



Durgesh C. Rai

Coordinator, NICEE

Professor, Civil Engineering

NICEE/ NAC

March 25, 2019

MEETING OF NATIONAL ADVISORY COMMITTEE - NICEE

Dear Sir/ Madam,

Please find here a copy of minutes of the 12th meeting of the National Advisory Committee (NAC) of the National Information Centre of Earthquake Engineering (NICEE) held at IIT Kanpur on March 06, 2019.

Thanking you and with best regards,

Yours sincerely

(Durgesh C. Rai)

Encl: Copy of the minutes of the 12th meeting

Distribution:

Prof. Abhay Karandikar, Director, IIT Kanpur

NAC Members

Ar. Balbir Verma, Balbir Verma & Associates, New Delhi

Prof. Mahesh Tandon, Tandon Consultants Pvt. Ltd., New Delhi

Dr. Shailesh K. Agarwal, Executive Director, BMTPC, New Delhi

Dr. Keya Mitra, Department of Architecture T & RP, BESU Howrah

Mr. Alok Srivastava, Cengage Publications, New Delhi

Prof. Atanu K. Dutta, Jorhat Engineering College, Jorhat

Computers & Structures Inc., India, New Delhi

Deputy Director, IIT Kanpur

Dean, Research and Development, IIT Kanpur

Prof. Sudhir K. Jain, Director, IIT Gandhinagar

Prof. C.V.R. Murty, Department of Civil Engineering, IIT Madras

Permanent Invitees

Dean, Resources and Alumni, IIT Kanpur

Head, Department of Civil Engineering, IIT Kanpur

Professor Incharge, PK Kelkar Library, IIT Kanpur

Special Invitees

Prof. Javed Malik, Department of Earth Sciences, IIT Kanpur

Prof. Chinmoy Kolay, Department of Civil Engineering, IIT Kanpur

Dr. KK Bajpai, Department of Civil Engineering, IIT Kanpur

Minutes of the 12th National Advisory Committee (NAC) meeting of the National Information Centre of Earthquake Engineering (NICEE) held at IIT Kanpur on March 06, 2019

The meeting was attended by:

- Ar. Balbir Verma, Practicing Architect and Past Chairman of IIA (Chairman)
- Prof. Keya Mitra, Indian Institute of Engineering Science and Technology, Shibpur, Howrah
- Prof. Atanu K. Dutta, Jorhat Engineering College, Jorhat
- Prof. Sudhir K. Jain, Director, IIT Gandhinagar
- Prof. Sachchida Nand Tripathi, Head, Department of Civil Engineering, IIT Kanpur
- Prof. Javed Malik, Department of Earth Sciences, IIT Kanpur
- Prof. Chinmoy Kolay, Department of Civil Engineering, IIT Kanpur
- Prof. Durgesh C. Rai, Department of Civil Engineering, IIT Kanpur (Convener)
- Dr. K. K. Bajpai, Department of Civil Engineering, IIT Kanpur
- Dr. S.K. Pathy, PK Kelkar Library, IIT Kanpur
- Cdr. Suresh Ailawadi, Retd., Project Executive Officer, NICEE, IIT Kanpur
- Mr. Shivesh Pandey, Deputy Project Officer, NICEE, IIT Kanpur

Prof. Abhay Karandikar, (Director, IIT Kanpur), Prof. Manindra Agrawal (Deputy Director, IIT Kanpur), Dr. Shailesh K. Agarwal (Building Material and Technology Promotion Council, New Delhi), Prof. CVR Murty (IIT Madras), Mr. Alok Srivastava (Cengage Learning India Pvt. Ltd.), Prof. S. Ganesh, (DORD, IIT Kanpur) and Prof. BV Phani (DORA, IIT Kanpur), could not attend the meeting due to other pressing commitments.

1. Introductory Remarks:

- 1.1. Prof. Durgesh C. Rai welcomed all the members and expressed his gratitude to all present for sparing their valuable time to attend the meeting. He pointed out the importance of the annual meeting of the Advisory Committee and how the past meetings have made critical contributions to the growth of NICEE. He then briefly described about the activities of NICEE during the last financial year, financial status of corpus, earnings and expenditure, functioning and other ongoing activities
- 1.2. Ar. Verma appreciated the good work of NICEE for the last two decades which justifies its sustenance. He appreciated the good work being done by NICEE for the benefit of society at large and commented that it was time now for NICEE to seek a higher level of recognition for its genuine work since this was also the call of the day. This could be achieved by involving the building industry, architecture community and professional bodies with NICEE for conferences, seminars etc. He also suggested that other avenues for increasing the funding of NICEE should be explored.
- 1.3. Prof. Tripathi expressed satisfaction on the outreach activity by NICEE and commented that he was not aware of any outreach activity in the country with such long standing. He suggested to explore the extensive usage of digital mode to increase the reach to the society. NICEE should also look at the possibility of opening satellite sub-units in other cities of the country. Regarding the space for NICEE, he informed the august gathering



that the department was likely to get good space in near future and promised to allocate dedicated space for NICEE.

