



INTERNATIONAL CONFERENCE

ON

ISSUES AND CHALLENGES IN

ENERGY CONVERSION & MANAGEMENT

(DECEMBER 18-20, 2009)



Organised by:

Department of Mechanical Engineering

Institute of Technology

Banaras Hindu University

VARANASI - 221 005 U.P. INDIA

website: www.itbhu.ac.in/icem2009



About the conference

Increasing energy demand, global climate scenario, and constrained energy supplies are likely to impact quality of life in the future. Without improved energy conversion system, we will not be able to sustain with the current trend of development. The recent climate debate has put a



severe constraint on our energy resources. Thus, the generation of energy from eco-friendly sources and its management should certainly get highest priority.

The economic health of any country is almost in commensuration of per capita energy consumption in that country. A secure, adequate, affordable, environment-friendly and reliable supply of energy is thus a necessary precondition for sustainable development.

With the traditional sources of energy being limited, a cautious effort has to be made to tap the new energy sources and manage these efficiently for future. Emphasis should be on improving the way energy is being transformed from one form to another, and to develop processes and products that are energy-efficient. All this is required to sustain the growth that is mandatory to withstand the competition and challenges that one may have to face in future.

New energy technologies and in particular heating and cooling technologies are decentralized and will create markets and employment essentially at a local level. From an economic viewpoint, these energy technologies are capital intensive sources of energy. The need of the hour is to develop such technologies and systems at a relatively low cost. The scientific community has not only to think and develop advanced energy conversion technologies but also to contribute in improving the existing ones. By re-enforcing collaboration between the various sectors and promoting an exchange of knowledge and experience among the nations, mankind will be able to meet the challenges of the future.

THEME

In face of the nearly doubling of the world population and tripling of the energy demand over the next 50 years, the conference attempts to present some thoughts on the possible ways, to meet this demand under the constraints of increased population and land use while holding the environmental impact to a tolerable level. It will also outline the ways in the conception and development of eco-friendly energy conversion processes. To effectively develop the innovative energy conversion technologies needed in the 21st century, ICEM- 2009 will provide an ideal platform to researchers from industry and academia to exchange information and outline the research needs.

The conference will provide forum for discussion in the following theme based areas:

Energy Conversion Technologies

Thermoelectricity; Thermionic; Photoelectric, Thermal-photovoltaic; Magneto-hydrodynamic; Brayton, Diesel, Rankine and combined cycles, Stirling engines; Hydrogen and other advanced fuel cells; Various forms of batteries and energy storage.

Renewable Energy Sources

Solar; Nuclear; Fossil, Geothermal, Wind, Hydro and Biomass.

Energy Auditing

Energy Conservation and management, Energy Efficiency; Public Policy and Economics.

Heat Recovery and Applications

Heat Recovery, Boilers and Furnaces; Refrigeration and Air-conditioning; Heat Exchangers, Process heat; Electrolysis etc.

Miscellaneous

Heating and cooling applications; Electric drive applications, commercial, space, industrial, transportation and residential applications; Carbon Capture and Carbon Credit.

City & University

Banaras is known as city of light from times immemorial and has been the home to several distinguished philosophers, academicians, saints and scholars over centuries. Varanasi is also credited to be the oldest living city in the world. The antiquity of the city has been aptly described by Mark Twain as "Banaras is older than history, older than tradition, older than even legend, and looks twice as old as all of them put together!" Varanasi is known as the city of temples



