



# National Information Centre of Earthquake Engineering

Indian Institute of Technology Kanpur

# Annual Report

April 2008-March 2009

## Technology Transfer in Seismic Safety of Dams

NICEE brought two international experts from U.S.A on seismic safety of dams—**Prof. Anil K Chopra** of the University of California at Berkeley and **Mr. Larry Nuss** of U. S. Bureau of Reclamation, Denver, USA. The objective was to help improve state of the practice in India in view of the surge in the number of hydel power projects in the country in recent years.



A National Seminar on Seismic Safety for Concrete Gravity Dams was organized in New Delhi on February 27, 2009, by NICEE and Building Material & Technology Promotion Council (BMTPC), in collaboration with Central Board of Irrigation & Power (CBIP), with 125 participants. Other invited speakers included Mr. M. Gopalakrishnan, Chairman, INCOLD Committee, Professor D. K. Paul of IIT Roorkee, Dr. I. D. Gupta of CWPRS Pune, and Dr. Durgesh C. Rai of IIT Kanpur.

The Seminar was sponsored by CSIR, CSI-India, Department of Science and Technology, IIT Kanpur, Indian National Academy of Engineering, Ministry of Earth Sciences, NTPC Ltd., and the Poonam and Prabhu Goel Foundation at IIT Kanpur.

The Seminar was followed by a four-day training course taught by Professor Chopra and Mr. Nuss on Seismic Design of Concrete Gravity Dams, at IIT Kanpur during March 3-6, 2009. The course was attended by 159 participants from practically every private, public-sector and government agency interested in dams, and numerous faculty and students from all over India.

Resource materials of the two events can be obtained from NICEE.

## From the Coordinator

The year 2008-2009 was rather eventful for NICEE. During the year, NICEE conducted the first workshop for undergraduate students of architecture to sensitize them towards earthquake safety through a series of lectures and a hands-on design studio. NICEE brought two leading international experts from the U.S.A on the seismic safety of dams and conducted two highly successful events with the objective of technology transfer. The support from well-wishers was overwhelming with a record number of donations during the year. This Annual Report highlights some of our major initiatives during this past one year. We welcome your suggestions and feedback.

## Institutional Memberships

During the year Platinum and Gold Institutional Memberships were initiated. NICEE thanks its Institutional members and extends a warm welcome to them.

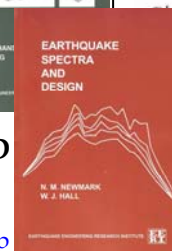
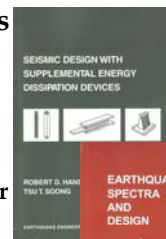
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## New Publications during 2008-09

- **Seismic Design with Supplemental Energy Dissipation Devices**  
Robert D. Hanson and Tsu T. Soong
- **Earthquake Spectra and Design**  
N. M. Newmark and W. J. Hall
- **Confined Masonry**  
(For one and two storey buildings in low-tech environments: A guidebook for technicians and artisans)  
Tom Schacher
- **National Seminar on Seismic Safety of Concrete Gravity Dams – CD**
- **Short Course on Seismic Safety of Concrete Gravity Dams – CD**

Full list of NICEE publications and products available at: [www.nicee.org/Publications.php](http://www.nicee.org/Publications.php)



## Workshop for Architecture Students

The first Workshop on Earthquake Resistant Practices for Undergraduate Students of Architecture was conducted at IIT Kanpur during July 03 – 08, 2008. The workshop was attended by 57 students from 19 colleges from all over India (and Nepal). The aim was to sensitize the students of architecture in earthquake resistant design practices through technical lectures followed by design studios where they were given guidance in earthquake resistant design by working on an architectural design project.

The resource persons included Prof Keya Mitra of Bengal Engineering & Science University, Dr. Mahua Mukherjee of IIT Roorkee, Dr. Vasudha Gokhale of Dr. B.N. College of Architecture for Women at Pune, and Prof Bhavna Vimawala and Prof Nehal Desai of Sarvyayanik College of Engineering and Technology at Surat.



