B.Tech	Adjunct Faculty	Nuclear Engineering	1	Nil
Mr. K Satya Raja Sekhar	Mtech Btech	Lecturer	Power Electronics and Drives	3	Nil
Mr. T. V. Pavan Kumar	M.Tech. B.Tech.,	Lecturer	Power Systems Engineering	1 year	Nil
Mr. Ravi Botta	M.Tech. B.Tech.,	Lecturer	Power Systems Engineering	2 Months	Nil

Department of Industrial Engineering:

Name	Qualification	Designation	Specialization	No. Of years of experience	No. of Ph.D./ M. Phil. Students guided for the last 4 years
Dr.M.B.Kiran	PhD (Indian Institute of Technology, Madras, 1997) PMP (USA)	Associate Professor & HOD	Surface Metrology & Digital Image Processing	25 (18 Years of Post Ph.D experience)	( Five guiding)
Dr.Abhishek Kumar	PhD (BITS, Pilani, 2012)	Assistant Professor	Manufacturing	16 (3.5 Years of Post Ph.D experience)	(Four Guiding)
Dr.D.M.Parikh	PhD (Singhania University, Rajasthan, 2014)	Adjunct Professor	Industrial Management and Entrepreneurship development	35	Nil
Dr.Poonam Savsani	Ph.D. (Pacific University, 2014).	Assistant Professor	Robotics, trajectory optimization, advance optimization technique	7	Nil
Mallika Taneja	M.Tech (NIT, 2014)	Lecturer	CAD/CAM	1	Nil
Sagar Patil	M.Tech (NIT, 2014).	Lecturer	Industrial Engg.	-	Nil
Balaji Rao	M.Tech-NIT-2015	Lecturer	Industrial Engg.	-	Nil
Kishan Fuse	M.Tech-NIT-2014	Lecturer	Production Engg.	-	Nil
Jai Kishan	M.Tech-NIT-2015	Lecturer	Industrial Engg.	-	Nil

**Department of Mathematics and Computer Science:**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D/M.Phil.students guided for the last 4 years
T. P. Singh	Ph.D.	Professor & HOD	Numerical reservoir simulation	28 years	Nil
Poonam Mishra	Ph.D.	Assistant Professor	Optimization	7 years	Nil
Mohammad Sharifuddin Ansari	Ph.D.	Assistant Professor	FluidDynamics/ Magnetohydrodynamics,	5 years	Nil
Manoj Sahni	Ph.D.	Assistant Professor	Solid Mechanics, FGM, Tomography	10 years	Nil
Bhasha Vachharajani	Ph.D.	Assistant Professor	Oceanography (Data assimilation)	6.5 Years	Nil
Shobhit Nigam	Ph.D.	Assistant Professor	Software reliability	2 months	Nil
Brajesh Kumar Jha	Ph.D.	Assistant Professor	Computational Neuroscience	4.5 years	Nil

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D/M.Phil. students guided for the last 4 years
Jwangsar Brahma	Ph.D.	Assistant Professor	Computational Seismology	6 years	Nil
Dishant Pandya	M. Sc., M.Phil.	Lecturer	Theory of Relativity	9 Years	Nil

**Department of Mechanical Engineering:**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D/M.Phil. students guided for the last 4 years
Prof.Surendra Singh Kacchwaha	Ph.D	Professor & HoD	Thermal	26	Two completed and six (Guiding)
Dr. Vishvesh Badheka	PhD (Metallurgical Engineering)	Associate Professor	Metallurgy and Welding Processes	6.6 (after PhD)	6 (Guiding)
Dr. Anurag Mudgal	Ph.D	Associate Professor	Thermal	20	3 (Guiding)
Dr. Vimal Savsani	PhD	Assistant Professor	Machine design optimization	8	Nil
Dr. Jatin Patel	PhD	Assistant Professor	Solar Thermal	11	3 (Guiding)
Dr. Vivek Patel	PhD	Assistant Professor	Thermal	12	1 (Guiding)
Dr. Pavan Kumar Gurralla	PhD	Assistant Professor	Additive Manufacturing	9	Nil
Mr. Jaydeep Patel	M.E. (PhD Pursuing)	Lecturer	CAD/CAM	4	Nil
Mr. Nagababu Garlapati	M.Tech (PhD Pursuing)	Lecturer	MACHINE DESIGN	4.9	Nil
Mr. Bhargav Gadhavi	M. Tech CAD-CAM (PhD)	Lecturer	CAD-CAM	3.3	Nil

	pursuing)				
Mr. Jay Vora	M.E. (PhD Pursuing)	Lecturer	Welding Technology (Metallurgy and material science)	4	Nil
Mr. Kush Mehta	M. Tech (AMT), Ph.D. pursuing	Lecturer	Advance Manufacturing Techniques, Welding Technology	2	Nil
Mr. Vivek Patel	M.E. (Mechanical), PhD (pursuing)	Lecturer	Production Engineering	7	Nil
Mr. Nirav Patel	M. Tech, PhD (Pursuing )	Lecturer	CAD/CAM	3.8	Nil
Mr. Rakesh chaudhari	M. Tech	Lecturer	Mechanical	1	Nil
Mr. Parth Prajapati	M. Tech	Lecturer	Mechanical Engineering	1	Nil
Mr. Bhasuru Srinivasa Abhinaya	M. Tech	Lecturer	thermal power engineering	0	Nil
Mr. Rahul Deharkar	M. Tech	Lecturer	Thermal Engineering	0	Nil
Mr. Hardik Goswami	M. Tech	Lecturer	Thermal Engineering	0	Nil
Mr. Krunal Mehta	M. Tech	Lecturer	CAD/CAM	1	Nil

**Department of Nuclear Engineering:**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D/M.Phil. students guided for the last 4 years
Mr G.Vaitheeswaran	M.Tech., M.Sc., B.Sc	Lecturer	Reactor Physics, Accelerators, Plasmas and Tokomaks.	2 years	Nil
Mr Vikram Rathore	M.Sc., M.Tech., Ph.D(Pursuing)	Lecturer	Computational Physics, Reactor Physics, CFD, Radiation Detection Techniques.	2 years	Nil

**Department of science:**

Name	Qualification	Designation	Specialization	No. Of Years of Experience	No. Of Ph.D./ M.Phil. students guided for the last 4 years
Dr. Nirendra M. Misra	Ph. D.	Professor & Head	Physical Chemistry	31	9 (Completed)
Dr. Rajib Bandyopadhyay	Ph. D.	Associate Professor	Physical Chemistry	17	Nil
Dr. Manoj Pandey	Ph. D.	Assistant Professor	Organic Chemistry	7	Nil
Dr. Satyam Shinde	Ph. D.	Assistant Professor	Computational Condense Matter Physics	6	Nil
Dr. Bharat Parekh	Ph. D.	Assistant Professor	Experimental condense matter Physics and material science	7	Nil
Dr. Balamurali Krishna Mayya	Ph. D.	Assistant Professor	Statistical Physics	12	Nil
Dr. Manoj Kumar	Ph. D.	Assistant Professor	Photovoltaic	8	3 Completed/ 3(Guiding)
Dr. Rohit Srivastava	Ph. D.	Assistant Professor	Electronics and isotope geochemistry	5	Nil
Dr. Anirban Das	Ph. D.	Assistant Professor	Physical Chemistry and Geochemistry	10	Nil
Dr. Brijesh Tripathi	Ph. D.	Assistant Professor	Solar Cell	7	Nil

**Department of Solar Energy:**

No.	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D/M.Phil.s tudents guided for the last 4 years
1	Dr. Indrajit Mukhopadhyay	M.Sc., Ph.D.	Associate Professor & Head	Physical Chemistry, Thin film solar cell, Energy Storage	19	2 Completed
2	Dr. Abhijit Ray	M.Sc., PhD	Assistant Professor	Experimental Condensed Matter Physics, Thin film solar cells	12	1 Completed

## 12. List of senior Visiting Fellows, adjunct faculty, emeritus professors

While the School has adequate number of full time scholarly faculty, role and importance of visiting and guest faculty cannot be undermined. In order to bring in the latest and best professional inputs for SOT students professionals of various disciplines from industrial and business organizations are invited to supplement course deliveries at the school.

### List of Visiting Faculties:

- Mr.Dinesh Deshmukh
- Prof. Ing-Eberhard Hohnecker
- Prof. James Miller
- Mr. Rajnikant Patel
- Dr. Vijay Modi
- Prof. Laltu Chandra
- Shri Deepak Gadiyar
- Prof. T. K. Chaudhari
- Prof. S.K. Dogra
- Prof. A.Q. Contractor
- Dr. Klaus Bucher
- Prof. Govindsamy Tamizhmani
- Dr. Manav Sharan
- Dr.RajaniKant Patel
- Mr.Govish Babu
- Mr. Jayraj Pandya
- Ms. Sushmita Ghosh
- Dr.V.S.Rao
- Mr. R.S. Tamu
- Mr. Nikhil Kumar
- Mr. Nital Zaveri
- Mr. Ravi Singh
- Mr.Senthil Velan
- Mr. Ketan Dhruv
- Mr.Naresh Behl
- Mr. Manish Mishra
- Mr. Prakhar Gupta

## 13. Percentage of classes taken by temporary/visiting faculty – programme-wise information

Programme	Percentage of classes taken by temporary faculty
Civil Engineering M. Tech (Infrastructure Engg & Management)	20
Mechanical Engineering	Nil
Electrical Engineering	Nil
Industrial Engineering	Nil
Chemical Engineering	Nil

Nuclear Engineering	Nil
Solar Energy	Nil

#### 14. Programme-wise Student Teacher Ratios

Programme	Student Teacher Ratios
Civil Engineering	25:1
Mechanical Engineering	18:1
Electrical Engineering	19:1
Industrial Engineering	22:1
Chemical Engineering	24:1
Nuclear Engineering	7:1
Solar Energy	20:1

#### 15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

(a) Technical and Administrative staff:

	Sanctioned	Filled	Actual
Number of technical staff	20	17	17
Number of administrative staff	8	6	6

(b) Supporting Staff : 168

#### 16. Research thrust areas as recognized by major funding agencies

- Renewable Energy Technology
- Solar Energy
- Friction stir welding
- Cost Effective Concentrator Photovoltaic (CPV) System
- Thermal Plasma pyrolysis of Crude Oil
- Gas Metal Arc Welding
- Low cost Kesterite(CZTS) thin-film solar cells
- Nano-rod Based Dye Sensitized Solar Cells (DSSC)
- Electrodeposition of Si & Ge
- Chemical and Isotopic Investigations Of Fluoride Rich Groundwater
- Cost Effective ConcentratorPhotovoltaic (CPV) System
- Synthesis of Sumanene and Corannulene derivatives
- Image processing and computer aided inspection
- Flexible manufacturing system modeling and simulation
- Development of CZTS Solar Cells
- Establishment of waste management and water recycling system for Industrial Parks
- Weldability aspects of Low Activation Ferritic-Martensitic Steel
- Development of MIS for Kalpasar Project
- Structures with Sandwich Panels
- Development of clean energy and Environment

- Development of Energy conservation laboratory (Bio fuels)
- Partial Identification Framework for multi input multi output system identification
- Development of New Anode Material
- Research Project on Prefabricated Housing

**17.** Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.

Sr.no	Project Investigator	Title of Project	Funding Agency	Grant (Rs.)
1	Dr. Abhijit Ray	Development of CZTS Solar Cells & Modules on Glass and Metallic Substrates by Non-Vacuum Processes	MNRE	19,356,000
2	Dr. Rajib Bandyopadhyay	Development of nanosized catalysts for the application in FCC & Hydroprocessing	RIL	2,580,000

**18.** Inter-institutional collaborative projects and associated grants received  
a) National collaboration b) International collaboration

Sr. No.	School	Principal Investigator/Co-PI	National Collaboration Project/Details	Grant (in Rs.)
1	SOT	PI: Indrajit Mukhopadhyay, Dr. Takeyoshi Yagyu, Prof. Shinji Kawasaki, Dr. Yosuke Ishii & Dr. Abhijit Ray [Ongoing]	Development of New Anode Material for next Generation Li ion Batteries by electrodeposition of Si on the inner-surface of nanospace carbon	3 lakh for 2 years /Exchange program

**19.** Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.

**Chemical Engineering:**

Sr. No.	Year	Name of the project	Name of the funding agency	Total grant Received
1	2013	Development of clean energy and Environment	PDP	Rs. 25 lakhs
2	2013	Development of Energy conservation laboratory (Bio fuels)	PDP	Rs. 20 lakhs

**Civil Engineering:**

Sr. No.	Year	Name of the project	Name of the funding agency	Total grant Received
1	2009-2011	Research Project on Selection of Appropriate Housing Technologies for EWS Housing	Sintex Industries Ltd	INR 4,00,000
2	2011-2012	Research Project on Prefabricated Housing Structures with Sandwich Panels	Sintex Industries Ltd	INR 6,00,000
3	2010-2013	Development of MIS for Kalpasar Project	Sintex Industries Ltd	INR 30,00,000

**Electrical Engineering:**

Sr. No.	Year	Name of the project	Name of the funding agency	Total grant Received
1	2012	Partial Identification Framework for multi input multi output system identification	Department of Science and Technology	Rs. 13,44,000

**Mechanical Engineering:**

Sr No.	Year	Project Title	Sponsoring Agency	Budget	Status
1.	2014	Dissimilar material joining of SS316LN (UNS S31653) and XM-19 (UNS S20910) Stainless steel joints	Board Of Research In Fusion Science & Technology (BRFST)	Rs. 14,00,000	On going

**Department of Sciences:**

S No	Year	Name of the project	Name of the funding agency	Total grant received
1	2010	Synthesis of Sumanene and Corannulene derivative and its application in various fields of chemistry	DST, India Registration No. 199/2010	Rs 18.8 Lakhs

**Solar Energy**

	Year wise	Number	Name of the project	Name of the funding agency	Total grant received
<b>A. University awarded projects</b>					
Minor projects	2011-2015	1	Performance analysis of different PV technologies	PDPU	Power plant plus 5 lakh /annum
Major Projects	2011-2015	1	CdTe by economical viable route	PDPU	Internal budget of the school
<b>B. Other agencies – national and international (specify)</b>					
Major Projects	2011-15	1	Studies on the Electrodeposition of Si and Ge at room temperature using less viscous ionic liquid.	DST	37 Lakh
		2	Development of CZTS Solar Cells & Modules on Glass and Metallic Substrates by Non-vacuum Processes	MNRE	194 Lakh
		3	Development of Metallic Nanowire Transparent Conducting Electrodes on Glass and Flexible Substrates	DST	56 Lakh (Sanctioned)
		4	Fabrication and characterization of TiO <sub>2</sub> based Dye-Sensitized Solar cells(DSSC's)	DRDO	19 Lakh

## 20. Research facility / centre with

- state recognition
- national recognition
- international recognition

National Recognition: Government of India, Ministry of Science and Technology, Department of Scientific and Industrial Research has accorded recognition to Pandit Deendayal Petroleum University.

## 21. Special research laboratories sponsored by / created by industry or corporate Bodies

- **Mechanical Engineering:**  
Welding Research Lab- received funds of Rs 1 Cr from various funding agencies like DST, ISRO, DAE, BRFSST for R & D projects in the area of Friction Stir Welding, Metal Cored Arc Welding, ATIG welding and Friction Stir Welding of Dissimilar metals.
- **Chemical Engineering:**  
Reaction Engineering Laboratory, Fluid Flow Laboratory are established by Gujarat Alkalies and Chemicals Limited (GACL).
- **Civil Engineering:**  
Several Civil Engineering laboratories like: Fluid Mechanics, Material Testing and Soil Mechanics are funded by L&T ECC Ltd.
- **Electrical Engineering:**  
Several Electrical Engineering laboratories like: Modeling and simulation Power System Protection, High Voltage Engineering, Microprocessor & Microcontroller, Process Dynamics & Control, and Modeling & Simulations are funded by GETCO and GSECL.

