

VOL. 2. NO. 1

ISSN 2456-6705

UGC APPROVED JOURNAL: NO. 63922

PDPU JOURNAL OF **ENERGY AND MANAGEMENT**

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AN EXPERIENCE SHARING**

Sachinkumar N. Bhagat

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VECTOR MACHINE**

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COMPRESSED NATURAL GAS: FUELS FOR FUTURE**

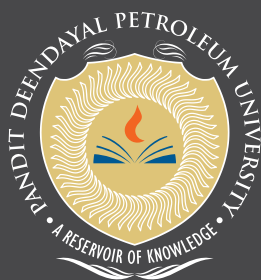
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SIMULATION ON MPPT BASED SOLAR PV STANDALONE SYSTEM

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**LONG TERM SUSTAINABILITY OF NUCLEAR POWER IN INDIA -
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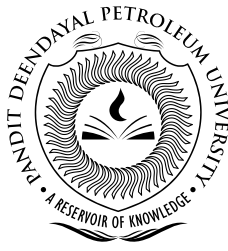
Vipin Shukla, Vivek J. Pandya and C. Ganguly



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PANDIT DEENDAYAL PETROLEUM UNIVERSITY

Gandhinagar, Gujarat, India



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UGC APPROVED JOURNAL: NO. 63922

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EDITORIAL

We are happy to present the third issue of *PDPJ Journal of Energy and Management* with five search papers on different aspects of energy and management. We are happy to update the contributors to the journal as well as the readers of the journal that JEM has completed the formalities for RNI and ISSN registrations. The journal has also been listed by the University Grants Commission (UGC) as an approved Journal.

A Brief of the Five Papers:

Disasters, natural as well as man-made, have become part of human existence. As disasters have a propensity to strike without much forewarnings and leave a trail of misery, they have to be managed effectively with preparations in advance to face them when struck in order to reduce their impact. They also have to be managed immediately after the disaster strikes.

Capt. (Dr.) Sachinkumar N. Bhagat's paper "Community-Based Disaster Management Strategy in India discusses community based approaches to disaster management in all its phases: prevention, mitigation, preparedness, response, and finally recovery. The paper is based on the actual practical experience of working in different aspects of disaster management and would be a very useful toolkit for community leaders, NGOs and others involved in managing disasters.

Maintaining power system security in all possible operating conditions, including contingencies, has become a matter of paramount importance especially in conditions of continuously increasing load demands. Traditional method of static security assessment using load flow involves long and tedious computations. The second paper by Astik Dhandhia, Vivek Panda, and Siddharth Joshi, discusses an alternative Support Vector Machine based Binary classifier for static security assessment of power system.

The third paper "Simulation on MPPT based Solar PV Standalone System" by Siddharth Joshi, Vivek Pandya and Astik Dhandhia reports the results of simulations performed in PSIM (R) 9.3.4 software for PV Module with Maximum power point tracking control system in standalone mode.

Increasing demand for fuels in the world has resulted in use of natural gas in its original form and also as mixture of several gases such as Hydrogen Compressed Natural Gas and Liquefied Compressed Natural Gas and other different variants. The paper by Kirti Yadav and Anirbid Sircar discusses about two technologies, one in which the compressed natural gas is blended with the various proportions of hydrogen, and two, where Liquefied Natural Gas is compressed to about 200 bar pressure to produce Liquefied Compressed Natural Gas.

Long run Sustainability of Nuclear Power is the subject matter of the paper by Vipin Shukla, Vivek Pandya and C. Ganguly. Nuclear power has been emerging as a viable carbon-free option to meet the base load requirements in India. As a matter of fact India is planning to have an installed capacity of about 45,000 MWe of nuclear power by 2030. The paper discusses the on-going and the expanding nuclear power programme in India highlighting the challenges of availability of uranium and plutonium for manufacturing nuclear fuels.

We at the editorial office are very happy to present the latest issue of our journal with incisive studies on the various aspects of energy. We would be happy to hear from you. In future, we also plan to incorporate an Idea Exchange section in the Journal.

- C. Gopalkrishnan

PDPU Journal of Energy and Management (JEM) is an International referred peer-reviewed journal. PDPU Journal of Energy and Management welcomes original papers from both academicians and practitioners on experimental energy science and technology (conventional and non-conventional), energy sector related management, business, and organizational issues related to energy and research. Papers, based on theoretical or empirical research or experience, should illustrate the practical applicability and/or policy implications of work described.

The bi-annual journal carries many features including perspectives, conceptual research, empirical research, colloquium, management case, and book reviews. Authors are invited to submit their contribution under any feature.

AIM AND SCOPE

The proposed research journal shall report and focus on identifying new opportunities, challenges, best practices and strategies for global economy on various complementing issues like business & techno-managerial Issues, regulatory & policy matters, marketing issues, financial & accounting issues, operational excellence & management, social & human resource management and capacity building in general and energy sector in specific.

PDPU JEM is a peer reviewed journal and follows a 'double blind' review process. All the papers submitted to PDPU JEM go through a preliminary review at the editorial desk and those considered appropriate are sent to an Editor representing a specialized domain. On recommendation of the concerned Editor, the Article may be rejected or assigned to two reviewers.

PUBLICATION INFORMATION

PDPU JEM shall be published biannually. All editorial correspondence should be addressed to the Chief Editor, C. Gopalkrishnan, School of Petroleum Management, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat - 382007 or sent by mail to *jem.pdpu@pdpu.ac.in*.

The views expressed in the Articles are those of the respective authors. Neither PDPU JEM nor Pandit Deendayal Petroleum University, Gandhinagar, Gujarat can accept any responsibility for any inadvertent omissions.

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