and ghats. This city has been the focal point of education, and many religions and cultures. Varanasi is very well connected by road, rail and air to all major cities of India. It generally has winter climate during December. The temperature varies between 10-18C during the winter. The Banaras Hindu University, an internationally reputed temple of learning, situated in the holy city of Varanasi, was established by Pandit Madan Mohan Malaviya in 1916. The university comprises of 3 Institutes, 15 Faculties and 124 Departments, 4 Interdisciplinary Centers. Since its inception, the Institute of Technology has not only been a premier educational institution producing graduate engineers and technologists with sound scientific and technological background, but has also grown into an excellent centre providing versatile postgraduate training and conducting advanced research in Engineering and Technology. As an indication of academic excellence achieved by the Institute of Technology, four of its Engineering Departments are recognized by UGC as Center of Advanced Study; two others are recognized for Special Assistance Programme. In addition, six departments have also received UGC support under the COSIST programme and eight departments have received support under FIST programme of DST, New Delhi. The DST also established the National Electron Microscope Facility (NELMIF) way back in 1982. It has been consistently ranked in the top 10 engineering institutions of the country in various surveys. The Department of Mechanical Engineering came into existence in 1919 under the leadership of Professor Charles A. King, the first Head of the Department and Principal of the erstwhile Banaras Engineering College (BENCO). Over the years the Department has grown four folds to become the largest department in the Institute of Technology as well as in the Banaras Hindu University. In the last five years, the Department has produced 232 graduates, and 93 post-graduates. Apart from this the Department has to its credit 10 Ph.D.s. awarded during the period 1995-2008. The post graduate and doctoral programme in the Department is well established and infrastructural facilities exist for studies and research in a wide range of specialisation which include Machine Design, Production Engineering, Heat Power Engineering & Industrial Management. The faculty is well qualified with a vast experience in various fields of Mechanical Engineering.



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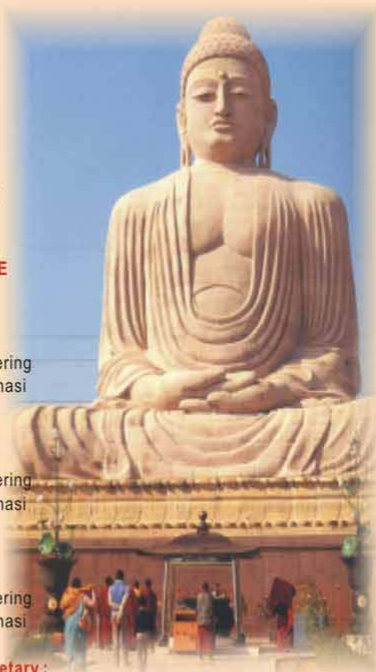
Dr. S.K. Shukla
International conference on Energy Conversion and Management (ICEM)
Department of Mechanical Engineering
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Call for Papers

Abstract of original papers in not more than 500 words should be sent by e-mail. A hard copy in duplicate on A-4 size bond paper neatly typed in 1.5 spaces (with CD) in Times New Roman font should be sent by post to organizing secretary. Authors will be required to submit the full paper after acceptance of their abstracts. Papers will be peer reviewed before publication in proceedings. The length of the paper including tables, figures and references should not exceed 10 typed pages of A4 size. Proceedings will be made available at the registration desk.

Registration Fee

- ▶ Delegates from Industry Rs. 6000
- ▶ Delegates from Academic Institutions and Research Organization Rs. 3000
- ▶ Research Scholars / Students Rs. 1500
- ▶ Accompanying Person/Spouse Rs. 1500
- ▶ *All payments of the conference should be made by DD/Cheque drawn in favour of **ICEM** payable at Bank of Baroda, BHU, Varanasi.*

Deadlines

Submission of Abstracts	30 th January, 2009
Acceptance of Papers	30 th April, 2009
Submission of Full Text	31 st July, 2009

Accommodation

Accommodation will be provided in various guest houses of the University. Accommodation can also be arranged in the hotels ranging from 5-star to ordinary ones on request provided Rs. 3000 per person is sent as hotel reservation in advance.

Sponsorship Rates

Category Rate (Rs.)

Delegate Kit	2.5 Lacs
Lunch (each day)	1.0 Lacs
Dinner (each day)	1.0 Lacs
High Tea (two times)	75,000
Tea & Snacks per break (4 breaks)	10,000
Exhibition Stall (3m x 3m)	40,000

Souvenir Advertisements

Multicolor front page	50,000
Multicolor back page	45,000
Multicolor front / back (inside) cover	35,000
Multicolor full page	15,000
Multicolor half page	10,000
Black & white full page	7,500
Black & white half page	5,000

Address for Correspondence

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Registration Form
INTERNATIONAL CONFERENCE
ON
ISSUES AND CHALLENGES IN
ENERGY CONVERSION & MANAGEMENT
December 18-20, 2009

DEPARTMENT OF MECHANICAL ENGINEERING
INSTITUTE OF TECHNOLOGY
Banaras Hindu University, Varanasi - 221 005

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Tariff Range :

Type of Accommodation :

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