## 22. Publications

### 1.Department of Chemical Engineering:

- Number of papers published in peer reviewed journals/conferences (national / international):31
  - Books with ISBN with details of publishers Catalytic Abatement of Diesel Soot Emissions: Green revolution on wheels, paperback-July 2 2014, LAP LAMBERT Academic Publishing , ISBN-13-978-3-659-54281-7
  - Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, EBSCO host, etc.)
  - Impact Factor – range / average 1.4-5.191/3.2955
  - h-index : 6
1. J. R. Dorgan, P. Kodgire, ‘Design of non-equilibrium blends via theory: The butanol-water study”, Advances in Membranes and Separation Science and Technology for Fuels and Energy Production, Petroleum Preprint, 242<sup>nd</sup> American Chemical Society National Meeting & Exposition, Denver, CO, USA, Aug 2011
  2. S. Bose, A. R. Bhattacharyya, Pravin V. Kodgire and A. Misra, ‘Fractionated crystallization in PA6/ABS blends: Influence of a reactive compatibilizer and multiwall carbon nanotubes’, Polymer, 48, 356-362, 2007 (Citations: 33; IF-3.4)

3. Pravin V. Kodgire, A. R. Bhattacharyya, S. Bose, N. Gupta, A. R. Kulkarni and Ashok Misra, 'Control of multiwall carbon nanotubes dispersion in polyamide6 matrix: An assessment through electrical conductivity' Chem. Phys Lett., 432, 480-485, 2006 (Citations: 60; IF – 2.15)
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5. S. Hambir, N. Bulakh, Pravin Kodgire, R. Kalgaonkar, J. P. Jog, 'PP/Clay nanocomposites: A study of crystallization and dynamic mechanical behavior', J. Polym Sci: Part B Polym Phys, 39, 445-450, 2001 (Citations: 97; IF – 2.22)
6. Kangana P. Bhatt, Pravin Kodgire & Sukanta K. Dash, 'A Review on Recent Pilot Plant CO<sub>2</sub>Capture Processes', Proceedings of International Conference on Chemical Industry (ICCI 2014); Bharti Publication, New Delhi (ISBN 978-93-81212-84-4),pg19-23, 2014
7. Kangana P. Bhatt, Pravin Kodgire & Sukanta K. Dash 'densities and viscosities of aqueous solutions of pZ, (amp+pZ) and (amp+1-mpZ) at 313 k and 323 k', CHEMCON 2014, Indian Institute of Chemical Engineers - Chandigarh regional centre, Dec 2014, Kangana, Pravin, Sukanta
8. Himanshu Choksi, Pravin Kodgire, S.S. Kachhwah , Biodiesel Production Using Supercritical Alcoholysis: A Review', pp. 1-6, , aug 2014, Proceedings of International Conference on Chemical Industry (ICCI 2014); Bharti Publication, New Delhi (ISBN 978-93-81212-84-4)
9. Dash, S. K., Samanta, A., Samanta, A. N., Bandyopadhyay, S. S. Vapour Liquid Equilibria of Carbon Dioxide in Dilute and Concentrated Aqueous Solutions of Piperazine at Low to High Pressure. Fluid Phase Equilibria 300 (2011) 145 – 154 (Impact Factor- 2.379)
10. Dash, S. K., Samanta, A. N., Bandyopadhyay, S. S. (Vapour + liquid) equilibria (VLE) of CO<sub>2</sub> in aqueous solutions of 2-amino-2-methyl-1-propanol: New data and modelling using eNRTL-equation. The Journal of Chemical Thermodynamics 43 (2011) 1278-1285. (Impact Factor- 2.297)
11. Dash, S. K., Samanta, A., Samanta, A. N., Bandyopadhyay, S. S. Absorption of Carbon Dioxide in Piperazine Activated Concentrated Aqueous 2-Amino-2-methyl-1-propanol Solvent. Chemical Engineering Science 66 (2011) 3223-3233. (Impact Factor- 2.653)
12. Dash, S. K., Samanta, A. N., Bandyopadhyay, S. S. Solubility of carbon dioxide in aqueous solution of 2-amino-2-methyl-1-propanol and piperazine. Fluid Phase Equilibria 307 (2011) 166-174. (Impact Factor- 2.379)
13. Dash, S. K., Samanta, A. N., Bandyopadhyay, S. S. Experimental and Theoretical Investigation of Solubility of Carbon Dioxide in Concentrated Aqueous Solution of 2-Amino-2-methyl-1-propanol and Piperazine. The Journal of Chemical Thermodynamics. 51 (2012) 120-125. (Impact Factor- 2.297)
14. Dash, S.K., Bandyopadhyay, S.S. Carbon Dioxide Capture: Absorption of Carbon Dioxide in Piperazine Activated Concentrated Aqueous 2-Amino-2-Methyl-1-Propanol. Journal of Clean Energy Technologies, Vol. 1, No. 3, May 2013.

15. Dash, S. K., Samanta, A. N., Bandyopadhyay, S. S. Simulation and Parametric Study of the Post Combustion CO<sub>2</sub> Capture using aqueous 2-Amino-2-methyl-1propanol and Piperazine. *International Journal of Greenhouse Gas Control*. (2013). Accepted for publication. (Impact Factor- 5.191).
16. Dash, S.K. Multi-Technology Approach to Carbon Dioxide Capture and Sequestration: A Strategy for Global Warming and Greenhouse Gas Mitigation , *International Journal of Research and Scientific Innovation (IJRSI)*
17. Javishk Shah, Kandarp Mavani, Himanshu Choksi, Conducting Polymers: A New Generation of Conductors, *International Journal of Scientific Computing*
18. S K Shukla, Shai Pandya, Manan Upadhyay, Himanshu Choksi, Industrial Water: A Study, *International Journal of Scientific Computing*
19. Baldania Ashish D. & Choksi Himanshu H., Purification of Ethanol by adsorption using 3-A0 Zeolite adsorbent under static conditions, *International Journal of Biotechnology, Chemical & Environmental Engineering*
20. Himanshu Choksi, Pravin Kodgire & Surendra Singh Kachhwaha; 'Biodiesel Production Using Supercritical Alcoholysis: A Review', *Proceedings of International Conference on Chemical Industry (ICCI 2014)*; Bharti Publication, New Delhi (ISBN 978-93-81212-84-4), pg 1-6, 2014
21. Techno-Economical analysis of Biodiesel production using castor oil - An Indian Approach', *Journal of Energy, Environment & Carbon Credits*, pp. 1-10, jan 2013
22. Modelling of Activated Sludge Process', *Global Journal of Researches in Engineering - Chemical Engineering*, pp. 11-16, jan 2013
23. Saini B., Mehrotra I., Kumar P. and Verma R. (2013) "Insight of Riverbank Filtration System at Haridwar for Enhancement of Drinking Water Quality". *International Journal of Current Engineering and Technology*. Vol. 3, No. 4.
24. Saini B., Verma R., Himanshu S. K. and Gupta S. (2013) "Analysis of Exhaust Emissions from Gasoline Powered Vehicles in a Sub-urban Indian Town". *International Research Journal of Environment Sciences*.
25. Saini B., Kumar P. (2012) "Assessment of Ground Water Quality of IIT Roorkee Campus". *Journal of Chemical, Biological and Physical Sciences*.
26. R. Prasad, Abhishek Kumar, Anupama Mishra, Potash Substituted Mixed Metal (La-Zn) Oxide Catalysts for Diesel Soot Oxidation, *International Journal of Advances in Science and Technology (IJAST)*, 125-130, ICAST(2014), ISSN 2348-5426
27. Ram Prasad, Abhishek Kumar, Anupama Mishra, Isothermal Kinetics of Diesel Soot Oxidation over La<sub>0.7</sub> K<sub>0.3</sub>ZnO<sub>y</sub> Catalysts, *Bulletin of Chemical Reaction Engineering & Catalysis (BCREC)*, 9(3), 2014, 192-200
28. Dey, R. Singh, M.K. Purkait, 2014 , Cobalt ferrite nanoparticles aggregated schwertmannite: A novel adsorbent for the efficient removal of arsenic. *Journal of Water Process Engineering* , Vol.3, pp-1-9
29. A.Dey, M.K.Purkait, 2014 , Effect of fatty acid chain length and concentration on the structural properties of the coated CoFe<sub>2</sub>O<sub>4</sub> nanoparticles, *Journal of Industrial and Engineering Chemistry (IF-2.011)*, Accepted 22 Sep . 2014.(doi: 10.1016/j.jiec.2014.09.027

30. Anvita Sharma, Dr. Pravin Kodgire & Dr. Surendra Singh Kachhwaha; 'Review on Biodiesel Production using Process Intensification Techniques', Proceedings of International Conference on Chemical Industry (ICCI 2014); Bharti Publication, New Delhi (ISBN 978-93-81212-84-4),pg. 7-18, 2014
31. Sukanta K. Dash\*, Sweta Balchandani, Multi-Technology Approach to Carbon Dioxide Capture and Sequestration: A Strategy for Global Warming and Greenhouse Gas Mitigation, International Conference on Multidisciplinary Research & Practice, 30.11.14.

## **2. Department of Civil Engineering**

- Number of papers published in peer reviewed journals/conferences (national / international) 53
  - Monographs 01
  - Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, EBSCO host, etc.) 52
  - SNIP 5-101/12
  - Impact Factor – range / average 0.5-2.5/0.9
  - h-index: 4
1. Sarkar, D., Raghavendra, H.B., Mitul, R. (2015) "Role of Key Performance Indicators for Evaluating the Usage of BIM as Tool for Facility Management of Construction Projects" Int. Journal of Civil & Structural Engineering, Vol. 5(4), pp. 370-378.
  2. Sarkar, D. (2015) "A Framework for development of Lean Integrated Project Delivery Model for Infrastructure Road Projects" Int. Journal of Civil & Structural Engineering, Vol. 5(3), 261-271.
  3. Sarkar, D. and Bhattacharjee, B. (2014) "Application of Multivariate CUSUM for Quality Monitoring of Ready Mixed Concrete" Int. Journal of Quality Engineering & Technology, Vol. 4(2), pp. 161-179. Inderscience Publishers, UK.
  4. Sarkar, D and Bhusan, M (2014) "Application of Bootstrap Technique and Genetic Algorithm for Resource Optimization of Bridge Projects" Int. J. of Latest Technology in Engineering Management , Vol. (III) (III), pp. 109-118.
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  6. Sarkar, D. and Shah, D (2013) "A framework for Application of Genetic Algorithm in Productivity Optimization of Highway Equipments Using Evolver Software" European Int. Journal of Science & Technology, Vol. 2(5), pp.151 -163
  7. Sarkar, D and Yadav, S. (2013) "Combined interpretative structural modeling and expected value method approach for managing project risks in oil exploration projects" International Journal for Decision Sciences and Risk Management, Inderscience Publications, UK, Vol. 5(1), pp. 35 - 54
  8. Sarkar, D. and Patel, K. (2012) "Project Risk Management Framework for PPP Models for Indian Highway Projects" Civil Engineering & Construction Review, Vol. 25 (3), pp 104 -114

9. Sarkar, D and Shah, S. (2012) "Evaluating Tower Crane Safety Factors for a Housing Project through AHP" NICMAR Journal of Construction Management, Vol. XXVII (II & III), pp. 61 -70.
10. Sarkar, D. (2011) "Simulation Application in Project Risk Management for Infrastructure Transportation Project" International Journal of Project Organization and Management, Inderscience Publications, UK. Vol. 3(3 /4), pp. 374 -392
11. Sarkar, D. and Dutta, G. (2011) "A Framework for Project Risk Management for the Underground Corridor Construction of Metro Rail" International Journal of Construction Project Management, Vol. 4(1), pp. 21-38
12. Sarkar, D. (2011) "Decision Tree Analysis for Risk Mitigation Options for Underground Corridor Metro Rail Project" International Journal for Decision Sciences and Risk Management, Inderscience Publications, UK, Vol. 4, Nos. 1/2, pp. 25 - 3
13. Sarkar, D. and Kamdar, P. (2011) "Application of Simulation in Evaluation of Travel Time Performance of Bus Rapid Transit System, Ahmedabad" Journal Of Institution of Engineers, Vol. 92, pp 9-13
14. Sarkar, D. and Shah, M. (2011) "Grey Water Recycling Systems: A Study of Economic Implications and Potential Applications in Residential and Commercial Projects" NICMAR Journal of Construction Management, Vol. XXVI, pp. 5 – 13.
15. Sarkar, D. and Dutta, G. (2010) "Design and Application of Risk Adjusted Cumulative Sum for Strength Monitoring of Ready Mixed Concrete" Journal of Construction Engineering and Management, ASCE. Vol. 136 (6), pp623 – 631
16. Sarkar, D. (2010) "Project Risk Assessor Model (PRAM) for Underground Corridor Construction of Metro Rail: A Case Study of Delhi Metro" New Building Materials & Construction World, Vol. 15(11) pp. 190 - 204
17. Sarkar, D, (2010) "Effect of Local Environment Factors in Selection of Green Building Materials and Technology: A Case Study of a Commercial Complex in Ahmedabad" New Building Materials & Construction World, Vol. 16(2) pp. 132 – 140
18. Sarkar, D. and Dutta , G. (2009) "Optimum Design of Control Charts for Indian RMC Industry" New Building Materials & Construction World, Vol. 14 (12), pp 122 - 130
19. Sarkar, D. (2009) "EWMA and CUSUM Control Charts for Online Strength Monitoring of Ready Mixed Concrete" The Journal of Institution of Engineers (India), Vol. 90, pp 19 - 23
20. Sarkar, D. and Dutta, G. (2009) "Economic Design of CUSUM Control Charts for Indian Ready Mixed Concrete Industry" NICMAR Journal of Construction Management, Vol. XXIV (III) pp 22 – 27
21. Sarkar, D. (2008) "A Framework for Development of Quality Control Model for Indian RMC Industry, New Building Materials & Construction World, Vol. 14 (6), pp 144 -161
22. Sarkar, D. and Akalkotkar, P.V. (2008) "A Framework for Selection of Appropriate Housing Technology and Materials for EWS Housing" New Building Materials & Construction World, Vol. 14 (4), pp 64 -71
23. Sarkar, D. and Thaker, M (2007) "Operating Characteristic Curves : Design and Application for Online Quality Monitoring of Ready Mixed Concrete" NICMAR Journal of Construction Management, Vol. XXII (III), pp 46 - 56

24. Sarkar, D. and Thaker, M. (2007) "An Application of OC Curves in Online Strength Monitoring of RMC" New Building Materials & Construction World,
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27. Sarkar, D. and Nagesh, M. (2006) "Enabling Structures for Construction of Underground Corridor with special Focus on Productivity" NICMAR Journal of Construction Management, Vol. XXI (I), pp 1 -7
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29. H.R.Dhananjaya, "A Software For Concrete Mix Design", The Indian Concrete Journal, September, 1996, pp.489-493
30. H.R.Dhananjaya, "A Software For Optimum Design Of Post-Tensioned Pre-Stressed Concrete T - Beams", Journal of Structural Engineering, Vol. 27, No.4, January 2001, pp.293-300.
31. H.R.Dhananjaya, P.C.Pandey, J.Nagabhushanam, "Mindlin-Reissner Theory Based New Four Node Quadrilateral Plate Bending Element For Integrated Force Method", Journal of Structural Engineering, Vol. 32, No. 3, August - September 2005, pp. 179 - 194
32. H.R. Dhananjaya, J. Nagabhushanam, P.C. Pandey, " Bilinear plate bending element for thin and moderately thick plates using Integrated Force Method", Structural Engineering and Mechanics –An International Journal, Vol. 26. No. 1, 2007, pp. 43 – 68.
33. H.R.Dhananjaya, J.Nagabhushanam, P.C.Pandey, "Automatic Generation Of Equilibrium And Flexibility Matrices for Plate Bending Elements Using Integrated Force Method", Structural Engineering and Mechanics–An International Journal, Vol 30, No 4. 2008. pp.387- 402
34. H.R.Dhananjaya, P.C.Pandey , J.Nagabhushanam, "New eight-node serendipity plate bending element for thin and moderately thick plates using Integrated Force Method", Structural Engineering and Mechanics–An International Journal, Vol 33, No 4. 2009. pp.485 -502
35. H.R.Dhananjaya, J.Nagabhushanam, P.C.Pandey, "Closed Form Solutions For Equilibrium And Flexibility Matrices of 4-node Rectangular Plate Bending Element Using Integrated Force Method", Electronic Journal of Structural Engineering, Vol.10, 2010, pp. 1-10
36. H R Dhananjaya, J. Nagabhushanam, P.C.Pandey, M. Zamin Jumath. "New twelve node serendipity quadrilateral plate bending element based on Mindlin-Reissner theory using Integrated Force Method", Structural Engineering and Mechanics–An International Journal, Vol 35, No 4. 2010,. pp.485 -502
37. H.R.Dhananjaya, P.C.Pandey, J. Nagabhushanam, Ismail Othamon, "Closed Form Solutions For Equilibrium And Flexibility Matrices of Eight-node Rectangular Plate Bending Element Using Integrated Force Method" Structural Engineering and Mechanics–An International Journal, Vol 40, No 1. 2011,. pp.121 -148