The final designs were evaluated by a Jury Board consisting of Ar. Tapan Kumar Sinha of CPWD, Prof Amit Bose of Designers & Planners Combine, Prof O R Jaiswal of VNIT Nagpur, Prof Sudhir K Jain and Prof Durgesh C Rai of IIT Kanpur.

The workshop was sponsored by Computers and Structures Inc, Berkeley, U.S.A, and the Poonam and Prabhu Goel Foundation, IIT Kanpur.

Encouraged by its success, it has been decided to make the Workshop an annual event.

For more information please visit:

[http://www.nicee.org/Architecture\\_Report/Arch\\_Workshop\\_Report.htm](http://www.nicee.org/Architecture_Report/Arch_Workshop_Report.htm)

## SAARC NASA Convention, Pune, 2009

NICEE initiated outreach to students of Architecture for the first time during the Golden Jubilee NASA Convention, Bhopal, 2007. The same was carried forward in SAARC NASA 2009 at Pune during February 22-24, 2009 where the NICEE Booth attracted many enthusiastic visitors and saw 300 new registrations.

As in the previous year, a quiz was conducted on Earthquake Safety in the Built Environment, this time, based on Hugo Bachmann's celebrated publication Seismic Conceptual Design that was disseminated free of cost.

Winners of the NICEE Quiz were: **Abhishek Kumar**, NIT Patna, **Mridul Kumar**, NIT Patna, and **Safiya Shirin**, MEASI Academy of Architecture Chennai.

This NICEE initiative was sponsored by Poonam and Prabhu Goel Foundation at IIT Kanpur.

## NICEE's Presence in Earthquake Engineering Events

- NICEE set up a Booth at the 14<sup>th</sup> World Conference in Earthquake Engineering at Beijing, China during October 12-17, 2008. NICEE was the only organization from India with to set up a booth in this huge conference with more than 3300 delegates from all over the world
- NICEE Booth was set up at the ICI Innovative World of Concrete Conference at Greater NOIDA, during December 11-14, 2008.
- The NICEE Booth at SAARC NASA 2009 at Pune generated a great deal of interest amongst the students of architecture and 300 new registrations were received (see separate box).



## Winners at the Architecture Workshop

FIRST PRIZE

**Hemant Kumar Chaurasia** of Lucknow College of Architecture Lucknow

**Sarang Sanjay Patwardhan** of BKPS College of Architecture, Pune

SECOND PRIZE

**Himanshu Soni** of Lucknow College of Architecture Lucknow

**Smita Yatish Prabhune** of BKPS College of Architecture Pune

THIRD PRIZE (JOINT WINNERS)

a) **Anil Kumar K** of School of Planning and Architecture New Delhi  
**Roshana Banepali** of Khwopa Engineering College Nepal

b) **Mungekar Neha Nandan** of Academy of Architecture Pune  
**Minu Agarwal** of Guwahati College of Architecture Guwahati



## People

**Mrs. Anamika Dixit Vajpai** joined NICEE in January 2009. She is MA in Economics and PGDIM from IGNOU, New Delhi. Mrs. Vajpai handles special projects and will coordinate content development for NICEE. NICEE welcomes her to its team.

## Translations into Indian Languages

Oriya Translation of **IAEE Guidelines for Earthquake Resistant Non-Engineered Construction** has been completed and is available at [www.nicee.org](http://www.nicee.org). NICEE acknowledges **Dr. Dhanada Kanta Mishra** and **Mr. Suresh Dash** for the Oriya Translation.

## PG Literature Review Workshop

The Annual Workshop was conducted at IIT Kanpur during 27 August - 05 September 2008. Fifty Six postgraduate students from across India participated this year. The participants were encouraged to make use of available literature at NICEE library and the Central Library for doing quality research work. They were also provided access to internet for downloading the research materials.

Following were the winners of the Structural Engineering Test.

FIRST PRIZE (Rs. 3000/-)

**Mr. Suryawanshi Anup Arvind** of VNIT Nagpur

SECOND PRIZE (Rs. 2000/-)

**Mr. Rajat Kulshereshta** SGSITS of Indore

THIRD PRIZE (Rs. 1000/-)

**Mr. Devendra Chapekar** SGSITS of Indore

The sponsors of the workshop were Council of Scientific and Industrial Research, Computers and Structures, Inc and the Poonam and Prabhu Goel Foundation at IIT Kanpur.