- 1.4. Prof. Malik after lauding the work of NICEE suggested to extend the coverage in neighbouring countries like Nepal. He suggested to conduct awareness programmes on seismic safety in cities prone to earthquake such as Kangra, Chandigarh, etc.
- 1.5. Prof. Jain commended the work of NICEE during the last two decades and said that the future was bright with the young faculty members offering their voluntary service to the project. He expressed satisfaction on the financial status of NICEE and suggested that the endowment fund should be leveraged to take up newer projects where by reducing the dependence on endowment interest. He appreciated the papers of WCEE uploaded through NICEE website and suggested to collect more data on the number of downloads and the countries in which the papers were being downloaded. He further appreciated the contribution of sub-centres of NICEE presently operational at Gandhinagar, Guwahati, Hyderabad and Nagpur as NICEE publications sales outlets. He recommended that these sub-centres be supported to undertake outreach activities on behalf of NICEE. He also suggested the process of opening sub-centres to be formalized and due recognition be given to them.
- 1.6. Prof. Mitra suggested that based on the experience gained from the Architecture Workshops over the decade it was strongly felt that the publication *Architectural Teaching Resource Material on Earthquake Design Concepts of Teachers of Architecture Colleges* needed a revision and upgradation. It was suggested that Prof. Mitra may prepare a draft of suggested revisions and upgradations for consideration by the authors.

2. Review of the Year 2017-18:

Dr. Rai during the presentation on the NICEE activities of the FY 2017–18 discussed various issues including Statement of Accounts, publication activities and the state of NICEE funds. Some of the highlights of the year include:

- 2.1. NICEE continued with its agenda of providing publications and disseminating information to all.
- 2.2. NICEE distributed more than 2,300 items of monographs/CDs etc. during the year 2017-18. In addition, ~14,000 copies of the periodical (*Earthquake Engineering Practice*) were distributed. The electronic newsletter is now being sent to about 15,000 subscribers of NICEE, every month. In addition, information about important forthcoming workshops is also circulated using the electronic media.
- 2.3. NICEE continues to offer three levels of Institutional membership, viz. Platinum, Gold and Silver at ₹ 4.00 lakh and above (US\$ 10,000 and above), ₹ 1.00 lakh and above (US\$ 2,500 and above) and ₹ 25,000 and above (US\$ 550 and above) respectively. As on date we have one Platinum (CSI Berkley), two Gold (PNC Infratech Ltd., Agra and IIT Gandhinagar) and one Silver subscribing member (Balbir Verma and Associates, New Delhi).
- 2.4. Efforts continued in the direction of engaging the undergraduate students of architecture towards earthquake safety. The annual architecture workshop was conducted at IIT Kanpur for the tenth time during July 08- 15, 2017 in which 56 students from 16 architecture colleges representing 14 cities of India participated.



- 2.5. The annual Literature Review Workshop for PG students of Civil Engineering was held for the sixteenth time during June 01-10, 2017. This was attended by 11 participants from 5 colleges across India.
- 2.6. The project aiming to sensitize the school going children about seismic safety which was started in 2009 has met with reasonable success during the year. More than 450 schools from about 130 cities across the country have participated till date. Like previous years, the final round of the quiz was conducted at IIT Kanpur on January 26 in the remembrance of the Bhuj earthquake. The winning team was from Bhavan's Bhagwandas Purohit Vidya Mandir, Nagpur.
- 2.7. The sales of publications during the year 2017-18 was ₹ 8.58 Lakh (against ₹ 17.43 Lakh the previous year) with average sale of ₹ 3,274/- (against ₹ 3,058/- the previous year).
- 2.8. Donations received during the year 2017-18 totaled ~₹ 13.95 Lakh from 61 donors (average donation ₹ 21,455), as compared to 82 donors during the previous year who contributed ₹ 6.44 Lakh. Since inception, NICEE has received ~ ₹ 112 Lakh as donations from 539 unique donors (besides the original sponsors) indicating tremendous appreciation of NICEE's work by the professional community in India and overseas and society at large.
- 2.9. The total expenditure during the year 2017-18 was ~₹ 51 Lakh (~₹ 50 Lakh the previous year). This was covered by Sales (16%), Donations (11%), Sponsorship (17%) and Interest income (56%).

