

Program

Day-1: 1st May, 2017

Theme: Overview of Computational Methods for Interdisciplinary Research

08:30 AM-09:30 AM	Registration
09:30 AM-10:30 AM	Inauguration , Introduction and Course overview
10:30 AM-11:00 AM	High Tea
11:00 AM-12:30 PM	Inaugural Address: Role of Computational Methods in Interdisciplinary Research
12:30 PM - 2:00 PM	Lunch
02:00 PM – 5:00 PM	Hands on Session: Installation of UBUNTU and ABINIT/QE

Day-2: 2nd May, 2017

Theme: LATEX for Technical Writing

10:00 AM-11:00 AM	Introduction to Open Source Software
11:00 AM-12:00 PM	Introduction to LATEX
12:00 PM-1:30 PM	Lunch
1:30 PM- 5:30 PM	Hands on Session: LATEX

Day-3: 3rd May, 2017

Theme: Computation in Atmospheric Physics

10:00 AM-11:00 AM	Importance of Atmospheric Science and Climate modeling
11:00 AM-12:00 PM	Computational Techniques in Atmospheric Sciences
12:00 PM-1:30 PM	Lunch
1:30 PM- 5:30 PM	Hands on Session: Environment/Physics/Chemistry

Day-4: 4th May, 2017

Theme: Density Functional Theory in Material Science

10:00 AM-11:00 AM	Introduction to DFT
11:00 AM-12:00 PM	Role of DFT in computational material science
12:00 PM-1:30 PM	Lunch
1:30 PM- 5:30 PM	Hands on Session: Environment/Physics/Chemistry

Day-5: 5th May 2017

Theme: Computational Chemistry/Bioinformatics

10:00 AM-11:00 AM	Role of Computational Method in chemistry
11:00 AM-12:00 PM	Computational Biology
12:00 PM-1:30 PM	Lunch
1:30 PM- 5:30 PM	Hands on Session: Material Science /Chemistry /Bioinformatics
05:30 PM-06:30 PM	Valedictory and certificate distribution

Organising Committee:

Patron:

- Prof. H.B. Raghavendra (Director, SoT, PDPU)

Coordinator:

- Dr. Satyam Shinde
- Dr. Rohit Srivastava

Committee members:

- Prof. Nirendra Misra (HoD, Dept. of Science)
- Dr. Bharat Parekh
- Dr. Brijesh Tripathi
- Dr. Manoj Kumar
- Dr. Balamurali Mayya
- Dr. Rajib Bandyopadhyay
- Dr. Manoj Pandey
- Dr. Anirban Das

Contact:

Dr. Satyam Shinde/Dr. Rohit Srivastava
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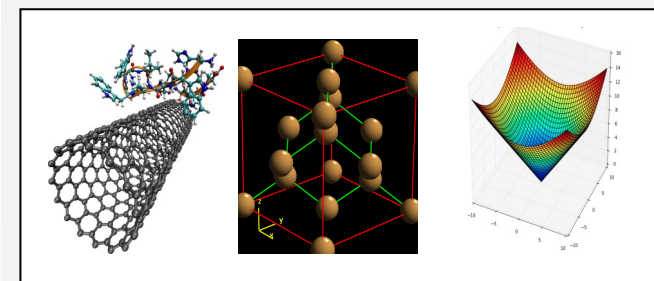
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SHORT TERM TRAINING PROGRAMME

COMPUTATIONAL METHODS FOR INTERDISCIPLINARY RESEARCH

(PHYSICS/CHEMISTRY/ENVIRONMENT)

1st May – 5th May, 2017



Organized by

Department of Science

School of Technology

Pandit Deendayal Petroleum University

Raisan, Gandhinagar, Gujarat-382007

About the University

Pandit Deendayal Petroleum University (UGC recognized) has been established by the Gujarat State Legislative Act in 2007. The University offers programs to address the need for trained human resources in the domains of Science, Technology, Management and Humanities. It intends to broaden the opportunities for students and professionals to develop core subject knowledge which are duly complemented by leadership training interventions, thereby helping the students to make a mark in the global arena. This objective is being further addressed through a number of specialized and well-planned undergraduate, post-graduate and doctoral programs as well as intensive research projects. In addition to this, PDPU offers multiple courses ranging from engineering, arts and management along with maximum exposure and opportunities to its students through various National and International exchange program with a number of acclaimed University worldwide.

About the Science Department

Department of Science as a part of School of Technology since 2011, is actively engaged in research and teaching in the frontier areas of Chemistry and Physics. The department offers Ph.D. program and B.Sc. (Hons.) in Chemistry & Physics. Department organizes training programs periodically, for skill development of students/research scholars for Chemicals and Pharmaceutical industries. The Department of Science has well equipped laboratories with advanced analytical and computational facilities.

Objective of the workshop

Computational methods and techniques are at the heart of modern materials research and development. Firstly, powerful, predictive theoretical and computational methods are used to facilitate the discovery and design of materials with new functionalities and desired properties. Secondly, computational methods have a major role in the design and optimization of routes for materials synthesis, processing and preparation, ranging from chemical reactions for growth to long-term annealing and recovery routes of materials. The third role for computational research is in the analysis and interpretation of

experimental characterizations, often based on sophisticated probes. With the objective providing necessary fundamental concepts, tools and crucial hands on training on various computational packages, a course on “**Computational Methods for Interdisciplinary research**” has been designed to be held at PDPU from **1st May–5th May 2017**. The course is for **Under-Graduates / PG students/ Research scholars/ faculties**. The course would have theory, practical and interactive sessions. Blend of acquired knowledge and hands-on experience of relevant equipment would surely help participants to carry and promote their interdisciplinary research.

Areas to be covered:

- Introduction to various computational Methods
- Open Source Software Packages
- DFT bases computational Studies
- Computational Methods in Environmental issues
- Computational Chemistry
- Bioinformatics

Who can participate?

Research Scholars/M. Sc./M. Tech/B. Sc./B. Tech. students/ Faculties can apply for the programme.

Duration : 5 days

Course fee : Rs. 2000/- for faculties & others
Rs. 1000/- for students

Venue : School of Technology, PDPU,

Last date for Registration: 25th April, 2017

Note: The participants are required to bring their own laptop and a pen drive (minimum 8 GB). Pen drive will be used for Ubuntu live installation.

Accommodation: Accommodation will be provided on chargeable basis on advance request by the participants.

Registration form

1. Name: _____
2. Gender: _____
3. Qualification: _____
4. Designation & Affiliation: _____
5. Address: _____
6. Email: _____
7. Mobile: _____

Last date of Registration: 25th April, 2017

Register online: <https://goo.gl/forms/smtEqwLVgCijNuGK2>

I enclose a demand draft of _____ Rs. Drawn in favour of “ Pandit Deendayal Petroleum University”, Payable at Gandhinagar, Gujarat- 382 007 or deposited Rs. _____ through NEFT (State Bank of India, IFSC: SBIN0014937, A/C Name: Pandit Deendayal Petroleum University, A/C No.: 31803338764).

Transaction ID/DD No.:

Name of the Bank & Branch: _____

Dated: _____