38. H.R.Dhananjaya, P.C.Pandey, J. Nagabhushanam, Zaina Ibrahim, “New nine node Lagrangian quadrilateral element based on Mindlin Reissner theory using IFM”, *Structural Engineering and Mechanics–An International Journal*, Vol 41, No 2. 2012., pp.205 -229
39. H R Dhananjaya, T R Madhavan, “A study on flexural behavior of pre-tensioned prestressed fiber concrete rectangular beams with fly ash”, *Anusandhana- Journal of Science, Engineering and Management*, Vol. 1. No.2, 2012, pp 09- 17
40. H R Dhananjaya, P.C.Pandey, J Nagabhushanam, Kirchhoff theory based bilinear plate bending element using IFM , ”, *Anusandhana- Journal of Science, Engineering and Management*, Vol. 3. No.1, 2014, pp 08- 18
41. Thaker T.P., Rao K.S. and Gupta K.K.(2010), “Site Specific Ground Response Studies for Coastal Soil, Kutch, Gujarat: A Case Study”, *International Journal of Earth Science Engineering* 3(4), 543-553.
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49. Kumar, J., and Bhoi, M.K. (2009). Effect of interference of strip footings and strip anchors on their elastic settlements. *International Journal of Geotechnical Engineering, J. Ross Publishing*,4(2), 289-297.
50. Rajesh Gujar, “Application of Hydrated Lime as Optional Filler in Microsurfacing” *Journal Name : International Journal of Civil Engineering and Technology (IJCIET)* *Journal Impact Factor (2012): 3.1861 Calculated by GISI.*
51. Rajesh Gujar ,“Application of Copper Slag as Optional Filler in Microsurfacing” *Journal Name : International Journal of Civil, Structural, Environmental, and Infrastructure Engineering Research and Development (IJCSEIERD)* *Journal Impact Factor (2012): 1.0565*

52. Rajesh Gujar, Calculated by GISI, <http://www.tjprc.org/>

“Application of Fly Ash as Optional Filler in Microsurfacing” Journal Name: International Journal of Civil Engineering, <http://www.iaset.us/>

53. Mr. Akshay Jain, “Flood simulation for ungauged basin: A case study of lower Tapi basin, India” -Journal of Geomatics (Oct 2013 Issue)

**3. Department of Electrical Engineering:**

- Number of papers published in peer reviewed journals/conferences (national / international) :75
- Books with ISBN with details of publishers 04

Books with ISBN with details of publishers

Sr. No.	Name of Faculty	Title of the book	Publishing Year	Name of Publisher with ISBN Number	National/International level
1.	Dr. Jitendra Jamnani	AC Machines	First Edition, January 2015	Mahajan Publishing House 978-93-83058-87-7	National
2.	Dr. Jitendra Jamnani	DC Machines and Transformers	First Edition, July 2014	Mahajan Publishing House 978-93-83058-59-4	National
3.	Dr. Jitendra Jamnani	“Elements of Electrical Design”	Fourth Edition, July-2013	Mahajan Publishing House 978-93-83058-10-5	National
4	Dr. Jitendra Jamnani	“Switchgear”	First Edition, July-2012	Mahajan Publishing House 978-93-81256-59-6	National

- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, EBSCO host, etc.)
- Citation Index – range / average: 14, 4.7
- SNIP 0.5-3.5/1.5
- SJR 0.5
- Impact Factor – range / average 0.8 -3.5/1.6
- h-index: 3

1. Hemant Joshi, Vivek Pandya, "A Review on Up Gradation of Conventional Grid to Smart Grid for Optimal Residential Power Scheduling", International Journal of Innovative Research in Advanced Engineering (IJIRAE), pp. 1-8, Apr 2015.
2. Bhinal Mehta, Pragnesh Bhatt, Vivek Pandya, "Small Signal Stability Enhancement of DFIG based Wind Power System using Optimized Controllers Parameters", International Journal of Electrical Power & Energy System, pp. 70-82, Jan 2015.
3. Hemant Joshi, Vivek Pandya, "Optimal RTP Based Power Scheduling for Residential Load in Smart Grid", Journal of The Institution of Engineers (India): Series B Electrical, Electronics & Telecommunication and Computer Engineering, pp. 1-9, Oct 2014.
4. Bhinal Mehta, Pragnesh Bhatt, Vivek Pandya, "Modelling of Fixed Speed Squirrel Cage Induction Generators for Small Signal Stability Assessment", WSEAS (World Scientific and Engineering Academy and Society; Greece) Transactions on Power Systems, pp. 360-375, Aug 2014.
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#### **6. Department of Mechanical Engineering:**

- Number of papers published in peer reviewed journals/conferences (National / International) : 80
  - Books with ISBN with details of publishers: 1 ("Mechanical Design Optimization using Advanced Optimization Technique"; Springer publication, published in 2012 ISBN 978-1-4471-2748-2)
  - Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.): 91
  - Citation Index – range / average: 9.799 (768 (range)/78.375(average))
  - SNIP: 37.123
  - SJR: 22.229
  - Impact Factor – range / average: 5.6146 (20.979 (range)/3.7365(average))
  - h-index: 25
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  2. Kachhwaha,S. (2013)- "Exergy analysis of a vapor compression vapour absorption cascade system" International Journal of Air-conditioning and Refrigeration, Vol. 21, No. 4 (2013) 1350026-10.
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## **7. Department of Science:**

- Number of papers published in peer reviewed journals/conferences (national / international) :127
- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, EBSCO host, etc.) Ten
- Citation Index – range / average sixty
- Impact Factor – range (0 - 7.53)/ 3.92
- h-index: 7 (Average)

1. V. B. Ugale, K. K. Singh, N. M. Mishra & Prashant Kuma, 2013, "Comparative study of carbon fabric reinforced and glass fabric reinforced thin sandwich panels under impact and static Loading", Journal of Composite Material, December 12, 2013, 0021998313514874, I.F. 0.936
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### **8.Department of Solar Energy**

- Number of papers published in peer reviewed journals /conferences (national / international) : 63
- Monographs: 01
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- Books edited: 00
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  56. Pankaj Yadav, Brijesh Tripathi, Makarand Lokhande, Manoj Kumar, Estimation of steady state and dynamic parameters of low concentration photovoltaic system, *Solar Energy Materials and Solar Cells* 112 (2013) 65-72. [ISSN: 0927-0248]
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### 23. Details of patents and income generated

Patent Applications filed by Dr Vishvesh J Badheka

1) Patent application of welding torch designed for Narrow Gap Gas Metal Arc Welding has been filed at Indian Patent Office, New Delhi. Application number 629/Del/2007 dated 22/03/2007.

2) Patent application of "Narrow Gap Gas Metal Arc Welding Torch Oscillation Device" has been filed at Indian Patent Office, New Delhi. Application no. 2797/Del/2008-11/12/2008.

**24. Areas of consultancy and income generated :**

Details are available at the university Level and will be made available to the committee members at the time of visit.

**25. Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad**

Sr.No.	Faculty Name	laboratories / institutions	Year
1	Dr. Jatin Patel	University of Saskatchewan, Canada	2014
2	Dr. Manas Bhui	University of Saskatchewan, Canada	2014
3	Dr. Vishvesh Bhadeka	University of Saskatchewan, Canada	2014
4	Mr. Vaitheeswaran G	Texas A&M University, USA	2014
5	Mr. Vikram Rathore	Texas A&M University, USA	2014
6	Mr. Vipin Shukla	Texas A&M University, USA	2014
7	Dr. Vimal Savsani	American Society of Mechanical Engineering, USA	2014
8	Dr. Rajesh Patel	International Conference on Gas liquid reactor engineering, Seoul, South Korea	2014
9	Dr. Rajesh Patel	Kangan Institute, Australia	2013
10	Dr. Pratik Shah	Kangan Institute, Australia	2013
11	Mr. Jayesh Patel	University of Saskatchewan, Canada	2014
12	Mr. HB. Raghavendra	Conference on World class university, China	2013
13	Mr. T. P. Singh	Workshop on World class university, Malaysia	2014
14	Mr. Vatsal Shah	Shell Eco Marathon Asia 2015 organized by Shell Global Ltd.	2015
15	Dr. Anurag Mudgal	: Royal Academy of Engineering, UK under Newton Fund scheme (reference	2015

Sr.No.	Faculty Name	laboratories / institutions	Year
		NRCP/1415/189) Duration: 19-05-2015	
16	Dr. Abhijit Ray	Chubu Research Foundation (JSPS) Foreign Researcher Fellowship, Japan	2015

**26. Faculty serving in**

**a) National committees b) International committees c) Editorial Boards d) any other (please specify)**

Sr No.	Editorial boards of national and international journals	Faculty Name
1	Institution of Civil Engineers	Dr.H.B.Raghavendra
2	International Journal of Civil Engineering Research	Dr. Debasis Sarkar
3	Editorial Board Member of SESI Journal, India.	Dr. Indrajit Mukhopadhyay

**27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).**

Faculty of School of Technology, have been attending number of Faculty Development/Orientation Programs. Details are given below.

**Department of Chemical Engineering:****Dr. Pravin Kodgire:**

- participated 9th International Plastic Conference – ‘PlastIndia– Expanding Horizons 2015 – Gateway to Innovations’ held at Convention Center of Mahatma Mandir, Gandhinager from 6-7th Feb 2015.
- attended 67<sup>th</sup> Annual Session of Indian Institute of Chemical Engineers, ‘CHEMCON-2014’ an international conference on " Chemical Engineering- Emerging Dimensions and Challenges Ahead" (INDO-JAPAN session) (December 27- 30, 2014), Dr SSB University Institute of Chemical Engineering and Technology, Panjab University, Chandigarh, India
- One day Workshop on "Enhancing Drug Solubility and Bioavailability Using Nanotechnology" on Friday, 10th October 2014, CII house, Ahmedabad
- 3rd International conference on advances in nanotechnology and nanomaterials - ICANN 2013’ to be held on 1-3 Dec. 2013 at Indian Institute of Technology, Guwahati, Assam
- participated 66<sup>th</sup> Annual Session of Indian Institute of Chemical Engineers, ‘CHEMCON-2013’ an international conference on “Innovative Approaches For

- Food Security and Health Care For a Better Tomorrow" (INDO-US and INDO-Canadian sessions) (December 27- 30, 2013), ICT, Mumbai, Maharashtra, India
- participated ISTE approved short term training program (STTP) workshop on 'Laboratory Development: Orientation, Design Methodology and Protocols' (February 16 - 20, 2013) held at Chemical Engineering Department of M S University of Baroda, Vadodara, Gujarat, India
  - participated ISTE approved Workshop on "Outcomes - Based Engineering Education for Enhanced Employability" 9/2/2013 at PDPU campus
  - participated 65th Annual Session of Indian Institute of Chemical Engineers, 'CHEMCON-2012' an international conference on 'Sustainable Technologies for Energy and Environment in Process Industries' (December 27- 30, 2012) held at NIT, Jalandhar, Punjab, India
  - attended 5 day summer school organized by Petrotech Society on 'Petroleum Refining and Petrochemicals', 4th – 8th June 2012, Gurgaon, Haryana, India

**Dr. Dash, S. K:**

- Carbon Dioxide Capture: Absorption of Carbon Dioxide in Piperazine Activated Concentrated Aqueous 2-Amino-2-Methyl-1-Propanol. International Conference on Future Environment and Energy– ICFEE 2013, 24-25, February, 2013, Rome, Italy.
- Simulation and Parametric Study of the Post Combustion CO<sub>2</sub> Capture using Aqueous 2-Amino-2-methyl-1propanol and Piperazine Blended solvent. CHEMCON-2012, 27-30, December, 2012, NIT Jalandhar, India.
- Post Combustion CO<sub>2</sub> Capture with Activated MDEA: Experimental and Thermodynamic Modeling of Phase Equilibrium Using Aspen Plus. CHEMCON-2011, IISc, Bangalore, Dec, 2011.
- Absorption into Activated AMP Solvent Used for Post Combustion CO<sub>2</sub> Capture from Coal Based Power Plants: Experimental investigation and modeling. CHEMCON-2011, IISc, Bangalore, Dec, 2011.
- Carbon dioxide Capture: Absorption of Carbon dioxide in Piperazine Activated Concentrated aqueous N-methyldiethanol amine. 14 ACC (Separation, Storage and Utilization of CO<sub>2</sub>, Symposium of 14th Asian Chemical Congress, Bangkok, Thailand. 5-8 September, 2011,
- Post-Combustion CO<sub>2</sub>-Capture: Thermodynamic study of CO<sub>2</sub> in Piperazine Activated Concentrated Aqueous 2-Amino-2-Methyl-1-propanol. Poster at GLS10 (10th International Conference on Gas-Liquid and Gas-Liquid-Solid Reactor Engineering, [www.gls10.org](http://www.gls10.org) ), Universidade do Minho, Braga, Portugal. 26-29 June, 2011
- Absorption of Carbon Dioxide in Piperazine Activated Concentrated Aqueous 2-Amino-2-methyl-1-propanol Solvent. 10th International Conference on Gas-Liquid and Gas-Liquid-Solid Reactor Engineering, 26-29 June, 2011, Universidade do Minho, Portugal.

- An Electrolyte NRTL Model for the VLE of CO<sub>2</sub> in 2-Amino-2-Methyl-1-Propanol Activated with Piperazine. CHEMCON-2010, Annamalai University, Tamil Nadu, Dec, 2010.

### **Department of Civil Engineering:**

#### **Dr. Debashish Sircar:**

- Attended a conference & presented a paper Application of Structural Equation Modeling for Project Risk Time Cost Behaviour and Optimization for Underground Corridor Metro Rail” Proceedings of National Seminar on Role of Management Science in Decision Making, Institute of Management Technology, Nagpur, 2009.
- Attended a conference & presented a paper on Evaluating Crane Safety Factors for Construction of Underground Metro Rail Project” International Conference on Safety, IIT Gandhinagar, [Dec. 2014]

### **Department of Electrical Engineering:**

#### **Dr. Vivek Pandya:**

- Attended Workshop on grid operation and Monitoring and Equipment health assessment on June 3, 2014 at IIT Bombay, Powai, Mumbai.
- Attended Seminar on “Smart Grid Development in Gujarat” at the event ‘Glorious Gujarat-Vision 2020’ at Sabarmati Riverfront, Ahmedabad on Sunday, January 12, 2014.
- Attended 2 days Regional workshop on “Smart Grids” organized by GETCO at PDPU on 7th and 8th February, 2014.

