## Earthquake Engineering Review Workshop for Masters Students from Engineering Colleges across India at IIT Kanpur during 25-31 March 2003

## Brief Report:

A week long review workshop was organized at IIT Kanpur by the National Information Center of Earthquake Engineering (NICEE) during 25-31 March 2003 for Masters' students from across India. Sixty masters' students from 19 different engineering colleges across the country (list of participants enclosed) participated in this workshop and collected literature (more than 45,000 pages) on earthquake engineering relating to their post-graduate studies. The schedule of the workshop is enclosed herewith.

During the workshop a series of video shows were shown on issues related to seismic designing of structures and on past great earthquakes. The faculty members of the department of civil engineering at IIT Kanpur (Professors. Sudhir K. Jain, C.V.R. Murty, Durgesh C. Rai, NSV Kameswara Rao, and Vinay K. Gupa) had discussions with the participants about their topic of research in different sessions during the workshop. Dr. K.K. Bajpai demonstrated the state-of-the art testing facilities available at the Structural Engineering Laboratory of IIT Kanpur to the workshop participants.

An earthquake engineering quiz was also organized during the workshop in which 10 groups consisting of 6 students each participated and after preliminary rounds 4 groups reach the finals. The quiz contained the questions starting from basic concepts of earthquakes and how they happen to the current Indian Standards design codes, and analysis of earthquake resistant design, instrumentation, etc. The members of winning and the runners-up team were given certificate and prize.

Some photographs during different sessions of the workshop are also enclosed herewith.

#### **Sponsors:**

- Indian Institute of Technology Kanpur, Kanpur
- Council of Scientific and Industrial Research (CSIR) New Delhi
- National Programme on Earthquake Engineering Education (NPEEE), Ministry of Human Resource Development
- National Information Centre of Earthquake Engineering (NICEE), IIT Kanpur

Sl.No. Name	of Student	College
1Adity	a Chandra	National Institute of Technology, Kurukshetra
2 A m o l	AMOLS Karode	Institute of Science & Technology for Advanced
2/411101		Studies & Research, Vallabh Vidyanagar
3Amut	hasheela R.	College of Engineering: Anna University
4 A plait	Ankit Sheth	Institute of Science & Technology for Advanced
		Studies & Research, Vallabh Vidyanagar
Artibe	en Bhikhubhai	Institute of Science & Technology for Advanced
Patel		Studies & Research, Vallabh Vidyanagar