3. Initiatives towards architects

- 3.1. Cdr. Ailawadi briefly informed the members present regarding the workshop for the third year undergraduate students of Architecture which was being held annually since 2008.
- 3.2. The 8 day "Workshop on Earthquake Resistant Practices for Undergraduate Students of Architecture" was conducted at IIT Kanpur during July 08-15, 2017, in which 56 students who had completed six semesters of studies in their respective architecture programmes, from 16 institutes representing 14 cities from all over India participated. The participants were selected from around 100 applications received. The following faculty members were the resource persons of the workshop:

- Prof. Keya Mitra, IEST, Shibpur, Howrah
- Prof. Vasudha Gokhale, Dr. B.N. College of Architecture for Women, Pune
- Prof. Atanu Dutta, Jorhat Engineering College, Jorhat
- Prof. Meera Shirolkar, Dr. B.N. College of Architecture for Women, Pune
- Prof. Ruchira Das, IEST, Shibpur, Howrah
- Prof. Vaibhav Singhal, IIT Patna

Six designs that incorporated earthquake resistant features without compromising the host of other requirements such as functionality, climate, etc. were shortlisted during the initial round by a Jury Board. The Jury Board consisted of Ar. Balbir Verma, Practicing Architect, New Delhi; Ar. Narendranath Mitra, Practicing Architect, Kolkata; Prof. OR Jaiswal, VNIT Nagpur, Nagpur and Prof. Vaibhav Singhal, IIT Patna, Patna. The jury looked particularly for a clear understanding of structural system that would be effective in withstanding earthquake loads. The top three position holders were as follows.



First Position

Ashwini Desai, Smt. Manoramabai Mundle College of Architecture, Nagpur
Bira Shukla, Chitakara School of Planning and Architecture, Rajpura

Second Position

Akansha Chourasia, Smt. Manoramabai Mundle College of Architecture, Nagpur
Atika, Maharaja Agrasen University, Solan

Third Position

Vaishnavi Charade, Maharaja Agrasen School of Architecture & Design, Solan
Pragati Golcha, National Institute of Technology, Raipur

- 3.3. During the workshop the participants were given a copy of RESIST software which they used during the workshop and then carried with them as their personal copy.
 - 3.4. Prof. Mitra stated that the participants were more or less from the same and states prone to earthquake were not represented in the workshop. Ar. Verma suggested to approach the other colleges through the Council of Architecture.
 - 3.5. Prof. Mitra also suggested that to enhance the understanding and propagation of Confined Masonry as an alternate building typology, the design problem during the 2019 workshop should be based on this subject. This proposal was appreciated and accepted.
- 4. Workshops, Open House and Inter School Quiz @ IITK:**
- 4.1. PG student Literature Review workshop was held during June 01 -10, 2017 in which 11 students from 5 colleges all over India had participated. In this workshop the participants were encouraged to make use of available literature at NICEE library and PK Kelkar Central Library for doing quality research work. A visit to the National Wind Tunnel Facility at IIT Kanpur along with a visit to the various laboratories of Civil Engineering was also organised, so that the participants get abreast with the latest available technologies in the country. More than 85% of the participants were satisfied with the workshop and downloaded approximately 5 GB of data and Xeroxed 300 pages each.
 - 4.2. Open House was attended by 5 participants for a period of ten days during November 01 – 11, 2017, although 12 participants had indicated their intent to attend the same. This was due to last minute backing out of participants due to personal reasons.
 - 4.3. The Inter School Quiz which was being held annually since 2009 was a grand success with more than 450 schools from about 130 cities having participated in the quiz till date. 43 schools from 23 cities showed their willingness to participate in the quiz this year. In the final round of the quiz on 26 January, 9 schools - who were the winners of their respective preliminary rounds, viz. DPS, Agra; DAV, Ludhiana; BVB Prism School, Satna; Bhavan's Bhagwandas Purohit Vidya Mandir, Nagpur; Faridabad Model School, Faridabad; SKNS PMC Vivekananda Vidyalaya Junior College, Chennai; K. D. Ambani Vidyamandir, Jamnagar; Pooranchand Vidyaniketan, Kanpur and Sheiling House School, Kanpur participated. The quiz had four rounds viz. Round Robin, Picture Round, Rapid Fire Round and Lucky number Round. The questions were based on the publication "Earthquake Tips" by Dr. CVR Murty. The winning team of the finals with 80 points was



Bhavan's Bhagwandas Purohit Vidya Mandir, Nagpur. The team from DAV, Ludhiana secured the second position scoring 73 points while the team from Sheiling House School, Kanpur scored 71 points to bag the third position.

- 4.4. Prof. Jain suggested that to improve the participation in the quiz, a letter of appreciation be sent to the Principal of the school and the mentor teacher. He also suggested that prize money for the winners be enhanced suitably.

