

National Information Centre of Earthquake Engineering

Indian Institute of Technology Kanpur

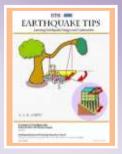


Reconnaissance Survey of the 2016 Imphal Earthquake

The M6.7 earthquake of January 04, 2016 struck at 04:35 am IST with its epicenter located in the Tamenglong district of Manipur about 30 km west of the state capital Imphal. The earthquake was strongly felt in all northeastern states of India, Bangladesh and Myanmar. The worst affected regions are Imphal, Tamenglong, Noney and Thoubal. A few aftershocks of magnitude less than 4.0 were also felt within a day of the main shock. A part of the north-east India, especially Assam, Nagaland and Mizoram also experienced intense shaking during this earthquake. Prof. Durgesh C Rai (IIT Kanpur), Dr. Hemant B Kaushik (IIT Guwahati) and Dr. Vaibhav Singhal (IIT Patna) undertook a reconnaissance survey of the earthquake affected regions during January 14 to January 17, 2016 and visited Imphal and adjoining areas. General damage to buildings and other structures agreed well with the intensity of ground shaking observed at various places, with the maximum of VI at Imphal and Tamenglong in Manipur on MSK scale. However, unexpected severe damage at an intensity of VI in Imphal was observed in buildings. It was surprising to observe that publicly funded buildings, which are supposedly designed and constructed properly under strict technical supervision, also performed poorly. For a detailed report please visit http://nicee.org/imphaleq.pdf

Publications during 2015-16

During the year the English Version of IITK-BMTPC Earthquake Tips was printed. This is the most sought after publication and is also the basis of Inter School Quiz.



List of NICEE publications and products: www.nicee.org/Publications.php

Eight New Earthquake Tips

Eight new Earthquake Tips have been added to the already existing 24 tips. All 32 tips can now be viewed at http://nicee.org/EQTips.php. Efforts are on to translate these into local languages. We hope to make these available during the current year.

From the Coordinator

In keeping with the agenda of Seismic Safety, NICEE has been conducting several workshops for society at large. The team of Prof. Durgesh C Rai (IIT Kanpur), Dr. Hemant B Kaushik (IIT Guwahati) and Dr. Vaibhav Singhal (IIT Patna) undertook a reconnaissance survey of the earthquake affected regions during January 14 to January 17, 2016 and visited Imphal and adjoining areas. Eight new Earthquake Tips have been added to the already existing 24 tips. All 32 tips are available at http://nicee.org/EQTips.php . The Punjabi translation of old 24 Tips has been completed and uploaded on the website. Efforts are on to translate the new eight tips into local languages. The Inter School Quiz based on this most sought after publication has been continuing for last seven years now. We are happy to note the increasing awareness about seismic safety at grass root level. NICEE continued to receive good support from its well-wishers during the year. Your support is important to us and we look forward to your continuous support and guidance in the forthcoming years. Support from 47 members during the year and 500 unique members till date is a great endorsement of our activities. We welcome your suggestions and feedback at nicee@iitk.ac.in.

Institutional Members

NICEE thanks its Institutional members and acknowledges their continued support to NICEE.

PLATINUM SUBSCRIBING MEMBERS

Computers & Structures Inc., Berkeley, USA Indian Institute of Technology Gandhinagar

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Inter School Quiz on Earthquake Tips

NICEE conducted an Inter School Quiz competition on *IITK-BMTPC Earthquake Tips*, the final round of which was held on 26 January 2016 at Outreach Auditorium, Indian Institute of Technology Kanpur, Kanpur.

80 schools from 29 cities participated in the preliminary rounds which were held in Ahmedabad, Faridabad, Jabalpur, Kanpur, Ludhiana, Modasa and Nagpur. In the final round of the quiz on 26 January, 10 schools - who were the winners of their respective preliminary rounds, viz. Shieling House School, Kanpur; Faridabad Model School, Faridabad; St. Paul's Senior Secondary School, Mathura; SRS School Valsad; St. Mary's Convent School, Faridkot; St. Gabriel's Senior Secondary School, Jabalpur; City Pride School, Pune; Siddharth Public School, Himmatnagar and Prarthana Global School, Modasa participated.