For more information please visit:

[http://www.nicee.org/MTech\\_Workshop](http://www.nicee.org/MTech_Workshop)

## Other Activities of NICEE During the Year

■ Earthquake Engineering Open House was held during December 15-19, 2008 with the aim to enable postgraduate students to conduct literature survey or their thesis related to earthquake engineering issues and interact with the faculty and professionals. The Open House also welcomed professionals.

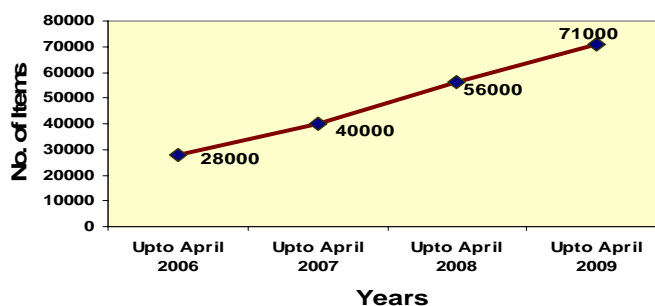
■ Procurement of 23 publications totaling Rs. 1.17 lakhs.

■ Electronic Newsletter is being sent monthly to about 7500 current subscribers.

■ As a follow up to NICEE's Confined Masonry Initiative (see last year's report), a manual on Confined Masonry by Tom Schacher was published.

## Aggressive Dissemination of Literature

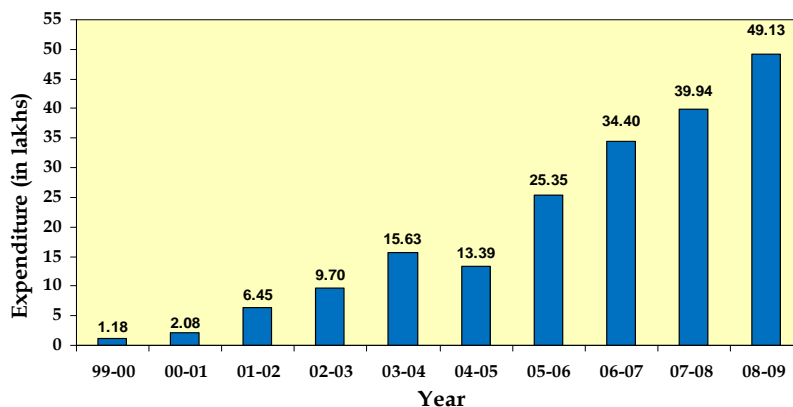
During the year, about 15,000 copies of books, monographs, CDs, and journal issues were distributed. Till date, NICEE has distributed about 71,000 such items.



## Earthquake Engineering Practice

The quarterly periodical *Earthquake Engineering Practice* continues to gain popularity. Its subscription list as of March 2009 stands at about 2,600 from 60 countries. The periodical is being financially supported by the Computers & Structures Inc. (CSI), Earthquake Engineering Research Institute (EERI), Poonam and Prabhu Goel Foundation at IIT Kanpur, and the numerous other donors of NICEE.

## NICEE Financials



With a healthy growth of NICEE activities, the overall spending during the year stood at about Rs 49 lakhs (Rs 40 lakh last year). This was covered by a healthy mix of resources from various sources: 29% from sales and fees, 31% from projects and sponsorship of activities, 23% from donations and interest income of endowment, and 19% from the Poonam and Prabhu Goel Foundation at IIT Kanpur.

The sale proceeds from publications and monographs were much higher: Rs 8.95 lakhs as compared to Rs 6.1 lakh last year. The number of donors this year were at a record number of 146 (126 last year) contributing a total of Rs 13.28 lakhs (Rs 6.9 lakh last year). The median donation to NICEE has steadily increased from Rs 1,000 upto 2005-06, to Rs 2,000 for the next two years, and Rs 3,000 during 2008-09. Since inception, NICEE has received one or more donations from a total of 370 donors: this is a great endorsement of its activities by its friends and well wishers.

## For more information, please contact

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