#### List of Participants:

6Arun NKaranth	BVB College of Engineering & Technology, Hubli
7Ashok Sahanubhuti	National Institute of Technology, Kurukshetra
8Atish Dhanraj Biradar	Visvesvaraya National Institute of Technology Nagpur
9 <sup>Avinash Maruti</sup> Wadagule	Gogte Institute of Technology, Belgaum
10B. Sachithanandham	Regional Engineering College, Trichy
11Ph and C Datal	Institute of Science & Technology for Advanced
11Bhavin G Patel	Studies & Research, Vallabh Vidyanagar
12Bishakha Chakraborty	Bengal Engineering College (Deemed University), Howrah
13Debarati Datta	Bengal Engineering College (Deemed University), Howrah
14Divyesh Bhalodiya	Institute of Science & Technology for Advanced Studies & Research, Vallabh Vidyanagar
15ERK Nishok	Coimbatore Institute of Technology, Coimbatore
16Harshal K. Shah	L.D. College of Engineering, Ahmedabad
17 Long on der V.C die eine	Institute of Science & Technology for Advanced
17Hemendu V Godhasara	Studies & Research, Vallabh Vidyanagar
10 Hiteshkumar Babubhai	Institute of Science & Technology for Advanced
18 <mark>Hiteshkumar Babubhai</mark> Namha	Studies & Research, Vallabh Vidyanagar
19Jigar K. Deliwala	L.D. College of Engineering, Ahmedabad
20Jigar P. Shah	Visvesvaraya National Institute of Technology Nagpur
21K. Karthick	Colllege of Engineering: Anna University
22Kamini Sharad Bhosle	Govt. College of Engineering Pune
23Kedar P. Parte	Govt. College of Engineering Pune
24Kiran S	SJ College of Engineering, Mysore
	Institute of Science & Technology for Advanced
25Krunal P Sheth	Studies & Research, Vallabh Vidyanagar
26 Loka Satya Prasad Macharla	Coimbatore Institute of Technology, Coimbatore
27 Madhukar Vasudev Ankam	Visvesvaraya National Institute of Technology Nagpur
28Malagavelli Venu	Birla Institute of Technology and Science, Pilani
29Maulesh Y Shah	Institute of Science & Technology for Advanced Studies & Research, Vallabh Vidyanagar
30Mushahid G. Shaikh	Walchand College of Engineering, Sangli
31Naga Ravi Kiran Anne	Coimbatore Institute of Technology, Coimbatore
32Nepoleon K.	Regional Engineering College, Trichy
33Ninad A Ketkar	Govt. College of Engineering Pune
34Pinakin Rajnikant Patel	Institute of Science & Technology for Advanced Studies & Research, Vallabh Vidyanagar
35 Poonam Inderkumar Modi	L.D. College of Engineering, Ahmedabad
36Pratik C. Khimani	Institute of Science & Technology for Advanced Studies & Research, Vallabh Vidyanagar
37R. Balaji	Coimbatore Institute of Technology, Coimbatore
,	Govt. College of Engineering Karad

39 <sup>Rajesh Ghanshyamdas</sup> Shah	Govt. College of Engineering Karad
40Rina D Patel	Institute of Science & Technology for Advanced
	Studies & Research, Vallabh Vidyanagar
41Rohit Y. Thawre	Visvesvaraya National Institute of Technology Nagpur
42Rupali S. Bhamare	Govt. College of Engineering Pune
43Rushikesh S. Trivedi	L.D. College of Engineering, Ahmedabad
44S. Adiseshu	Andhra University, Vishakhapatnam
45S. Eswaran	Coimbatore Institute of Technology, Coimbatore
46S. Jayaprakash	Regional Engineering College, Trichy
47S. Karthikeyan	Pondicherry Engineering College, Pondicherry
48Sachin Amrutlal Selot	Govt. College of Engineering Karad
49 <sup>Sandip</sup> Ganpatbhai Vadher	L.D. College of Engineering, Ahmedabad
50Shubhada S. Patki	BVB College of Engineering & Technology, Hubli
51Smit P Patel	Institute of Science & Technology for Advanced
515mit F Fater	Studies & Research, Vallabh Vidyanagar
52Somesh Kumar	Thapar Institute of Engineering & Technology, Patiala
53Sridhar Vedula	Manipal Institute of Technology, Manipal
54Sunil M	SJ College of Engineering, Mysore
55U. Chandana	Pondicherry Engineering College, Pondicherry
56Umesh Ankush Gavas	Govt. College of Engineering Karad
57V. Marimuthu	Coimbatore Institute of Technology, Coimbatore
58 <sup>Vishal Vinodchandra</sup> Shah	L.D. College of Engineering, Ahmedabad
59Yogesh C. Kalamkar	Walchand College of Engineering, Sangli
60 Yusufi Jainuddinbhai	Institute of Science & Technology for Advanced
Trunkwala	Studies & Research, Vallabh Vidyanagar

