



NEWSLETTER

January–August 2023

Co-Editor: Varun K. Singla

Indian Society of Earthquake Technology

(Established in 1962; Registration No. 845/64-65)

Department of Earthquake Engineering Building

Indian Institute of Technology Roorkee, Roorkee-247 667, India

(Affiliated to International Association for Earthquake Engineering)

Tel. No. 01332-284491 | E-mail: office@iset.org.in | <http://www.iset.org.in>

Message from President, ISET



Dear Fellows/Members,

I feel highly honoured and humbled to be elected unopposed as the President of Indian Society of Earthquake Technology. I am grateful to ISET members for giving me an opportunity to serve as a president of the society and thank them for their trust and confidence in me. I have taken charge of the office along with other members of Executive Committee on 26th April, 2023 for a term of two years. We propose to work closely with all the members of the society and further stimulate society activities to meet the objectives of ISET.

One of the most important agenda of this two-year term is to rejuvenate the local chapters and initiate formation of student chapters, since these are the pillars and wings of the society. Unfortunately, at many chapters, elections have not been held for a long time and as a result these chapters are dormant. With a view to make such chapters active as early as possible, necessary steps are already being taken. We are also in the process of starting new chapters in cities/states where the society does not have one.

One of the flagship events of the society is the “8th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics (8th ICRAGEE)” to be tentatively organized in December 2024. Also, it is high time that ISET along with other stakeholders bid for organizing the 19th World Conference on Earthquake Engineering (19WCEE) in India in the year 2028.

Another important item is the “ISET Journal of Earthquake Technology”. We aim to make this a journal of international repute. This will require timely publication of all the issues with a reputed publisher. The Executive Committee is in process of finalizing a strong editorial board and we request all members of the society to submit their research work to this journal. I assure you of a timely processing of the submitted manuscripts.

To expand its activities, ISET envisions collaborations with other societies and organizations in the country, such as Indian Geotechnical Society, Indian Association of Structural Engineers, CSIR Labs etc. ISET also aims to collaborate with internationally reputed societies such as EERI, ISSMGE, ASCE, etc. and to strengthen its base in the SAARC countries. Additionally, the Society shall strengthen its interaction with industrial partners working in the area of Earthquake Engineering in the country.

The profession of Earthquake Engineering has undergone a rapid transformation in the past few decades. ISET thus needs to make strenuous efforts to not only keep the pace with the latest developments in this profession but to also increase its visibility by transferring the benefits of research in earthquake engineering to the society and common man at large. In addition to providing a forum for researchers and professionals to come together and exchange ideas and solutions to issues related to earthquake technology, ISET should also play an instrumental role to raise awareness about earthquake safety and earthquake-resistant technologies in the society.

I hereby solicit the support and active participation of all Fellows and Members of the Society in accomplishing the aforementioned tasks and objectives in order to make ISET more vibrant and fruitful. I also welcome your valuable inputs to make ISET more responsive towards the needs of the general public and other stakeholders and for searching sustainable solutions to the problems related to Earthquake Technology. To have wholesome participation, please encourage everyone working in the area of Earthquake Technology to become a member of the society.

Finally, I take this opportunity to invite my younger colleagues to come forward and become part of this journey of ISET at a time when it is soaring to new heights and entering an exciting era of growth.

Dr. B. K. Maheshwari
President, ISET
August 24, 2023

From the Desk of the Secretary



I am honoured to be nominated as Secretary of ISET for the term 2023–2025. Indeed, it is my great pleasure to assume this responsibility. At the outset, on behalf of the ISET, I would like to thank the members of the outgoing Executive Committee (EC) for their tireless efforts during the previous two years for the society.

On behalf of the new EC, which took charge on 26th April, 2023, and on my personal behalf, I assure you that under the dynamic leadership of its President Prof. B. K. Maheshwari, Former Shamsher Prakash Chair Professor, Department of Earthquake Engineering, IIT Roorkee and Vice-President Prof. Vasant A.

Matsagar, Dogra Chair Professor, Department of Civil Engineering, IIT Delhi, we are determined to accelerate the functioning of ISET. All members of the new team are dedicated to rejuvenate and synergize the society. Efforts have already started for this noble cause and I seek cooperation of each and every member of ISET.

One of the most important agenda of this two-year term is to rejuvenate the Local Chapters and to form Student Chapters, and some steps in this direction have already been initiated. We also welcome opening new Chapters in the cities/states where these have not yet been established.

We have already updated the ISET website and are gearing-up for the timely publication of research articles in the ISET Journal of Earthquake Technology. I request all the members to come forward to enhance the membership of the society and help create vibrant atmosphere that breeds front runners, innovators, academicians, scientists, engineers, and entrepreneurs in earthquake engineering innovations. I welcome your thoughts and ideas in continuing our mission of excellence at ISET. Thank you and best wishes to all of you.