#### **Dr. Jitendra Jamnani:**

- Attended 2 days Regional workshop on “Smart Grids” organized by GETCO at PDPU on 7th and 8th February, 2014.
- Attended training programme on ISO Certification of University during February 11 to 13, 2014.
- Attended Seminar on “Smart Grid Development in Gujarat” at the event ‘Glorious Gujarat-Vision 2020’ at Sabarmati Riverfront, Ahmedabad on Sunday, January 12, 2014.
- Attended Workshop on grid operation and Monitoring and Equipment health assessment on June 3, 2014 at IIT Bombay, Powai, Mumbai.

#### **Mr. Anil Marakana:**

- Participated actively in workshop on Outcome based Engineering Education for

Enhanced Employability, organized by ISTE chapter, PDPU, Gandhinagar on 09<sup>th</sup> Feb. 2013.

- Participated in two day seminar on “Awareness on green energy and conservation” organized by Pandit Deendayal Petroleum University on 17<sup>th</sup> and 18<sup>th</sup> Sept. 2013.
- Participated in one day workshop on “Energy savings using solar appliances” organized by Pandit Deendayal Petroleum University on 25<sup>th</sup> Oct. 2013.
- Participated actively in International Conference for Academic Institutions (ICAI) on Jan 2013, held at PDPU, organized by Government of Gujarat during Vibrant Gujarat summit 2013.
- Attended International workshop/conference on Renewable energy at Istanbul , Turkey, on 05<sup>th</sup> Nov to 10<sup>th</sup> Nov. 2012 organized by International Finance Corporation (IFC), World Bank group.

**Dr. Pratik Shah:**

- Participated actively in workshop on Outcome based Engineering Education for Enhanced Employability, organized by ISTE chapter, PDPU, Gandhinagar on 09<sup>th</sup> Feb. 2013.
- Attended two day workshop on MSP430 DSP Micro-controller (21-22 August, 2014) at PDPU

**Mr. Astik Dhandhia:**

- Attended 5 Days STTP on “Advanced Engineering Optimization Through Intelligent Techniques” at SVNIT Surat during 7-11 January 2013.

**Mr. Siddharth Joshi:**

- Attended STTP on Renewable energy on Feb. 14<sup>th</sup> to 18<sup>th</sup> 2011 at BVM Engineering College, V.V. nagar.
- Attended STTP at Nirma University on Condition Monitoring of Electrical machines on Dec. 26<sup>th</sup> to Dec. 31<sup>st</sup>, 2011 in Electrical Engineering Dept.
- Attended two day workshop on smart grid in Pandit Deendayal Petroleum University, Raisan, Gandhinagar during 14<sup>th</sup> and 15<sup>th</sup> May, 2012.
- Attended a FDP on “Power System Protection”, at Birla Vishwakarma Mahavidhyalaya during 17<sup>th</sup> to 22<sup>nd</sup> June, 2013.
- Attended a TEQIP sponsored one week short term training program on “Modeling and Optimization Techniques for Engineering Applications (MOTEA)” from 19-23 May 2014 at SVNIT, Surat.

**Mr. Nitin Prajapati:**

- Attended One Week ISTE Coordinators Workshop on Control Systems at IIT Kharagpur During 15-19 September 2014.

**Mr. Vipin Shukla:**

- Attended Siemens Mechatronic Systems Certification Program 3rd Aug 2015 to 7th Aug 2015, IITRAM, MANINAGAR. Gujarat.
- Attended 13th ESARDA Course on Nuclear Safeguard and Non-proliferation, Chulalongkorn university, Bangkok, Thailand, 6th October 2014 to 10th October 2014.
- Attended Summer Certificate In Nuclear Security offered by Texas A&M University, College Station, Texas, 26th May 2014 to 16th July 2014.
- Attended Institute of Nuclear Materials Management 55th Annual Meeting 2014, Atlanta, Georgia USA 19th July 2014 to 24th July 2014.
- Attended Institute of Nuclear Materials Management 54th Annual Meeting 2013, Palm Springs, California USA, 13th July 2013 to 19th July 2013.
- Attended Introduction to Techniques of Measurement for Nuclear Security program at Texas A&M University, College Station, Texas, USA 20th July 2013 to 1st Aug 2013.
- Attended “Nuclear Security Summer Technical Training” at Sandia National Laboratory, Albuquerque, New Mexico, USA 1st Aug 2013 to 7th Aug 2013.
- Attended workshop on “Severe Accident Analysis and Management, 1st Feb 2013 to 3rd Feb 2013, IIT Kanpur.
- Attended Workshop on “Computational Methods in Engineering using MATLAB” IIT Gandhinagar, 21st December 2012 to 23rd December 2012.
- Attended workshop on Intellectual Property Rights including patent and copyrights on 15<sup>th</sup> Sept 2012, organized by IIT Gandhinagar, Gujarat.
- Attended DST-SERB school (organized by UPES DDN) on evolutionary Techniques for the optimization of chemical Engineering Systems on 24<sup>th</sup> March to 29<sup>th</sup> March 2014.

**Mr. Gaurav Khare**

- Attended 01 day workshop on “Intellectual Property Rights Awareness” conducted by Technology Business Incubator of NIT-Calicut at NIT Calicut on 5th October 2013.

**Mr. Ravi Botta**

- Participated in “Application of Power Electronics to Renewable Energy Systems and Micro Grids” workshop conducted by Dept. of EEE, NIT Trichy during Feb-2015.
- Participated in “Off-shore Wind Farms & Smart Grids” workshop conducted by Dept. of EEE, NIT Trichy during April-2015.
- Participated in “Power system modelling and simulation with PSCAD” workshop conducted by Dept. of EEE, NIT Trichy during July-2014.
- Participated in short-term course on “FACTS Controllers” conducted by Dept. of EE, NIT Trichy during July-2014.

**Mr. Elijha Toppo**

- Attended a 5 days STTP at SVNIT on Implementation of Power Electronic Systems from 1st to 5th July, 2013

**Mr. K Satya Raja Sekhar**

- Attended 6 days STTP on " Power Electronic Systems" At Svnit

**Mr.Bandopant Pawar**

- Attended 2 days workshop on “PLC and Automation” organized by WCE on 11<sup>th</sup> and 12<sup>th</sup> January, 2013.
- Attended 2 days workshop on “Smart Grid and renewable Energy sources” organized by CPRI on 09<sup>th</sup> and 10<sup>th</sup> January, 2015.

**Department of Industrial Engineering:**

**Dr.M.B.Kiran:**

- Attended Six sigma Green belt Training (2015).
- Attended Lean Six sigma Black belt Training ( 2015).
- Attended MINITAB training (2015).
- Attended Lean Management Training (2015).

**Dr.Abhishek Kumar :**

- Attended workshop on advances in welding, cutting & automation organized by Rajeev machine tools at AMA Management Center, Ahmedabad on May 16th and 17th 2014.
- Attended International Conference on Friction Based process at IISc, Bangalore from 3-5th Sept. 2014.
- Attended International Institute of Welding- National Welding Seminar at Tatanagar from 22nd – 24th Jan. 2015.

**Dr.D.M.Parikh:**

- Techniques of Project Appraisal;5th – 17th August 1985;Management Development Institute (MDI) New Delhi
- Computed Model For Feasibility Analysis & Reporting (COMFAR);1st -5th November 1993;Entrepreneurship Development Institute of India (EDI) Ahmedabad
- Computer orientation;22nd December 1994;Datapro Information Technology Ahmedabad
- Merchant Banking;30th January to 11th February 1995;Bankers Training College, Reserve Bank of India (RBI), Bombay
- Equipment leasing;19th to 22th June 1995;Jawaharlal Nehru Institute For Development Banking (JNIDB), Hyderabad
- Windows and MS office;28th August to 9th November 1995;Softrak Technology Exports Ltd, Ahmedabad

- Technical Analysis;4th to 8th November 1996;UTI Institute Of Capital Market, New Bombay
- Infrastructure Development and Finance;16th to 21st February 1998;Indian Institute of Management, Ahmedabad
- Diploma In PPM Using MSP;August 2008;CADD center project management, Ahmedabad
- Intelligent Manufacturing with Focus on Precision Engineering;28th April 2012; By Center For Entrepreneurship Development, Ahmedabad
- Spreadsheet Application in financial Management;26th-28th April 2012;NIM, Nirma University, Ahmedabad
- Training of Trainers (ToT) on “MSME Umbrella Program”;1st-8th July 2012 At National Institute for Micro, small & Medium Enterprise (NI-MSME), Hyderabad
- Intelligence Manufacturing & SME;11th – 13th January 2013;INDEXTb, Gandhinagar.
- National Workshop on “Development of policy Framework for Innovation ,Student Entrepreneurship & IPR;21st & 22nd November 2014;Gujarat Technological University, Ahmedabad
- Business Ethics for Good Corporate Governance & Sustainability;6th – 7th Feb 2015, Gujarat Technological University, Ahmedabad

#### **Department of Mechanical Engineering:**

##### **Prof. Surendra Singh Kachhwaha:**

- Proceedings of International Conference on Chemical Industry (ICCI 2014); Bharti Publication, New Delhi, 2014 and Won the Best paper presentation award.

##### **Dr Vishvesh J. Badheka:**

- International welding Congress IC 2014 at Delhi from 9th April to 11th April 14. International Conference on Friction Based Processes, 3-5 Sept 2014, IISc, Bangalore

##### **Dr. Vimal Savsani:**

- ASME- International Mechanical Engineering Congress and Exposition, Montreal, Canada, 2014.

##### **Dr. Jatin Patel:**

- International Congress on Renewable Energy (ICORE)

##### **Mr. Vivek Patel:**

- International conference on friction stir based processes (ICFP) at IISc Bangalore

##### **Mr. Kush Mehta:**

- International conference on friction based processes at IISc, Bangalore.

#### **Department of Solar Energy:**

**Prof. Indrajit Mukhopadhyay :**

- 1000 Teachers Training Programme in Solar Photovoltaics, ISTE, NMEICT, IIT-Bombay/December 2011.
- 1000 Teachers Training Programme in Analog Electronics, ISTE, NMEICT, IIT-Kharagpur/4-14 June 2013.
- Workshop on BIPV in PDPU

**Dr. Abhijit Ray :**

- 1000 Teachers Training Programme in Solar Photovoltaics, ISTE, NMEICT, IIT-Bombay/December 2011.
- 1000 Teachers Training Programme in Analog Electronics, ISTE, NMEICT, IIT-Kharagpur/4-14 June 2013.
- Workshop on BIPV in PDPU

**28. Student projects**

- Percentage of students who have done in-house projects including interdepartmental projects

Project Name	Student Investigator(s)	Project Guide	Sanction Date	Sanction Amount(Rs.)
Fabrication and Electrical Characterization of the CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> Based Perovskite Solar Cells	Mr. Kaushik Natarajan	Dr. Manoj Kumar	1/28/2015	1,10,000.00
Development and decoration of nanoparticles for Surface Plasmon mediated enhancement of efficiency in a:Si Solar cells	Mr. Ankit Bhatt	Dr. Abhijit Ray	1/28/2015	70,000.00
Deposition of Graphene monolayer through Chemical Vapour Deposition at Atmospheric Pressure	Ms. Chandni Shah	Dr. Indrajit Mukhopadhyay	1/28/2015	2,10,000.00
Reuse of Materials in Geotechnical Applications	Mr. Shubham Mishra Mr. Akash Gupta Mr. Arijit Samanta Mr. Nipun Verma	Dr. Trudeep N. Dave	1/28/2015	65,000.00

Project Name	Student Investigator(s)	Project Guide	Sanction Date	Sanction Amount(Rs.)
Investigations of tool design on dissimilar copper-aluminium materials by energy efficient FSW technology	Mr. Razin Desai Mr. Prashant Meena	Mr. Kush Mehta	12/26/2014	1,00,000.00
self healing OF Engineered Cementitious composites (ECC) under natural environment with different percentage of fibers	Mr. Ajay Gelot Mr. Jaykrishna Patel Mr. Aniket Raj Mr. Bhaumik Merchant	Ms. Niragi Dave	1/28/2015	19,000.00
Design and Development of Compressed Air Engine as an alternative to Fossil Fuel Engine	Mr. Raj Gopalachari Mr. Kunal Kotak	Dr. Vimal Savsani	12/26/2014	46,000.00
Participation in Shell Eco Marathon Asia 2015	Mr. Saurabh Shukla Mr. Keyur Suthar	Mr. Vatsal Shah	1/28/2015	1,00,000.00
Experimental Analysis of Parallel Electric Hybrid Powertrain with Electronic Clutch for Gasoline Engine.	Mr. Chaitanya Dave Mr. Deep Vaghani Mr. Harsh Desai	Dr. Vimal Savsani	3/31/2015	95,500.00
Design and Development of UNI-WHEEL VEHICLE	Mr. Subir Thakur Mr. Darshit Patel Ms. Chandni Bhuva Mr. Shloka Shah	Dr. Vimal Savsani	1/28/2015	50,000.00
Experimental Study of Rankine Cycle with Scroll Expander	Mr. Rahi Shah Mr. Darshit Parmar	Dr. Surendra Singh Kachhwaha	12/26/2014	1,00,000.00

Project Name	Student Investigator(s)	Project Guide	Sanction Date	Sanction Amount(Rs.)
Optimization of Electrical discharge machining (EDM) drilling parameters using neural – genetic approach for techno – commercial evaluation.	Mr. Aditya Singh Mr. Setu Dave Mr. Saurabh Srivastava Mr. Nimesh Thakkar	Mr. Jay Vora	1/28/2015	70,000.00
Design & Development of a Solar-electric hybrid drivetrain and prototype on a carbon fibre monocoque chassis platform	Mr. Vedant	Mr. Bhargav Gadhavi	1/28/2015	75,000.00
BIPV based DC Nanogrid for Façade(Building) Integration	Mr. Alpesh Desai	Dr. Indrajit.Mukhopadhyay	1/28/2015	90000.00
Study of Light Confinement Properties of Metal Nanoparticle trapped on Graphene Thin-Films for Solar Photovoltaic Applications	Ms. Pooja Kanade	Dr. Manoj Kumar	12/24/2013	60,000.00
Production of biodiesel by using Colsolvents	Mr. Javishk Shah Ms. Nikita Koka Mr. Happy Patel	Dr. Himanshu Choksi	2/7/2014	2,20,000.00
Synthesis and characterization of Charge carrier transporting materials for enhancement of energy harvesting and their applications in devices	Mr. Parth Patel Ms. Maitrayee Trivedi	Dr. Manoj Pandey	2/7/2014	1,95,000.00
An approach towards green synthesis by Designing Novel synthetic methodologies using copper and Iron based catalysts for cross dehydrogenative coupling by CH activation	Ms. Jessica Patel Mr. Vipul Patel	Dr. Manoj Pandey	2/7/2014	2,25,000

Project Name	Student Investigator(s)	Project Guide	Sanction Date	Sanction Amount(Rs.)
Development of a small scale Solar Vapour Absorption Refrigeration System and analyzing its feasibility for commercial use	Mr. Animesh Mathur Mr. Swapnil Choudary Mr. Anup Sharma Mr. Prashant Arya Suprabha Sharda	Dr. Jatin Patel	1/29/2014	1,80,000.00
Design and Development of Small Scale Solar Forced Convection Solar Drying System and Analysing it's feasibility for Commercial Purpose	Mr. Karan Prajapati Mr. Ruchik Thaker	Dr. Jatin Patel	12/26/2014	1,00,000.00

• percentage of students doing projects in collaboration with other universities / industry / institutes

Nil.

## 29. Awards / recognitions received at the national and international level by

• Faculty

Faculty of SoT have received number of Awards and recognitions as narrated below.