# Inaugural Programme (25 March 2003):

09:30	Assembly of participants at PBCEC Big Seminar Room and collection of introduction letters
10:00	Welcome (Prof. C.V.R. Murty, Civil Engineering Department, IIT Kanpur and Coordinator, NPEEE@IIT Kanpur)
10:10	About the NICEE and NPEEE (Prof. Sudhir K. Jain, Head, Civil Engineering Department, IIT Kanpur and Coordinator, NICEE & National Coordinator, NPEEE)
10:25	CDTE activities for next generation (Prof. Krishna Kumar, Head, CDTE, IIT
10.00	Kanpur)
10:30	Inaugural Address by <b>Chief Guest: Prof. Kripa Shanker, Dy. Director, IIT</b> Kanpur
10:45	Vote of Thanks (Dr. K.K. Bajpai, Civil Engineering Department, IIT Kanpur)
10:50	Group Photo
11:00	Теа

#### Workshop Schedule:

Literature survey all through except during the following hours

Date	Time	Activity (Venue: Pioneer Batch Continuing Education Center)
25 March 2003	9:30am	Inauguration
	11:30am	Introduction of Participants
	12pm	Discussion with Professor Sudhir K. Jain
	2pm	Earthquakes: How they Happen!! (C.V.R.Murty)
26 March 2003	9am	Video shows on
		1. Seismic Design of Bridges by Public Works Research
		Institute (PWRI), Japan
		2. Leaning Tower of PISA by Parker Research Foundation,
		USA
	2pm	Discussion with <i>Professor Durgesh C. Rai</i>
27 March 2003	9am	Discussion with <i>Professor N.S.V. Kameswara Rao</i>
	2pm	Discussion with <i>Professor C.V.R.Murty</i>
28 March 2003	9am	Video show on
		1. Great Quakes San Fransisco by Discovery Communications,
		Inc., USA
		2. <i>Resisting the Forces of Earthquakes by Earthquake</i>
		Engineering Research Institute (EERI), USA
	2pm	Computer Models with Kaustubh Dasgupta
29 March 2003	9am	Video show on Great Quakes Mexico City by Discovery
		Communications, Inc., USA
	2pm	Visit to the Structural Engineering Laboratory
		(with Dr. K. K. Bajpai)
30 March 2003	9am	Video show on Earthquake Protective Design by American Society of
		Civil Engineers (ASCE), USA
	2pm	Earthquake Engineering Quiz
31 March 2003	9am	Reimbursement of Travel Expenditure
	3pm	Closing Ceremony

## Closing Ceremony (Monday, 31 March 2003):

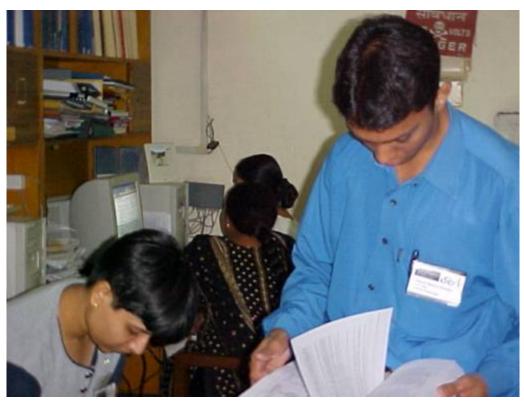
2:00 Welcome

Professor C.V.R. Murty, Department of Civil Engineering, IIT Kanpur

 2:05 The Workshop :: In retrospect Professor Sudhir K. Jain, Head, Department of Civil Engineering, IIT Kanpur and Coordinator, NICEE
2:15 Distribution of Certificates
2:30 Valedictory Address Professor Krishna Kumar, Head, CDTE, IIT Kanpur

2:40	Presidential Address
	Professor Kripa Shanker, Deputy Director, IIT Kanpur
2:50	Vote of Thanks
	Dr. K. K. Bajpai, Department of Civil Engineering, IIT Kanpur
2:55	Теа

# Workshop Photos:



Literature Review at NICEE, IIT Kanpur



Visit to Structural Engineering Laboratory (Pseudo-Dynamic Testing Facility)



Visit to Structural Engineering Laboratory (Material Testing Facility)



Visit to Structural Engineering Laboratory (Dynamic Experiment Demonstration)



Earthquake Engineering Quiz



Students' Group participating in Earthquake Engineering Quiz