Winners of Final Quiz – St. Paul's Senior Secondary School, Mathura represented by Ashita, Aditya, Rajat and Rohan. The quiz had four rounds: Round Robin, Picture Round, Rapid Fire Round and Lucky Number Round. The questions were mostly from the publication *IITK-BMTPC Earthquake Tips* by Prof. CVR Murty and some questions were based on the past earthquakes in India and in other countries. The winning team of the finals with 87 points was St. Paul's Senior Secondary School, Mathura represented by Ms. Ashita Goyal, Mr. Aditya Kumar Madan, Mr. Rajat Kumar and Mr. Rohan Dayal. Shieling House School, Kanpur and St. Gabriel's Senior Secondary School, Jabalpur came second and third respectively scoring 79 points and 78 points. The quiz was supported by BMTPC, New Delhi, Computers & Structures Inc. (CSI) and Poonam and Prabhu Goel Foundation at IIT Kanpur. The preliminary round of the quiz at Jabalpur was conducted by Prof. Rajiv Khatri and his team, at Ludhiana by Prof. HS Rai and his team, at Nagpur by Prof. OR Jaiswal and Prof. Ratnesh Kumar and their team, at Aravalli and Sabarkantha districts by Prof. CS Sanghvi and his team whilst at Gandhinagar

by Prof. Amit Prashant, Mr. Abhishek Gupta and their team. NICEE takes pride in the efforts put in by them and their support teams, and acknowledges with gratitude their unstinted support to NICEE activities. The school quiz has now become an important annual event of NICEE. It will be our endeavour to include more and more cities from the neighboring areas during forthcoming years. For further details and procedure for participating in the quiz please visit http://www.nicee.org/Quiz/

Workshop for Architecture Students

The seventh workshop on Earthquake Resistant Practices for Undergraduate Students of Architecture was conducted at IIT Kanpur during July 06 – 11, 2015. The workshop was attended by 35 students from 13 colleges representing 9 cities of India. 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. Vasudha Gokhale & Meera Shirolkar of Dr. B.N. College of Architecture for Women, Pune; Prof. Atanu Dutta, Jorhat Engineering College, Jorhat; Prof Indrani Gogoi, Assam Engineering Institute, Guwahati; Mr. Hari Kumar, GeoHazards, New Delhi and Ar. Ruchira Das, School of Architecture, Techno University, Kolkata. The final designs were evaluated by a Jury board consisting Prof. Mahesh Tandon, TCPL Delhi; Prof. OR Jaiswal, VNIT Nagpur; Ar. Narendranath Mitra, Practicing Architect,

Kolkata; and Prof. Rajeev Kacker, College of Architecture, Lucknow. The workshop was sponsored by Ministry of Earth Sciences, New Delhi; Council of Scientific and Industrial Research, New Delhi; Computers & Structures Inc. (CSI) and Poonam and Prabhu Goel Foundation at IIT Kanpur. For more information, visit: http://www.nicee.org/Architecture_Workshop/Arch_Ws_2015_Report__2015.pdf



PG Literature Review Workshop

This Annual Workshop was conducted at IIT Kanpur during June 04 – 13, 2015. Twenty three Postgraduate students from 9 colleges across India participated in this. The participants were encouraged to make use of available literature at NICEE library and the Kelkar Library of IIT Kanpur for doing quality research work. They were also provided access to internet for downloading the published research literature. The participants had interaction with Dr. Vaibhav Singhal and Dr. KK Bajpai of IIT Kanpur.

The sponsors of the workshop were Indian National Science Academy, New Delhi; Computers & Structures Inc. (CSI) and Poonam and Prabhu Goel Foundation at IIT Kanpur.

For more information please visit:

http://www.nicee.org/MTech_Workshop

Institutional Membership

You may like to encourage your organisation to take up institutional membership of NICEE. For details: http://www.nicee.org/AboutNICEE.php?id=18

PLATINUM SUBSCRIBING MEMBERS

₹4 lakh (US\$ 10,000) per year or more

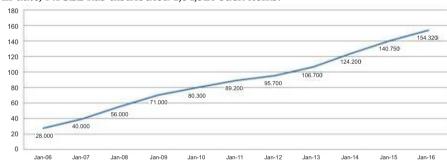
GOLD SUSCRIBING MEMBERS

₹1 lakh (US\$ 2,500) per year or more SILVER SUBSCRIBING MEMBERS

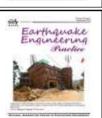
₹ 25,000 (US\$ 550) per year or more

Aggressive Dissemination of Literature

During the year 13,570 copies of books, monographs, and CDs, were distributed. Till date, NICEE has distributed 1,54,320 such items.