### Chemical Engineering

- Sukanta Kumar Dash received best paper presentation in advanced separation process at CHEMCON-2013 at institute of chemical Technology (ICT), Mumbai-December, 2013
- Abhishek Kumar received the following awards:
  - Oral presentation entitled “E-waste Generation, Environmental Effects and Recycling” has been selected for the “Young Scientist Award” for the best presentation in the 3rd Bihar Science Conference.
  - Paper submitted to ECMA Global Learning conference on challenges and strategies to meet off road emission norms, 13-14 Nov, Radisson Blu New Delhi, was selected for 2<sup>nd</sup> prize.
- Himanshu Choksi received 1<sup>st</sup> prize in the paper presentation competition in the ICCI -2014

### Civil Engineering

#### **Dr. Debasis Sarkar:**

Recipient of Gold Medal for “Outstanding Performance Year 2002” Presented by International Metro Civil Contractors (IMCC JV) , Delhi Metro

**Dr. Tejaskumar Thaker:**

- Awarded Scholarship of Rs. 20000/- Per Month by Ministry of HRD, Govt. of India for carrying out Doctoral Research in the year 2008-2012.
- Awarded Travel Grant to attend the International conference on Urban earthquake engineering by centre for urban earthquake engineering, Tokyo Institute of Technology Japan.

**Electrical Engineering**

Siddharth Joshi received Young Scientist Award in 2005.

**Industrial Engineering :**

Dr.M.B.Kiran was awarded as a Certified Project manager from the Project management Institute, Pennsylvania, USA (2014).

**Mechanical Engineering:**

Dr Vishvesh J Badheka, Associate Professor received following awards for his research contributions

- Dr Vikram Sarabhai Award for the year 2009-10 for ‘Friction Stir Welding of Aluminum and its Alloys’; from Gujarat Council on Science and Technology (GUJCOST), Government of Gujarat; The award consists of cash price of Rs One lack, a memento and a citation, declared on 7/3/2011
- Broad Outlook Learner Teacher Award (BOLT), district runner up, from AIR INDIA for Active Citizen of India for preserving crumbling of environment, for the year 2006
- Welding torch designed for Automatic Narrow Gap Welding, has been awarded Bronze medal by the “Center for Innovation, Incubation and Entrepreneurship (CIIE)” of Indian Institute of Management, Ahmedabad (IIM) on 31<sup>st</sup> March 2005 for commercialization of narrow gap technology.
- Best oral presentation award out of 62 presented papers at National Welding Seminar, held at Mumbai, in Feb 2009. Title of the paper “Microstructural Investigation of weld metal in low carbon steel welded by NG-GMAW”
- Panthaki Memorial Award 2010 for best research paper on Non ferrous material, at National Welding Seminar held at Vizag, Dec 2010. Title of the paper “Development of welding procedures for joining of Al-Mg-Si alloy and Al-Mg alloy for marine application.

**Dr Vimal Savsani, Assistant Professor received following awards for his research contributions**

- Received the award of “2013 Most Cited paper award” by computer aided design Journal of Elsevier, New York, USA.
- Received the award of “Science direct top 25 list of most downloaded articles” ranked 4th on the top 25 for computer-aided design – January to December 2012 full year, for the paper “Teaching-learning-based optimization: a novel method for constrained mechanical design optimization problems”
- Received the recognition in “25% most downloaded ebook” in the Springer e book collection 2012.

**National and international recognition received by the faculty from reputed professional bodies and agencies:**

Dr Vishvesh J Badheka qualified International Welding Engineer, conducted by International Institute of welding.

**Department of Science:**

**Dr. Rajib Bandyopadhyay was awarded the following awards:**

- Junior and Senior Research Fellowship (JRF and SRF) from CSIR, New Delhi during 1992-1997
- Postdoctoral fellowship from Japan Society for the Promotion of Science (JSPS) during 1999-2001
- Postdoctoral fellowship from Alexander von Humboldt Foundation (AVH) during 2001-2002

**Dr. Manoj K. Pandey:**

- “Young Scientist Award” under Fast track scheme from Department of Science & Technology (DST, Registration No. 199/2010) New Delhi for his project entitled “Synthesis of Sumanene and Corannulene derivative and its application in various fields of chemistry”. Total Cost of the Project is Rs 18, 80,000.00 for three years.
- VBL Postdoctoral research fellowship 2009-2010, NIT, Nagoya, Japan.
- DAIKO Foundation Postdoctoral research fellowship 2008, NIT, Nagoya, Japan.
- Schulich Postdoctoral Research Fellowship, Technion-Israel Institute of Technology, 2007, Haifa, Israel.
- Award of Senior Research Fellowship by Council of Scientific and Industrial Research, 2005, New Delhi, India.
- Project, “Synthesis of Nitrogen Containing Heterocycles” sponsored by Neurogen Corporation, Branford, USA (Investigator: Prof. Vinod K. Singh, Dept. of Chemistry, IIT Kanpur) 2002 – 2004.
- ABVP Pratibha Samman,-Uttar Pradesh, 1998, Purvanchal University, Uttar Pradesh.
- UGC Networking Resource Centre, School of Chemistry, University of Hyderabad awarded for Training visits for 6 months (June 2011).
- Summer Research Fellowship Programme invitation for two months by Indian Academy of Sciences, Indian National Science Academy, and The National Academy of Sciences, India(June 2011). Member of American Chemical Society

**Dr. Anirban Das:**

**Awards:**

- Japan Society of Promotion of Science (JSPS) Postdoctoral Fellow, Hiroshima University (2007 –2008)
- Postdoctoral Fellow (2011-2012); Department of Earth Sciences, National Cheng Kung University, Tainan (funded by National Science Council, Taiwan).
- Research Fellow (Academic Level B) (2010-2011), School of Earth and Environmental Sciences, James Cook University, Australia.(On lien from PDPU)
- Postdoctoral Fellow (2005- 2006) Department of Earth Sciences, University of Ottawa, Canada.

**Recognition:**

- Das Anirban, Chung Chuan-Hsiung, You Chen-Feng, Shen Min-Lin (2012) Application of an improved ion exchange technique for the measurement of  $\delta^{34}\text{S}$  values from microgram quantities of sulfur by MC-ICPMS, Journal of Analytical Atomic Spectrometry, 27 (12), 2088-2093  
(This article was invited to compete for a cover page by the Journal, which is published by Royal Chemical society, London)
- Das Anirban, Chung Chuan-Hsiung, You Chen-Feng (2012). Disproportionately high rates of sulfide oxidation from river basins of Taiwan orogeny, Geophysical Research Letters, 39, L12404, doi: 10.1029/2012GL051549  
(This article was selected as “Research Spotlight” by the Journal, which is published by American geophysical Union, USA)

**Solar Energy:**

**Prof. Indrajit Mukhopadhyay was awarded –**

- Vikram Sarabhai Award in 2006.
- CSIR rural technology Award 2010

**• Doctoral / post doctoral fellows**

SoT students have received the following awards:

Sr.No	Name of the scholar	Award received	Year
1	Sanjay Kumar Behura, Dept. of Solar Energy	GSEP-Commonwealth Fellowship, Canada	2012
2	Khusbu Chauhan, Dept. of Solar Energy	GSEP-Commonwealth Fellowship, ,Canada	2013
3.	Sanjay Kumar Behura, Dept. of Solar Energy	Post Doctoral Fellowship, University of Michigan	2014
4.	Malkeshkumar Patel, Dept. of Solar Energy	Post Doctoral Fellowship, Incheon University, Korea	2015

**• Students**

SoT students have received the following awards:

- Students Participated in BAJA-2014 (Organized by SAEINDIA), Team Rank 72 (National Level).
- Students Participated a National Level Model Making Competition organized by GoG & PDPU ,Secured First Rank in Dead Model Competition,2014.
- 3.Students participated in Nestle India Business Plan competition organized by IIT Gandhinagar,Obtained First Rank,2014.

- 30 students participated in “Global Citizen”, AIESEC Internship in Mauritius, Egypt, Russia, China, and Malaysia for a month to develop entrepreneurial and leadership skills through international internships centered on social issues,2013.
- Students participated in “Rampage” national event of DAIICT and PDPU team obtained second position,2013.

**30.Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.**

**Department of Chemical Engineering :**

**Department of Chemical Engineering organized (National)-**

- Organized a one day seminar on “Awareness on Biodiesel Production and Applications” at School Of Technology,2013.(Funding source: PDPU).
- Organized a one day workshop “Computational Fluid Dynamics: Fundamentals and Engineering Applications”,2014. (Funding source : SAL-PDPU)
- Organized a National symposium ‘Advancements and Design trends in Chemical Engineering’,2014. .(Funding source: Reliance, NEPL, GSFC, GACL GERMI).
- Organized a one day workshop on Piping and pipeline engineering: fundamentals and applications,2014. (Funding source: PDPU).
- International conference on chemical Industries’, ( a part of pre vibrant 2015 event in association with GOG and GCA.,2014. (Funding source: Reliance Industries Ltd, GACL,NEPL, UPL,GNFC, IndexTB, Green Enviro, GERMI).

**Department of Civil Engineering**

**Civil Engineering department organized a workshops(Funded by PDPU) (National)-**

- Emerging trends in concrete water proofing, 2012.
- Bridge design, fabrication and testing,2013.
- Engineering Applications of Geoinformatics, 2013.
- Hydrological data management in Gujarat: Present state and trends,2013.
- River Restoring in India, 2013
- Auto CAD 2D and 3D modeling,2013.
- Energy saving through effective use of green building materials and technology,2013.
- application of GIS in civil engineering,2013.
- Application of critical chain project management for infrastructure project,2014.
- Latest Trends on Innovations in Construction, 2014.

**Department of Electrical Engineering**

**Department of Electrical Engineering organized (National)-**

- Induction Program for Electrical Sub Inspector at PDPU in 2013. (Funded by CEICED,GUJARAT).
- Coordinated & organized a three day Management training Programme, jointly organized by PDPU and CEI- Government of Gujarat at Mahesana in 2013. (Funded by CEICED,GUJARAT).

- Coordinated and conducted a Scilab workshop at PDPU and supported by IIT Bombay, funded by National Mission on Education through ICT, MHRD, Government of India, in 2013. (Funded by National Mission on Education through ICT, MHRD, Government of India, in 2013).
- Organized two days workshop on Linear algebra, Data Acquisition and Computer based Control using a graphical programming Language – LabVIEW, in collaboration with IEEE Gujarat Section at PDPU, in 2012.(Funded by PDPU –IEEE GUJARAT)
- Organized workshop on Latex by IEEE student branch, PDPU in 2015. (Funded by PDPU –IEEE GUJARAT)

### **Department of Industrial Engineering**

#### **Department of Industrial Engineering organized workshops (National)-**

- Total Quality Management in 2014.( Funded by PDPU).
- Importance of Technical and Leadership skills for students,2014. ( Funded by PDPU).
- Quality Management System (Module C), 2014. ( Funded by PDPU).
- Flawless process adapted by the popular Mumbai Dabbawallas in delivering more than 2,00,000 Tiffin to different places on a daily basis, in 2014. ( Funded by PDPU).
- Quality management in 2015. ( Funded by PDPU).
- Continuous Improvement Techniques in 2015. ( Funded by PDPU).
- Minitab workshop in 2015. ( Funded by PDPU).
- Statistical Process Control, in 2015. ( Funded by PDPU).
- 5S Understanding and Implementation, in 2015. ( Funded by PDPU).

### **Department of Mathematics and Computer Science**

#### **Department of Mathematics and Computer Science organized (National)-**

- National Seminar on Applications of Mathematics in Engineering,2014. ( Funded by PDPU).
- Elementary Techniques using MATLAB, 2014. ( Funded by PDPU).

### **Department of Mechanical Engineering:**

#### **The Mechanical Engineering department organized (National)-**

- Two day workshop on CREO software, in 2014 under MECHINERZO club of the department.
- One day workshop in Industrial applications of evaporative cooling, in 2015 under MECHINERZO club of the department.
- Two Day workshop Pressure Vessel design as per ASME” in 2015 under ASME chapter of the department.
- One day workshop on Energy Conservation Awareness in 2015 under ISHRE chapter of the department.
- One day workshop on Research Opportunities and Wind resource assessment in 2015, under MECHINERZO club of the department.

- Two Day workshop Finite Element Analysis in 2015, under MECHINERZO club of the department.
- One day workshop on: Computer Aided Thermal System Analysis in 2015, under MECHINERZO club of the department.
- One day workshop opportunities and trends in applied energy" in 2015, under MECHINERZO club of the department.
- One day workshop Fundamentals of Vehicle Dynamics in 2015, under ASME chapter of the department.

**Department of Solar Energy :**

**Department of Solar Energy organized –**

- International Congress in Renewable Energy, 2012
- Workshop on Smart Grid Development, 2012(National)-
- ADB-Japan New and Renewable Energy Workshop: Smart Community Technologies,2012. (National)-

**30. Code of ethics for research followed by the departments**

Code of ethics for research is important because, it helps in defining research objectives, values that are essential for collaborative work such as trust, accountability and mutual respect, accountable to the public and moral and social values. Research Advisory Board is responsible for formulating and overseeing implementation of policies related to Code of ethics for research. ORSP Charter defines guidelines for university research activities.

Structure and composition of the Research Advisory Board (RAB) of the University is given below.

**Composition of Research Advisory Board Members**

Sr. Nos.	Name	Designation	Organization
16.	Prof. H.B.Raghavendra	Director General	Pandit Deendayal Petroleum University
17.	Dr. A. V. Chainulu	Scientist –F	Department of Scientific & Industrial Research
18.	Shri R.K. Vij	DGM (Reservoir)	ONGC Ahmedabad Assets
19.	Dr. Chandra Rai	Director/ Eberly Chair	Mewbourne School of Petroleum & Geological Engineering The University of Oklahoma
20.	Dr. Vijay K. Madiseti	Professor	School of Electrical & Computer Engineering Georgia Tech
21.	Prof N.R. Dave	Educational Advisor	Pandit Deendayal Petroleum University
22.	Prof. VC Shah	Advisor-CSC	Pandit Deendayal Petroleum University
23.	Dr. B. G. Patel	Provost (Vice-Chancellor)	Charotar University of Science & Technology (CHARUSAT)

Sr. Nos.	Name	Designation	Organization
24.	Dr. Akshai Agarwal	Vice-Chancellor	Gujarat Technological University
25.	Dr. Bharat H. Desai	Professor	Jawaharlal Nehru Chair in International Environment Law, JNU
26.	Sh. Kumarpal Desai	Padmashree	An eminent Litterateur
27.	Dr. T Harinarayana	Director	GERMI
28.	Dr. Avinash Chandra	Chairman & Managing Director	Petrobiz Consultant ( P) Ltd
29.	Dr. D.M. Kale	Director General	ONGC Energy Centre
30.	Dr. H.B Raghavendra	Director	School of Technology, PDPU
31.	Prof. Tarun Shah	Registrar	Pandit Deendayal Petroleum University
32.	Dr. Indrajit Mukhopadhyay	Coordinator, ORSP	Pandit Deendayal Petroleum University

In its Evaluation meeting RAB takes note of different policies and implement them for facilitated research and development activities in its various schools.

Research Ethics:

- advancing funds for sanctioned projects -
- providing seed money
- simplification of procedures related to sanctions / purchases to be made by the investigators
- autonomy to the principal investigator/coordinator for utilizing overhead charges-
- timely release of grants
- timely auditing
- submission of utilization certificate to the funding authorities
- The strengths and culture of the participants must be respected and utilized whenever possible.
- Written permission must be obtained from the partners before beginning the research projects.
- Permission from all individual participants must be obtained prior to collecting personal information.
- The confidentiality of all individuals, if required must be respected
- All research results, analyses and interpretations must first be reviewed by the participants to ensure accuracy and avoid misunderstanding.
- The participants must be involved in making decisions about the publication and the distribution of all or parts of the research results
- Anti-plagiarism

### 33. Student profile programme-wise:

Student profile programme-wise (2010-14):

Name of the Programme	Applications Received	Selected	Pass Percentage	
			Male	Female
B.Tech.	4522	180	82	100

**Student profile programme-wise (2011-15):**

Name of the Programme	Applications Received	Selected	Pass Percentage	
			Male	Female
B.Tech.	5664	420	81	100

**Student profile programme-wise (2012-14):**

Name of the Programme	Applications Received	Selected	Pass Percentage	
			Male	Female
M.Tech.	221	5	100	100

**Student profile programme-wise (2013-15):**

Name of the Programme	Applications Received	Selected	Pass Percentage	
			Male	Female
M.Tech.	381	82	100	100

**33. Diversity of students**

Name of the program	% of the students from the same university	% of the students from the other university within state	% of the students from universities outside the state	% of the students from other countries
B.Tech.	00	58%	42%	00
M.Tech.	00	91.11 %	8.89 %	00
Ph.D	00	87.50 %	12.50 %	00

**34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.**

None of our students have appeared for Civil services and Defense Services examinations. The following table shows the data about other competitive examinations.