5. Translation Projects:

- 5.1. The committee was informed that the Hindi, Marathi and Punjabi translation have been completed and available as a soft copy on website. The translation of the tips in Telugu, Turkish and Nepalese has been completed and is presently under review. The translation in Gujarati, Oriya, Burmese, etc. is being attempted.
- 5.2. It was suggested that attempts should be made to translate the *Confined Masonry – A guidebook for technicians and artisans* into Assamese language for its spread in the North Eastern Region of the country.

6. Improvements in NICEE Website:

- 6.1. Prof. Rai informed that the new website of NICEE is being developed and suggestions on the same will be sought shortly. After the WCEE papers have been uploaded on NICEE's website there has been a marked increase in the traffic on the website and ~1GB of download per day was reported. Prof. Jain suggested that this page could be used to leverage for NICEE and IIT Kanpur.
- 6.2. Facebook page of NICEE is very active and updates are posted on it from time to time.
- 6.3. A need for an Architect Corner on the website had been felt in previous meetings to address seismic safety issues relevant to the architecture community. Suggestions for the same are welcome.

7. Publicity and Brand Building:

- 7.1. Cdr Ailawadi informed that there was a fair increase in the growth of NICEE registrations. The EERI e-affiliate membership being offered through NICEE was helping the members to keep abreast with the international scenario in the field of Earthquake Engineering and it should be promoted more energetically to attract more attention among professionals engaged in earthquake engineering.
- 7.2. Mails be sent to participants of previous workshops to help in spreading the word for the same and entuse more participants to apply for the same.

8. Distribution and Sales of Publications

- 8.1. It was felt that the sales income of NICEE should be pushed up and a sales target of ₹ 12 Lakh was decided for the next financial year. The price of all publications needs a review for an upward revision.
- 8.2. The members were informed that the attempts to sell NICEE publications through Amazon did not materialize as no interest was shown by them. They may be enthused after the price of the publications is increased.



9. New Publications and Products

- 9.1. The revised and enhanced edition of *Earthquake-Resistant Confined Masonry Construction* authored by Prof's Svetlana Brzev and Keya Mitra is now available. The committee expressed their gratitude to the authors.
- 9.2. Prof. Rai informed that 8 more Earthquake Tips authored by Prof. CVR Murty have been added and the hard copy of the same is now available. The committee expressed their gratitude to the author.
- 9.3. The review of *Architectural Teaching Resource Material on Earthquake Design Concepts for Teachers of Architecture Colleges* was strongly felt. A broad overview of the changes required needs to be formulated before attempting the revision.
- 9.4. Dr. Bajpai suggested for a new publication on retrofitting issues.
- 9.5. On the survey conducted for the quarterly periodical – Earthquake Engineering Practice – about 600 responses were received. The respondents expressed satisfaction over the periodicity (43.1% in favour of quarterly), number of articles (77.3% for 6 articles), content (77.9% for 120 pages) and quality of articles (82.6% rated it above average). It was decided to continue the periodical quarterly. Prof. Jain suggested that the individuals who did not respond to the survey be given an option to continue receiving the same on payment.
- 9.6. The projects of translation of NICEE publications into vernacular be pursued with more vigour. The necessity to undertake the same should be analysed critically before taking up the translation work.

10. Financial Position

- 10.1. The Committee expressed its gratitude towards Mr. Ashraf Habibullah, Computers and Structures Inc (CSI) USA and Mr. Rajiv Shamra and Mr. Hemant Kumar of CSI India for their very substantial financial support.
- 10.2. The "Institutional Membership" wherein the organizations could contribute ₹ 25,000/year (or more) has met with a reasonable success. The current members are:
 - (a) Platinum Subscribing Members (₹ 4 Lakh/ year and above)
 - Computers & Structures Inc, Berkeley, USA
 - (b) Gold Subscribing Members (₹ 1 Lakh/ year and above)
 - PNC Infratech Ltd., Agra
 - Indian Institute of Technology Gandhinagar, Gandhinagar
 - (c) Silver Subscribing Members (₹ 25000/ year and above)
 - Balbir Verma and Associates, New Delhi

11. Other Future Activities

- 11.1. Prof. Rai suggested that a Workshop for young researchers associated with the field of Earthquake Engineering be held. Prof. Jain suggested a Young Researchers Conclave be given a try. Also, a conclave for Young Faculty related to Earthquake Engineering can be thought of.
- 11.2. Prof. Jain suggested concerted efforts for awareness activities in the North-Eastern Region be taken up. If need be, a designated amount be allocated towards this activity and the younger faculty be given a free hand to design the required programme and activities.



11.3. It was also suggested that the annual meeting of NAC be scheduled in February/ March each year based on availability of committee members.

There being no other points, the meeting was adjourned with a vote of thanks to Ar. Balbir Verma for chairing the meeting.



Durgesh C. Rai
Convener, National Advisory Committee
National Information Centre of Earthquake Engineering
Indian Institute of Technology Kanpur