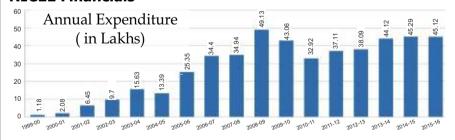




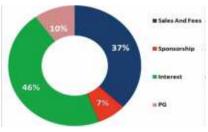
Earthquake Engineering Practice

The quarterly periodical *Earthquake Engineering Practice* continues to gain popularity. Its subscription list as of March 2016 stands at 3,350 from 73 countries. The periodical is being financially supported by the Computers & Structures Inc. (CSI), Poonam and Prabhu Goel Foundation at IIT Kanpur, and the numerous other donors of NICEE. The annual expenditure on the periodical is to the tune of \mathfrak{T} 16.0 lakhs. To make it self-sustaining we invite advertisements/ sponsorships from the

NICEE Financials



Funding of Expenses – 2015-16



With a healthy growth of NICEE activities, the overall expenditure during the year stood at about ₹ 47.12 lakhs (₹ 45.29 lakhs last year). This was covered by a healthy mix of resources from various sources: 37% from sales and fees, 7% from sponsorships, 46% from interest from endowment and 10% from Poonam and Prabhu Goel Foundation at IIT Kanpur.

The sale proceeds from publications and monographs were ₹ 17.43 lakhs as compared to ₹ 12.52 lakhs last year. The number of donors this year were 47 (59 last year) contributing a total of ₹ 8.40 lakhs with an average donation of ₹ 17,874/- (₹ 11.02 lakh last year with average of ₹ 18,673/-). Since inception, NICEE has received one or more donations from a total of 500 donors with an overall median of ₹ 5,000: this is a great endorsement of NICEE's activities by its friends and well wishers.



9

₹ 4,00,000/- and above

IIT Gandhinagar, Ahmedabad, GJ

₹ 20,000/- to ₹ 99,999/-

M/s Tandon Consultants Pvt. Ltd., New Delhi S. H. Babu, Secunderabad, TG Robert Reitherman, CA, USA Balbir Verma, New Delhi

₹4,000/- to ₹19,999/-

Ascent Consulting Engineers, Mumbai, MH N. Y. Kochak Consulting Engineers & Structural Designers, Pune, MH Anand Swarup Arya, Ghaziabad, UP Deepak B. Dave, Mumbai, MH Atanu Kumar Dutta, Jorhat, AS Sarvesh Kumar Jain, Gwalior, MP Sudhir Kumar Jain, Ahmedabad, GJ O. R.Jaiswal, Nagpur, MH Vikrant Joshi, TX, USA Abhay Khandeshe, Ahmednagar, MH B. B. Ladge, Kolhapur, MH

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Keya Mitra, Howrah, WB
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Bhabananda Nath, Jamnagar, GJ
Durgesh C. Rai, Kanpur, UP
Doris Rebello, Mumbai, MH
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R. J. Shah, Ahmedabad, GJ
V.M. Shanthi, Coimbatore, TN
Trilochan Singh, New Delhi
Balkrishna B Soneji, Ahmedabad, GJ
Jagdish Kumar Varma, Jaipur, RJ

Up to ₹ 3,999/-

Aditi's Design Studio, Bangalore, KN Parth Consultancy, Jamnagar, GJ Anil Agrawal, Yeddumailaram, TG Kamal K Arora, Pune, MH Debasis Dasgupta, Jalpaiguri, WB Arnab Datta, Bhavnagar, GJ K. C. Francis, Kochi, KL Sunil Gandhi, Rajkot, GJ Girish Manohar Malu, Kolhapur, MH Gaurav Maroo, Noida, UP M. L. Narasimhulu, Kurnool, AP Mohd Naseem, Mumbai, MH Prakash Shamrao Pajgade, Amravati, MH Amaresh S Patil, Gulbarga, KN NVRK Prasad, Guntur, AP Jalilbhai Abdulbhai Sheikh, GJ Subhransu Sekhar Swain, Bhubaneswar, OS N. Subramanian, Chennai, TN T. Viswanathan, New Delhi

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NICEE Team

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