Student Progression	Percentage against enrolled
NET	0
SET	0
GATE	28
GMAT	2

### 35. Student progression

Student Progression	Percentage against enrolled
UG to PG	Nil
PG to Mphil	NA
PG to Ph.D.	Nil
Ph.D. to Post doctoral	NA
Employed <ul style="list-style-type: none"> <li>• Campus selection</li> <li>• Other than campus recruitment</li> </ul>	40% , through Campus selection.

### 36. Diversity of staff

Percentage of faculty who are graduates	
From the same University	1%
From other Universities within the state	60%
From Universities within from other states	39%
From Universities outside the country	Nil

### 37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period

Following faculties were awarded Ph.D. during the assessment period.

Year 2014-2015	Name of the Faculty	Research Topic	Supervisor	Degree M.Tech/Ph.D
19/08/2014	Brijesh Tripathi	Theoretical and experimental studies of titanium dioxide based dye-sensitized solar cells	Dr. Manoj Kumar	Ph.D.
13/11/2013	Jatin Patel	Design Development and Investigations of solar powered two stage parabolic solar collector.	Dr.L.N.Patel	Ph.D.
03/03/2015	Jwngsar. Brahma	Geological and Geophysical Integrated Study	Dr. Anirbid Sircar	Ph.D.

		of Western and Central Tripura for Identification of Hydrocarbon Plays and Prospects		
16/02/2015	Anurag Kandya	Characterization of Urban Heat Islands over Megacity Delhi and Simulating its effect on Building Energy Consumption with Mitigation Strategies	Prof. Dr. Manju Mohan	Ph.D.
11/11/2014	Poonam Savasani	Investigation of advanced metaheuristic for the trajectory optimization of a robotic arm.	Prof. R. L. Jhala	Ph.D.

**38. Present details of departmental infrastructural facilities with regard to**

**a. Library**

- Number of Titles: 1818
- Number of Volumes: 9114
- International E-Journals: 274
- Database : 7
- National Journals: 50
- International Journals: 7
- International E-Journals : 274
- CDs : 350

**b. Internet facilities for staff and students**

- Internet bandwidth: 250 Mbps with 1:1 contention ratio
- Computers: 174

**c. Total number of class rooms :**

21

**d. Class rooms with ICT facility :**

21

**e. Students' laboratories :**

109

**f. Research laboratories :**

18

**39. List of doctoral, post-doctoral students and Research Associates****a) from the host institution/university :****b) from other institutions/universities :****Ph.D. Students List**

<b>Sr No.</b>	<b>Candidate Name</b>	<b>Name of the Department</b>
1.	Ms..Sunita Barot	Science
2.	Mr. Jignesh Gaurang	Electrical Engg
3.	Mr. Astikkumar Hishorchandra Dhandhia	Electrical Engg
4.	Mr. Harsh K.Brahmbhatt	Science
5.	Mr. Chandrakant	Science
6.	Mr. Heistrene Leena S.	Electrical Engg
7.	Mr. Nikhil J. Chotai	Mechanical Engg
8.	Mr Jaspalsinh B. Dabhi	Mechanical Engg
9.	Mr. Bhargav J. Gadhvi	Mechanical Engg
10.	Mr. Gaurang Joshi	Mechanical Engg
11.	Mr. Kush P. Mehta	Mechanical Engg
12.	Mr. Bhavesh K. Patel	Mechanical Engg
13.	Mr. Jaydeep Patel	Mechanical Engg
14.	Mr. Vipul D. Patel	Mechanical Engg
15.	Mr. Vivek V. Patel	Mechanical Engg
16.	Mr. Pritesh J. Prajapati	Mechanical Engg
17.	Mr. Harikrishnasinh G. Rana	Mechanical Engg
18.	Mr. Garlapati Nagababu Rangarao	Mechanical Engg
19.	Mr. Ghanshyam G. Tejani	Mechanical Engg
20.	Mr. Jay J. Vora	Mechanical Engg
21.	Mr. Maaz Kureshi	Science Department
22.	Mr. Maaz Nawab	Science Department
23.	Mr. Sukumar Mandal	Science Department
24.	Ms. Khusbu Patel	Science Department
25.	Mr. Mitesh Solanki	Science Department
26.	Mr. Nischal Joshi	Science Department
27.	Ms. Kangana Bhatt	Chemical Engg
28.	Mr. Himanshu Choksi	Chemical Engg.
29.	Ms. Anvita Sharma	Chemical Engg.
30.	Mr. Apurva H. Dave	Civil Engg
31.	Mr. Rajat C. Mishra	Civil Engg
32.	Ms. Anal A. Sheth	Civil Engg
33.	Mr. Apurva G. Sheth	Civil Engg
34.	Mr. Chavda ashok jivrajbhai	Electrical

35.	Mr. Prajapati nitinkumar rasiklal	Electrical
36.	Mr. Vyas kaustubh atulkumar	Electrical
37.	Mr. Bhatt naimish sanatkumar	Civil
38.	Mr. Jain akshay omprakash jain	Civil
39.	Mr. Manvinder singh	Civil
40.	Mr. Kumar abhishek ram pravesh	Chemical
41.	Mr. Saini bharti kalia	Chemical
42.	Mr. Balchandani sweta chetananand	Chemical
43.	Mr. Modi bhaumik rajeshkumar	Mechanical
44.	Mr. Motwani karan hiralal	Mechanical
45.	Mr. Patel vivek bhagvandas	Mechanical
46.	Mr. Patel dhiren ramanbhai	Mechanical
47.	Mr. Pandya jay kiritbhai	Mechanical
48.	Mr. Mohanty bibhabasu bijaya kumar mohanty	Science
49.	Mr. Dhake nirmalkumar krushnkant	Maths
50.	Mr. Satisha Venkatesh Prabhu	Mechanical
51.	Mr. Mustakim S. Bukhari	Mechanical
52.	Mr. Rakshith R. Shettigar	Science-Chem.
53.	Mr. Karamata Meera R.	Electrical
54.	Mr. Parmar Kanubhai Kalidas	Chem. Engg.
55.	Mr. Asha T. Achuthan	Chemistry
56.	Mr. Vikram Rathore	Physics
57.	Ms. Lokapavana H. M.	Civil
58.	Mr. S Rajesh	Mech.
59.	Mr. Oza Ankit Dilipkumar	Ind.
60.	Mr. G. Vaitheeswaran	Physics
61.	Mr. Balbir Singh	Mech.
62.	Mr. Abhimanyu kumar Yadav	Solar
63.	Ms. Pramila Mahala	Solar
64.	Mr. Cliff Kant	Solar
65.	Mr. Pankaj kumar Yadav	Solar
66.	Mr. Pandey Kavita Ashokkumar	Solar
67.	Mr. Anand singh	Solar
68.	Mr. Parth Bhatt	Solar
69.	Mr. Jani margi mukeshbhai	Solar
70.	Mr. Nisarg Shah	Solar
71.	Mr. Raval Dhyey D.	Solar

72.	Mr. Chavda Arvind Dhirajlal	Solar
73.	Mr. Dixit Sandeep	Solar
74.	Mr. Waldiya Manmohan Singh	Solar
75.	Chandni Shah	Solar
76.	Priyanka Marathey	Solar
77.	Chauhan Mihirsinh Kishorsinh	Solar
78.	Bhatt Vishwa Dharmendrakumar	Solar
79.	Leena Madhukarrao Borkar	Chemical
80.	Girish G. M.	Civil
81.	Shivam Kapoor	Civil
82.	Modi Raj Rakesh	Civil
83.	Gohel Jishnu Rajeshbhai	Civil
84.	Bhatt Srushti	Mechanical
85.	Prajapati Parth Preshkumar	Mechanical
86.	Gaurav Aggarwal	Mechanical
87.	Patel Jessica Suresh	Science
88.	Trivedi Maitrayee Umeshbhai	Science
89.	Thakkar Ridhhiben Yogeshkumar	Science
90.	Tejvani Sanjaykumar Vasudev	Science
91.	Shah Hiral Kamleshkumar	Physics
92.	Zeel Prafullchandra Purohit	Physics
93.	Patel Hiralben Pravinbhai	Environmental Science
94.	Trivedi Mumukshu Harisiddha	Mathematics
95.	Dave Devanshi Dilipkumar	Mathematics
96.	Shaikh Azharuddin Sarfuddin	Mathematics
97.	Mehta Parth Dinesh	Mathematics

**40. Number of post graduate students getting financial assistance from the university.**

Year	Number of M.Tech Students	Number of Ph.D. Students
2013	38	6
2014	39	8
2015	53	14

**41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.**

Yes, a systematic process is followed for designing and development of curriculum. The focus is on factoring in all those academic areas which would prepare our students for Industry, different walks of society and life. The curricula are developed and reviewed by

respective Boards of Studies under the direction of the various Faculties (Management/Engineering & Technology/Liberal Studies) who in turn work under the umbrella of PDPU Academic Council which is a blend of senior academia and industry/professional experts. The broad role of the **Academic Council** as clearly defined in the Act and the Statutes of PDPU as follows:

- Prescribes and sanctions the number of academic programmes in the University and their intake for each academic year.
- Approves curricula and syllabi for the courses and studies in various schools of the University
- Formulates the rules and regulations for academic matters including the structure of student evaluation, conduct of examination and ratification of results;
- Reviews and monitor the standards of instruction, education, training and research carried on or imparted in the University;
- Approves recognition and equivalence of the certificates, diplomas and degrees of other Universities and Institutions from where PDPU intakes it's students;
- The new programmes/curricula are formally approved by the Academic Council after detailed deliberations and the minutes of the meetings are duly recorded.

**42. Does the department obtain feedback from**

**a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?**

The concerned Boards based on the recommendations received from the Departmental/School Faculty Council, review the same and recommend to the respective Faculty. The Faculty in turn after due deliberation recommends the matter to PDPU Academic Council for deliberation and approval.

The constitution and functioning of respective academic bodies (that includes members from peer institutions, industry and profession) ensures that adequate need-assessment is undertaken with incorporation of necessary feedback towards course curriculum design and development.

**b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?**

The feedbacks provided by the students are shared with the faculties. Based on the feedback received the faculties try to bring changes in the teaching methodology.

Students are asked to give their feedback regarding the teachers' teaching techniques. The feedback is noted and conveyed to the faculty so that they can make improvements as required.

Third party feedback system by students for faculties is used through computer software. This feedback is shared by higher authorities with faculties to discuss positively and to provide suggestions for improvement if any.

**c. alumni and employers on the programmes offered and how does the department utilize the feedback?**

The feedback from the alumni, employers and industries are regularly invited and departments take them positively. Such suggestions are incorporated during Board of studies meeting for curriculum design.

**43. List the distinguished alumni of the department (maximum 10)**

Sr. No	Name of the Alumni	Programme of study at the Institute	Present designation of the Alumni
1	Mr Darshan Dave	Civil	GACL
2	Mr Rushang Dave	Civil	GACL
3	Mr. Nitin Jaswani	Electrical	GACL
4	Ms. Priyanka Sehgal	Electrical	GACL
5	Mr. Aditya Agarwal	Electrical	Relience
6	Mr. Darshan Yadav	Mechanical	GACL
7	Mr. Uttam Singh	Mechanical	GIFT City

**44. Give details of student enrichment programmes (special lectures / workshops /**

**seminar) involving external experts.**

<b>1 Academic Excellence Name of Activity *</b>	<b>Sponsoring agency</b>	<b>Year</b>	<b>No of Particip ants</b>	
Students Undergone Vocational Training at Reliance, L & T, AEC, Torrent Power	PDPU	(2013-14)	80	Hands on practical training in Field Enviornment
Students participated in Robotics Workshop	PDPU	(2013-14)	3	Hands on training
Students participated in Science day Celebrations organized by PPDU	PDPU	(2013-14)	3	students learned Presentation skills
Students participated in Scilab workshop organized by FOSSEE	PDPU	(2013-14)	30	Learnig SCILAB
Students participated in Nestle India Businees Plan competition organized by IIT Gandhinagar	PDPU	(2013-14)	5	Obtained First Rank
Students participated in All india National Engineering sports competition at SVNIT Surat	PDPU	(2013-14)	4	Overall development
Students participated in Poster Presentation Competiton organized by ESPA, PDPU	PDPU	(2013-14)	22	Overall development
Expert lecture on the Career Opportunities in Quality Management and Overview of the Bosch Production System by Dr. Himanshu Trivedi, General Manager – Quality Management and Methods, Bosch Rexroth and Mr. Ketan Dhruv, General Manager, Bosch Production	PDPU	2013	70	Students were exposed to how quality management systems work in industry and various career opportunities that are available.
Expert lecture on Current Developments in Industrial Engineering and MOST by Mr. Dinesh Deshmukh from the Pune Divisional Productivity Council.	PDPU	2013	70	Students were made aware of current trends in Industrial Engineering and applications in industry.
Workshop on Basics of Quality by Dr. Himanshu Trivedi, General Manager, Quality Management and Methods, Bosch Rexroth and Dr. Rajesh Jain, Sr. Associate Professor, Nirma University. This workshop was also attended by industry members as well as 30 students from Government Engineering College, Bhavnagar.	American Society for Quality (ASQ) and PDPU	2013-14	50	Students learnt about the basics of quality.

Workshop on Continual Improvement Techniques by Mr. Shrikant Mehta (ABB) and Mr. Chirag Rajyaguru (Bosch Rexroth).	American Society for Quality (ASQ) and PDPU	2013-14	50	Students learnt how to apply various continuous improvement tools to real problems.
One day Workshop On “Energy Savings using Solar Appliances” organized by Prof. Poonam Savsani of Industrial Engineering department jointly with Mechanical Engineering department.		2013-14		
Students of Industrial Engineering attended a seminar on Lean Manufacturing for Productivity Enhancement organized by the National Productivity Council (NPC). Twenty-four students from IE participated in the seminar.	National Productivity Council	2013-14	24	Students learnt how lean manufacturing techniques are applied in industry and current trends.
Industrial Visit at Meghmani Dye and Intermediate, Vatva, Ahmedabad	PDPU	2013-14	60	Practical learning, understanding of industry processes and environment to the students
Industrial Visit at GACL, Vadodara	PDPU	2013-14	60	Practical learning, understanding of industry processes and environment to the students
Industrial visit at IFFCO, Kalol, Ahmedabad	PDPU	2013-14	60	Practical learning, understanding of industry processes and environment to the students
Industrial visit at Excel Crop care, Bhavnagar	PDPU	2013-14	60	Practical learning, understanding of industry processes and environment to the students
Industrial visit at GSFC, Vadodara; 21-28 June 2013	PDPU	2013-14	60	Practical learning, understanding of industry processes and environment to the students
Industrial Visit to ABB Vadodara	PDPU	(2013-14)	60	Successfully Completed
Industrial Visit to Rtransformers & Rectifiers Limited	PDPU	(2013-14)	60	Successfully Completed

Industrial Visit to Gandhinagar Thermal Power Station, GSECL	PDPU	(2013-14)	60	Successfully Completed
Industrial Visit to Sardar Sarovar Project	PDPU	(2013-14)	60	Successfully Completed
Industrial Visit to GIPCL	PDPU	(2013-14)	60	Successfully Completed
Established student chapter of the American Society for Quality (ASQ)	ASQ and PDPU	2014	50	Implemented a certification scheme for Industrial Engineering students wherein ASQ will award certificates to students completing a course on Quality Management.
Students of Industrial Engineering were part of a team representing PDPU at BAJA 2013 organized by the Society of Automotive Engineers	PDPU	2014	60	Successfully Completed
Workshop on 'Introduction to Computational Fluid Dynamics and Application', 29-30 Apr 1024, PDPU campus	PDPU	2013-14	210	To enhance the computational skills
Symposium on 'Advancements in design and trends in chemical engineering', 11 Apr 14, PDPU Campus	Reliance, NEPL, GCA,	2013-14	200	Awareness about the latest development in the designs and trends
Prof. Krishna Kaushik ,University of Houston, Texas delivered expert lectures series talks on(1.“Over view of Petroleum Downstream including Refining and Operations”, 2.“Career Paths and Work Options in Downstream”, 3. “Modeling and Simulation of Chemical Processes including refinery Operations”, 4. “Downstream Products - Opportunities for Chemical	PDPU	2013-14	150	Awareness about the latest development in the designs and trends
Prof. S. P. Dabke , M S University, Baroda on 11.10.13, “Industrial application of Reaction Engineering & Chemical Engineering thermodynamics”, PDPU campus	PDPU	2013-14	90	Awareness about the latest development and trends

University of Manitoba, Canada and PDPU are working on organizing Summer Research Internship for undergraduate/graduate students.	PDPU	(2013-14)	7	Awareness about the latest development and trends
Edith Cowan University (ECU) and PDPU have signed a collaboration MOU in 2013 to facilitate student exchange/study abroad. In this regards PDPU invites expression of Interest from interested students for student exchange in which students does not have to pay any tuition fees and has only to undertake the living, insurance and travel cost. 2 students will be selected for this (1 from Engineering and 1 from Psychology).While studying as an exchange student for a semester starting June 2014, the selected student will take 4 courses at	PDPU	(2013-14)	4	Awareness about the latest development and trends
Mitacs Globalink is a unique program, as it offers International research internships for the top	PDPU	(2013-14)	3	Awareness about the latest development and trends
Students Undergone Vocational Training ( L & T, Mahindra Tractor, Seimens, NTPC,SAIL ...)	PDPU	(2013-14)	118	Hands on in Field Enviornment
Students Participated in BAJA-2014 (Organized by SAEINDIA)	PDPU	(2013-14)	19	Team Rank 72 (National Level)
Students Participated in Threed Days Automobile Workshop	PDPU	(2013-14)	28	Hands on Experience on Car Repair and Maintainance
Students Participated in Software Training Workshop - CREO 2.0 (Three days)	PDPU	(2013-14)	32	Learnig CREO 2.0
Students Participated a National Level Model Making Competation organized by GoG & PDPU	PDPU	(2013-14)	12	Secured First Rank in Dead Model Competation
The team of RACE to rein-in-cancer has conducted a workshop and was highly successful	PDPU	2014	34	Success

Workshop on 'Awareness on Biodiesel production and applications, 30 July 2013, PDPU campus	PDPU	2013-14	80	for generating awareness amongst the audience about biodiesel, various methods of production of biodiesel, different drawbacks of its production loss till date
Dr. Manoj K. Pandey, An approach towards green synthesis by designing novel synthetic methodologies using copper&Iron based catalyst for cross dehydrogenative coupling by CH activation	PDPU	2014	4	Student research project by ORSP;PDPU
Dr. Manoj K. Pandey, Synthesis and characterization of charge transporting materials for enhancement of energy harvesting and their applications in devices, Student research project by ORSP;PDPU	PDPU	2014	4	Student research project by ORSP; PDPU
Mega Science event on National Science Day on 28 <sup>th</sup> February-2012	PDPU	2012	262	Students of different schools, colleges and Universities from Ahmedabad and Gandhinagar, participated in various activities like Science project competition, Poster competition, Slogan writing competition and quiz competition etc
Basic Mechanical Workshop - Assembling a Robotic Car (CRETUS Robotic Club)	PDPU	2012	180	Students learned about robotic techniques
Expert Lectures by Mr. Bharat. I. Bhatt, Title of Talk: 'Process Calculations for Chemical Engineering'	PDPU	2012	180	Students learned about 'Process Calculations for Chemical Engineering'
Expert Lectures by Prof. M H Divekar Title of " Over View of Fluid Flow Operation"	PDPU	2012	180	Students learned about Fluid Flow Operation

Invited talk by Dr. Anil Kane (President, Indian Wind Energy Association and President Emeritus , World Wind Energy Association, on Title: 'Wind energy: Potential Renewable Resource and Current Trends'	PDPU	2012	180	Students learned about possibilities in Wind energy, Renewable Resource and Current Trends
Workshop on "Soft skills for Placement" by Mr. Sachin Bordavekar, and Mr. Sandeep Deepankar AGM, HR, L&T, Vadodara.	PDPU	2012	180	Students learned about requirements and implimentation of soft skills for placement
Expert talk on "Importance of Design and Analysis Solve Industry Problems" by Prof. S. B. Soni, Emeritus Professor, Mechanical Engineering Department, L. D. College of Engineering, Ahmedabad	PDPU	2012	120	Students learned about Importance of Design and Analysis Solve Industry Problems
"Auto Quiz" Organized by SAEINDIA PDPU Collegiate Club	PDPU	2012	70	Knowledge upgradation
Inauguration of "Indian Society for Technical Education (ISTE) Institute and Student Chapters" at Pandit Deendayal Petroleum University	PDPU	2012	70	Knowledge upgradation
Expert talk on "Harnessing Solar Power using PVCs and CSPs" by Dr. Indrajit Mukhopadhyay, School of Solar Engineering, Pandit Deendayal Petroleum University	PDPU	2012	120	Knowledge upgradation
Expert talk on "Vehicle Dynamics" by Prof. V Kumar, Vice Chairman and Head, Student Activity, SAEIWS	PDPU	2012	180	Knowledge upgradation

<b>School of Technology</b>		
<b>Sr.No.</b>	<b>Seminars, Workshops, Symposia</b>	<b>Month &amp; Year</b>
1	Prof. Shriram Paranjape participated as a panelist in 1st Symposium on "Framework for Indo-US Nuclear Education Cooperation". Held at IIT Mumbai	Oct-11
2	Organised three days workshop on "Upstream Petroleum Technology" at PDPU-Gandhinagar	Nov-10
3	Spreading the use of Free & Open Source Software, for example Linux & LaTeX" through 'Spoken Tutorials' in collaboration with IIT Bombay	Nov-11
4	Expert talk on "Vehicle Dynamics" by Prof. V Kumar, Vice Chairman and Head, Student Activity, SAEIWS	Mar-12
5	Inauguration of "Society of Automotive Engineers (SAE)" Collegiate Club at Pandit Deendayal Petroleum University	Mar-12
6	Expert talk on "Harnessing Solar Power using PVCs and CSPs" by Dr. Indrajit Mukhopadhyay, School of Solar Engineering, Pandit Deendayal Petroleum University	Sep-12
7	Inauguration of "Indian Society for Technical Education (ISTE) Institute and Student Chapters" at Pandit Deendayal Petroleum University	Sep-12
8	"Auto Quiz" Organized by SAEINDIA PDPU Collegiate Club	Sep-12
9	Expert talk on "Importance of Design and Analysis Solve Industry Problems" by Prof. S. B. Soni, Emeritus Professor, Mechanical Engineering Department, L. D. College of Engineering, Ahmedabad	Nov-12
10	Workshop on "Soft skills for Placement" by Mr. Sachin Bordavekar, and Mr. Sandeep Deepankar AGM, HR, L&T, Vadodara.	Dec-12
11	Faculty training on Modeling and Simulation software Siemens NX-8 (Unigraphics) for Five Days	Dec-12
12	Hydrological Data Management in Gujarat	Apr-12
13	Energy Efficient Building Designs: BIPV	Jul-12
14	AutoCAD – Innovations and Applications	Aug-12

15	Emerging Trends in Water Proofing	Nov-12
16	Introduction to SCILAB (conducted by FOSSEE team of IIT B)*	Feb-12
17	ESPA - Seminar, Paper and Poster Presentation on various topics of related to Energy and Electrical Engineering	Feb-12
18	Control System and Process Stability using SCILAB (conducted by FOSSEE team of IIT B)*	Mar-12
19	Introduction to graphical system design using LabVIEW	Apr-12
20	Linear algebra, data acquisition and computer based control using a graphical programming language - LabVIEW	Nov-12
21	Invited talk by Dr. Anil Kane (President, Indian Wind Energy Association and President Emeritus , World Wind Energy Association) Title: 'Wind energy: Potential Renewable Resource and Current Trends'	Feb-12
22	Organised a mega Science event on National Science Day on 28 <sup>th</sup> February-2012 in which about 262 students of different schools, colleges and Universities from Ahmedabad and Gandhinagar, participated in various activities like Science project competition, Poster competition, Slogan writing competition and quiz competition etc with grant success.	Feb-12
23	Linear Algebra, Data Acquisition & Computer Based Control Using LABView (IEEE)	Nov-12
24	Basic Mechanical Workshop - Assembling a Robotic Car (CRETUS Robotic Club)	Oct-12
25	Expert Lectures by Mr. Bharat. I. Bhatt, Title of Talk: 'Process Calculations for Chemical Engineering'	Sep-12
26	Expert Lectures by Prof. M H Divekar Title of " Over View of Fluid Flow Operation"	Nov-12
27	Arduino Workshop (IEEE)	Jan-13
28	Workshop on Robowars (CRETUS Robotic Club)	Jan-13
	Engineering Applications of Geoinformatics	Jan-13

	Workshop on “ Students Outcome- Bases Engineering Education for Enhanced Employability” under ISTE Institute Chapter for Faculty members of at Pandit Deendayal Petroleum University	Feb-13
	Expert lecture on “Motivating Engineering Students to achieve program outcomes for enhanced employability under ISTE student Chapter for B. Tech. First Year students of School of Technology, at Pandit Deendayal Petroleum University	Feb-13
	Line follower bot & mobile controlled bot using basic Arduino programming (EE Dept and CRETUS club in collaboration)	Feb-13
33	Tark - Workshop on Quality management	Feb-13
34	Paper and Poster presentation on “Advances in Automobile Engineering” by SAEINDIA PDPU Collegiate Club	Mar-13
35	Workshop on “Automobile and Engine Design” by Metawing Tech., organized by SAEINDIA PDPU Collegiate Club	Mar-13
36	Awareness on Biodiesel Production Techniques & Application	Jul-13
37	Awareness on Green Energy & Energy Conservation.- 2 Day Seminar	17,18- Sept -13
38	Model Building Competition	31st Oct-2013
39	Energy Savings through Effective Use of Green Building Material & Technology	30th Aug-2013
40	Process Dynamics, Control and Automation using LabVIEW	Aug-13
41	Emerging trends in concrete Waterproofing	Nov-13

## **45. List the teaching methods adopted by the faculty for different programmes.**

- Explanation in classroom with real life examples and case studies
- Showing course related videos in the classroom
- Project based learning
- Assignments
- Simulators for solving numerical examples.
- Supplementary Video lectures/Animations
- Field visits complimenting theory lectures
- Quizzes
- Language lab assignments
- Student Seminars
- Laboratory projects

## **46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored? by the faculty for different programmes.**

To assess the academic performance of students, a continuous evaluation system is followed. At the end of each semester, each student is awarded a letter grade in each of his courses by the concerned instructor, based on his performance in mid-semester examination, end-semester examination, quizzes, tests, assignments, tutorials, laboratory work, seminars, projects, etc, and also on regularity of attendance in classes. The assessment in a laboratory course is based on turn-to-turn supervision of the student's work, performance in viva voce examinations, and group discussions, the quality of work as prescribed through laboratory journals and an end-semester test that contains an experiment and/ or a written examination.

## **47. Highlight the participation of students and faculty in extension activities.**

### Student participation in extension activities.:

Students of SoT have been participating in Workshops, Industrial Visits and Training programs. For details please refer to Table in Page 215.

### Faculty participation in extension activities.:

#### Department of Chemical Engineering

#### **Dr. Pravin Kodgire:**

- International conference on chemical Industries', ( a part of pre vibrant 2015 event in association with GOG and GCA.)
  - Organized a one day workshop "Computational Fluid Dynamics: Fundamentals and Engineering Applications", 29-30th March, 2014.
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- Organized a National symposium ‘Advancements and Design trends in Chemical Engineering’, 11th April, 2014.
  - One day seminar “piping and pipeline engineering: fundamentals and applications”, On the pdpu Campus, Gandhinagar, Seminar 1<sup>st</sup> August 2014.
  - Expert talk on “Cleaner Production – A Pollution Prevention Strategy” to save Environment in association with Gujarat Cleaner Production Centre, Gandhinagar, 12<sup>th</sup> Sept 2014.

**Dr. S K Dash:**

- International conference on chemical Industries’, ( a part of pre vibrant 2015 event in association with GOG and GCA.).
- Organized a National symposium ‘Advancements and Design trends in Chemical Engineering’ on 11th April, 2014.

**Mr. Himanshu Choksi:**

- International conference on chemical Industries’, ( a part of pre vibrant 2015 event in association with GOG and GCA.).
- Organized a one day seminar on “Awareness on Biodiesel Production and Applications” at School Of Technology, PDPU, (30th July 2013).

**Ms. Anvita Sharma:**

- Organized a one day seminar on “Awareness on Biodiesel Production and Applications” at School Of Technology, PDPU on 30<sup>th</sup> July 2013.
- Organized a National symposium ‘Advancements and Design trends in Chemical Engineering’ on 11th April, 2014.

**Mr. Abhishek Kumar:**

- Organized a National symposium ‘Advancements and Design trends in Chemical Engineering’ on 11th April, 2014.

**Ms. Sweta Balchandani:**

- Organized a National symposium ‘Advancements and Design trends in Chemical Engineering’ on 11th April, 2014.

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### **Department of Civil Engineering:**

#### **Dr. Debasis Sarkar:**

- Dr. Debasis Sarkar Delivered "Guest Lecture" on "Project Risk Management: A Case Study of Delhi Metro" in MDP Programme on "Project Risk Uncertainty & Complexity" on April 6-9th, 2015 at IIM Ahmedabad.

### **Department of Electrical Engineering:**

#### **Dr. Vivek Pandya:**

- Delivered expert talk on "Power System-Back To Basics" at Shankersingh Vaghela Babu Institute of Technology, Vasan, Gandhinagar on 25/11/2014.
- Delivered expert talk on "How to do Research?: Tips, Tricks & Techniques" at Marwadi Education Foundation's Group of Institutions Rajkot on 8/8/2014.
- Delivered expert talk on "Protection Aspects of Series Compensated Transmission Lines" at Nirma University, Ahmedabad on 04/7/2014.

#### **Dr. Jitendra Jamnani:**

- Delivered expert lecture on "Reactive power compensation and voltage control in power systems" at Institute of Technology, Nirma University Ahmedabad on 13/3/2015
- Delivered Expert lecture on "Energy Efficient Induction Motors" during STTP on "Advancements in Operation, Control, Testing and Protection of Electrical Systems" at MEFGI, Rajkot on 6/8/2014.
- Delivered Expert talk on "High Performance Energy Efficient Induction Motor" during STTP on "*Trends and Innovations in Electrical Power Engineering*" held at Institute of Technology, Nirma University, Ahmedabad on 10/7/2014.
- Delivered Expert lecture on "Voltage control, compensation and surge impedance loading of EHV AC transmission lines" at Institute of Technology, Nirma University, Ahmedabad on 1/7/2013.

#### **Dr Pratik Shah:**

- Expert Lecture at Chandubhai S Patel Institute of Technology, Changa on "Digital Image Processing and its Applications on 2/9/2013.
- Invited as Chair at National Conference on Emerging Trends in Engineering, Technology and Management – 2015 for the Electronic and Communication Track at Indus Institute of Technology & Engineering, Indus University on 30/1/2015.

#### **Mr. Anilkumar Markana**

- Delivered expert talk on "Control System in a LABVIEW," in the STTP LabView and its applications to an Engineering Systems at LDRP Institute of Technology & Research, Gandhinagar

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## **Department of Industrial Engineering:**

### **Dr.M.B.Kiran:**

- Conducted PMP training program for practicing Engineers of Infosys at Bangalore (2011).
- Delivered a talk on “ Project Risk management “ at International Conference on Convergence of Science and Engineering in Education and Research –A Global perspective in the new millennium-ICSE 2010, DCSE, Bangalore.

### **Dr.Abhishek Kumar:**

- Organized Industrial Visit : Electrotherm,India Ltd on 28th and 30th June 2014.
- Organized Industrial Visit : Ferromatik Milacron India Pvt. Ltd. on 5th July, 2014.
- Organized Industrial Visit : Hindustan Coca-Cola beverages Pvt. Ltd. 28th April, 2015
- Organized Industrial Visit : KHS Machinery, 2nd July, 2015

### **Dr.D.M.Parikh:**

#### ***International Training Program***

- International Training Program on “SME Banking & Financial Services” during 2nd September – 2nd October 2013 at EDI funded by Ministry of External Affairs GOI.
- International Training Program on “Industrial & Infrastructure Project Preparation & Appraisal” during 03rd March –11thApril 2014 at EDI funded by Ministry of External Affairs GOI.
- In house Credit Appraisal training for credit officers of Bhutan Development Bank, at Bhutan during 28th July – 13th August 2014

#### ***National Training Programs***

- “Credit Risk Assessment based Project Appraisal & Entrepreneur Assessment” during 22nd – 27rd October 2007 at EDI, Ahmedabad.
- “Credit Risk Assessment based Project Appraisal & Entrepreneur Assessment” during 20th to 25th October 2008 at EDI, Ahmedabad.
- “Credit Risk Assessment based Project Appraisal & Entrepreneur Assessment” during 25th – 30th October 2010 at EDI; Ahmedabad.
- “Credit Creation, Credit Analysis, Credit Delivery and Entrepreneur Assessment” during 30th December 2013 – 4th January 2014 at EDI, Ahmedabad.
- Project Appraisal, Monitoring & Follow-Up during 20th– 24thNovember 2012 for NEDFi; Guwahati.
- Team Member of Post graduate program in Corporate Entrepreneurship & Management (PGCEM) for “officers of Zydus group during 2008 at EDI, Ahmedabad.

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## **Department of Mechanical Engineering**

### **Prof. Surendra Singh Kachhwaha:**

- Delivered an invited talk on “Modeling and Analysis of Thermal Systems” at STTP on “Modeling and analysis of Mechanical Systems” Mechanical Engineering Department, Marwadi Education Foundation, Rajkot (Dec. 23, 2014).

### **Dr. Anurag Mudgal:**

- A workshop was conducted at Gujarat Technological University (GTU) campus, Chandkheda on 18-04-2015. About 40 students of M Tech and PhD programme attended the workshop. The topic of the workshop was “Design of heat exchanger and Heat transfer aspects in multiple effect distillation (MED) for water purification”.

### **Dr Vishvesh J Badheka:**

- Advances in welding’ expert talk delivered on 22nd April 14, at SPB.Patel Engineering College, for PG students.
- ‘Open Ended problem in Material Science & Metallurgy- DBTT, Fatigue, Hardness’ were presented at Gujarat Power Engineering Research Institute, GPERI, on 8th Aug 2014 for UG students of mechanical engineering.
- ‘Fundamentals of Welding Processes’ were presented at C S Patel, Institute of Technology- Changa, on 9th Aug 2014 for UG students of mechanical engineering.
- Presented Invited talk on “Metallurgical Factors Affecting Corrosion in Petroleum and Chemical Industries” at International conference on chemical industries (ICCI), 22-23 Aug 2014, PDPU
- Delivered expert lectures on ‘GMAW-FCAW- Resistance welding- Wear & Surfacing’ under International Welding Engineer (IWE) course leading to Diploma, conducted by The Indian Institute of Welding (IIW), Baroda Branch on 11th Nov 14.
- ‘Advances in activated flux processes’ at National Welding Seminar held between 21st to 23rd Jan 2015 at Jamshedpur
- ‘Welding Metallurgy’ for PG students and faculty member of Mechanical Engineering Dept, Shankersinh Vaghela Bapu Institute of Technology, 30th Jan 2014
- ‘Basics Welding Processes’ for UG students and faculty member of Mechanical Engineering Dept, Shankersinh Vaghela Bapu Institute of Technology, 20th Feb 2014.
- ‘Advanced Welding Processes’ for UG students and faculty member of Production Engineering Dept, Birla Visvakarma Mahavidyalaya, Vallab Vidyanagar, 14th Feb 2014
- ‘Advanced Welding Technology’ for PG students and faculty member of Mechanical Engineering Dept, A.D.Patel Institute of Technology, Vallab Vidyanagar 14th Feb 2014
- ‘Advanced Welding Processes- FSW, MCAW, ATIG’ for UG students and faculty member of Mechanical Engineering Dept, Nirma University, Ahmedbad, 27th Feb 2014

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**Dr. Vimal Savsani:**

- Delivered Expert talk on “Teaching Learning Based Optimization” March 27 -28 2015, organized by Department of Mathematics and computer science, PDPU, Gandhinagar.
- Delivered Expert talk on “ Advanced optimization techniques and its applications to mechanical engineering” in 4 Day Short Term Course on “Optimization Methods and Applications”, December 16 - 19, 2014, organized by Indian Institute of Technology, Delhi (IITD), under TEQIP-II.
- Delivered Expert talk on “Optimization using MATLAB” in a three day Short term training program on "Modelling and analysis of Mechanical systems" during December 22 to 24, 2014, organized by Marwadi Education Foundation, Rajkot.
- Delivered Expert talk on “Optimization techniques” in a two day seminar on “Research Methodology” during 16th and 17th January 2015 under the Centre for Advanced Research Studies, Ganpat University.
- Delivered Expert lecture on “Gears and gear trains” organized by Gujarat Power Engineering & Research Institute, Mehsana, 19th September 2014.
- Delivered Expert lecture on “Offshore wind energy-an overview” in a one day workshop on “Sustainable Development: Innovations in Energy Sectors”, on 20th August 2014, at Gujarat Technological University (GTU), Gujarat.
- Delivered Expert sessions on “Advanced optimization techniques using Matlab” in a Short term training program on "Modeling and Optimization Techniques for Engineering Applications (MOTEA), S.V. National Institute of Technology (SVNIT), Surat, from 19-23 May 2014.

**Dr. Jatin Patel:**

- Concentrated Solar Thermal Technology, Short Term Training Program on Energy Conservation, 16th – 21st August-2010, LDRP Institute of Technology and Research, Gandhinagar, Gujarat
- A Role of Laboratory in Engineering Education, Shankersinh Vaghela Bapu Institute of Technology, Vasan, Dist. Gandhinagar, Gujarat, 31st August, 2013
- Concentrated Solar Thermal Power Plant, A Two Day Seminar on Awareness on Green Energy & Energy Conservation, Pandit Deendayal Petroleum University, Gandhinagar during 17 -18 September 2013
- Solar Terminology and Solar Collectors, Shankersinh Vaghela Bapu Institute of Technology, Vasan, Dist. Gandhinagar, Gujarat, 7th February, 2014
- Computer Aided Thermal System Analysis (Using Engineering Equation Solver-EES), Two Days Hands-on Experience on Latex tool and EES, Shankersinh Vaghela Bapu Institute of Technology, Vasan, Dist. Gandhinagar, Gujarat
- Solar Thermal Heat Generation, Regional seminar at L. D. R. P. Institute of Technology and Research, Gandhinagar., 14th march, 2015

**Mr. Bhargav Gadhvi:**

- Expert lecture on "Forced Vibrations and Appliations"; at Shankarsinh Vaghela Bapu Institute of Technology, Gandhinagar, on 20/03/2015.

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**48. Give details of “beyond syllabus scholarly activities” of the department.**

1. SOT has various clubs and a Guest Lecture Committee that together ensure learning beyond the scope of syllabus. The clubs operate as student led initiatives supported by respective subject faculty to organize weekly discussions, debates presentations and other exercises purposefully selecting topics and subjects beyond the syllabus. Moreover organizing sector/functional area specific annual roundtables/conclaves provide for a number of industry professionals to interact with the students and faculty on contemporary professional, industrial and academic issues. Students are encouraged to prepare and submit research papers and projects at National and International seminars and conferences.
2. Added courses relating to renewable energies Project Management Certification Course.
3. For PG additionally Research Training and Methods are introduced to motivate students towards research and its applications.
4. Research groups are identified and members of the groups are encouraged to continue research in their area by funding by PDPU along with students ---to submit proposals for different funding agencies. Several training programs for the students are arranged by each department to add value to their degree like
5. Computer –Aided Design Courses (Civil and Mech. Engg. Dept.)
6. Lab View Courses (Electrical Engg. Dept)

**49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.**

School of Technology has helped PDPU in bagging Prestigious ISO and SIRO awards. School of Technology is instrumental in getting Pandit Deendayal Petroleum University (PDPU) approved by the Government of India, Ministry of Finance, Department of Revenue (Central Board of Direct Taxes) for claiming exemption under section 35(1)(ii) of Income Tax Act on the donations/ grants received for scientific research activities done by its faculty members and students.

**50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.**

Throughout the year, the institute organizes many advanced workshops, seminars and conclaves for advance learners.

The advanced learners are encouraged to participate in inter university competitions and the faculty advisors cater to their needs for additional counselling and help. These students also get identified as capable at handling challenging projects. These students are encouraged to write and publish/present this work and university has always supported them in attending the seminars at both National and International level. Such students are offered opportunities for ‘Exchange Programmes’ with international institutions with which the University has a MoU. The students are also provided opportunities to interact with industry stalwarts during their visit to the University and some of them get an opportunity for an internship or placement with the organization.

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The university offers International Exposure Programs and also International students exchange programs through which the advanced learners are given the opportunity to interact with faculty and students of other International Institutes of repute and thus can enrich their knowledge in global context.

This is also done at department level through inviting experts of various subjects as member of board of studies, at institute level through BOS of FOET and through academic council at university level.

The advanced students are encouraged for participation in competitive examinations and events, model making, extra project works, participation in research works of the department. Such students are also involved in the event management activities to bring out their talents.

#### **51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.**

##### **Strengths**

1. Recognition from accreditation organizations (viz. ISO, SIRO,..)
2. Providing Value Based Education for students
3. Experienced and Qualified Faculty Members.
4. Excellent Infrastructure-including Laboratory Equipments
5. Excellent industry-institute interaction through execution of projects

##### **Weaknesses**

1. Instability of the faculty because of the more opportunities
2. Faculty quarters are not available in the Campus because of which Faculty is unable to pursue Research Activity after the working hours.
3. To Recruit Academicians with Doctorate degree from reputed institutions is taking more time.
4. Limited Advanced Research Laboratories
5. Limited number of faculties have industrial experience.

##### **Opportunities**

1. Placed in well connected Geographical Location
2. Collaboration with reputed National and International Organizations
3. Many on-going Research projects
4. Many faculties have memberships in international professional societies.
5. Encouraging student research projects.

##### **Challenges**

1. To attract and retain experienced faculty members
2. To get 100% placement
3. To make every student Industry ready engineer
4. Strive hard to enrich the school -SOT.
5. Rapid challenges in the area of technology require faculty members constantly upgrade their skills.

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## 52. Future plans of the department.

14. Accreditation for all programs (UG and PG) by concerned bodies (viz. NAAC, NBA)

15. Government of India, Ministry of Science and Technology, Department of Scientific and Industrial Research has accord recognition to Pandit Deendayal Petroleum University (PDU), Gandhinagar as Scientific and Industrial Research Organization (SIRO). The University is in the process of Development of faculty group for excellence in the upcoming areas.

16. Accreditation for laboratories of school by agency like NABL

The school is already on the way of exploring the possibilities of consultancy and research. In lining with it authenticated third party assessment of labs and equipments like National Accreditation Board for Testing and Calibration Laboratories (NABL) is proposed. Narmada development Department, Government of Gujarat and Public work Department Engineers team have visited our laboratories to empanel for material consulting purposes.

Substantial research work is being done by faculty groups in the area of clean energy, project management, risk analysis and solar energy specialization. The long term planning has been initiated to occupy empty space in the field of applied research in few selected and burning issues like Energy & infrastructure, Climate change & Environment and Automobile & Automotives. Two research groups are taking shape to deal with bio-diesel possibilities and Cooling and desalination using low grade thermal energy.

17. Up gradation of library and information centre in line with our research and academic requirement

It is very much obvious that without hurdle free access of literature and latest updations through standard and peer reviewed journals, research can't keep going. The school will enhance its library and information centre to fulfil the prerequisite requirement of free flow of latest information and research going around the world. Our library is already equipped with 9114 volumes of 1881 titles of books, 57 journals and 274 international E Journals. We are also in the process of procuring software regarding lecture capture and learning.

18. Development of Centre for patent submission and simulating growth of research publication

One research group is already engaged in developing new welding techniques and has filed for two patents too. The school is planning to make a time bound strategy to achieve target of filing patents and research publications. An independent centre will be proposed to take care for this activity. The school may propose few more channels like ORSP that

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may offer some financial back up for the projects and ideas of students that are really worth. This will create a healthy competition among students.

**19. Student strength and faculty strength enhancement**

In accordance with over all development in the field of academics and research it will be ensured that the school will gradually strengthen number of students as well as faculties in the years to come. At present the school is running 5 UG and 5 PG courses that take about 1800 students. This figure will be increased to 4000 with PhDs facility in all the courses. As on the date SOT is having 102 faculties.

**20. New programs and consistent curriculum in line with technology development**

To support the previous point few new programs and different module courses will be proposed time to time as per the applicability and demand of the time and society. The following programs are in the pipeline.

- Chemical Engineering (PG Program)
- Computer Science (UG Program)

**21. Portfolios development for each student and faculty**

The University has already developed campus management system (CMS) through which attendance of students and faculty/ staff and students results etc are being monitored. Further it provides hassle free way of communicating and approaching interdepartmental and intradepartmental activities and thought process. Institute Research information management system (RIMS) provides opportunities lying in the research area and update faculty and students. It will further be expanded by developing portfolios of each of the faculty and student. There will be a separate webpage devoted to specific faculty and student that will be having all the academic/ professional information about him.

**22. Switching over to international curricula and bonding flexible basket of courses in each program**

This will be ensured in due course that our students will set at par with the best education system of Engineering in the world. This will be done by providing them a basket of courses as per global scenario. The advisory committee for different subjects will intervene and set the best fit and applicable syllabus that is acceptable worldwide in the industries. Further freedom of selecting the subjects of taste will also be diversified and extended to the students.

**23. Development of teaching material and teaching learning process through student centric and FDP module**

The school will explore few more and relevant teaching learning processes to make engineering education more practical at the level of understanding and applicability. The already existing mode of classroom centric teaching will further be expanded to student centric teaching learning and distance learning mode.

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The already existing student and faculty exchange program will be strengthened and such possibilities with few other, renowned foreign universities will be explored more rigorously.

**24. Placement process of students**

The school is very much concerned with final outcome i.e placement of its students. To achieve this, practical and hand on experience is a must for the students to learn. Further many students may be motivated to take up live industrial projects and being associated with many available power and energy sector industries, as we, being an enterprise, are in the best position for it. Further students may be asked to undergo summer trainings as Civic & Social Service Internship (CSSI), industry orientation, and Industrial training, to provide them a better understanding and challenges of Indian society and industry as career options.



## PANDIT DEENDAYAL PETROLEUM UNIVERSITY

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Established by the Gujarat Legislature Act No.14 of 2007

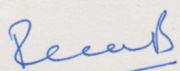
Recognized by the University Grants Commission, New Delhi u/s 2(f) of the UGC Act, 1956

### Declaration

I certify that the data included in this Self-Study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this SSR during the peer team visit.

  
Director General

Place: Gandhinagar

Date: 16<sup>th</sup> September 2015