Dr. P. C. Ashwin Kumar
Secretary, ISET
Dept. of Earthquake Eng., IIT Roorkee

Message from Co-Editor, ISET



Dear Members of ISET,

I am honored to be nominated as Co-Editor for the term 2023–2025, and it is a pleasure to assume this responsibility. On behalf of ISET, I would like to thank the former Co-Editor, Dr. P. C. Ashwin Kumar, for his commendable services to the society and for his immense contribution in improving the quality of the Newsletter. I wish him plenty of success in his new role as Secretary of ISET.

I would like to take this opportunity to assure that all efforts would be made to further improve the quality of the Newsletter. In this regard, I invite suggestions from all members of ISET. Members may also send information that they wish to get published in the next edition of the Newsletter. Kindly send this information through email to office@iset.org.in (with a copy to singlav@eq.iitr.ac.in).

Best wishes,

Dr. Varun Kumar Singla
Co-Editor, ISET
Dept. of Earthquake Eng., IIT Roorkee

Call for Papers

Dear Colleagues,

It is our pleasure to inform you that the ISET Journal of Earthquake Technology is listed in **UGC-CARE**. All previous issues of the Journal are available at <https://iset.org.in/issues>

ISET Members are invited to submit the manuscripts of their research papers for possible publication in the ISET Journal of Earthquake Technology. The PDF of the manuscript should be electronically submitted to the journal editors at editor@iset.org.in. The submission may please be copied to ravi.jakka@eq.iitr.ac.in and drsahoo@civil.iitd.ac.in. For manuscript preparation guidelines and other information, please visit: <https://iset.org.in/>

Thanking you,

Prof. Ravi S. Jakka & Prof. Dipti Ranjan Sahoo
Editors, ISET Journal of Earthquake Technology

Felicitation Function

The Indian Society of Earthquake Technology and the Department of Earthquake Engineering, IIT Roorkee, organized a **Felicitation function** on April 26, 2023 in honor of **Prof. (Dr.) T. G. Sitharam**, Chairman, All India Council for Technical Education (AICTE) and President, ISET. The function was presided over by Prof. B. K. Maheshwari and commenced with the lighting of lamp. Prof. K. K. Pant, Director, IIT Roorkee addressed the gathering and presented a Citation to Prof. T. G. Sitharam, Later, Prof. Sitharam delivered a lecture on “**Foundation Alternatives for Ram Janmabhoomi Sri Ram Lalla Temple at Ayodhya, UP**”. The vote of thanks was given by Prof. V. A. Sawant, Secretary, ISET.

Following are some glimpses from the function:



Prof. T. G. Sitharam, Chairman, AICTE (left); Prof. K. K. Pant, Director, IIT Roorkee (middle); and Prof. B. K. Maheshwari, President, ISET (right)



Prof. K. K. Pant addressing the gathering



Prof. K. K. Pant felicitating Prof. T. G. Sitharam



Prof. T. G. Sitharam addressing the gathering



Prof. N. K. Samadhiya, CED, IIT Roorkee presenting Memento to Prof. T. G. Sitharam



The gathering listening to the lecture by Prof. Sitharam



Group photograph taken after the felicitation function

Promoting Academic Research and Industry Excellence (PRIME) Lecture Series

The Department of Earthquake Engineering, IIT Roorkee, along with the Indian Society of Earthquake Technology and Indian Geotechnical Society, organized the first seminar under the PRIME (Promoting Academic Research and Industry Excellence) Lecture series. These bimonthly seminars, coordinated by Prof. Ritesh Kumar (EC Member), aim to stimulate conversation among students, industry practitioners, and academicians for exchange of scientific ideas and information in the interdisciplinary areas of earthquake, geophysics, offshore/onshore oil-gas industry, civil, construction, and built-environment engineering. The Inaugural Lecture entitled “Use of Technology & Innovative Design to Overcome Construction and Design Challenges” was delivered on August 4, 2023, by Sri Praveen Kumar Rai, Joint General Manager and Head Design-Terminal, L&T Construction. The lecture was held in hybrid mode and was attended by over 200 people from academia and industry.



Sri Praveen Kumar Rai delivering the Inaugural PRIME Lecture

Calendar of Forthcoming Events

OCTOBER 10–13, 2023

Conference on ‘Future Directions in Physics-Based Ground Motion Modeling’, organized by the Seismological Society of America (SSA), is scheduled to be held at Vancouver, British Columbia. **For more details**, please visit: <https://www.seismosoc.org/groundmotion-2/>

OCTOBER 25–27, 2023

21st Southeast Asian Geotechnical Conference (SEAGC 2023) is scheduled to be held at Bangkok, Thailand. **For more details**, please visit: <https://seagcagssea2023.com/>; Email: seagc2023@gmail.com

NOVEMBER 20–22, 2023

2nd International Conference on Construction Resources for Environmentally Sustainable Technologies (CREST 2023) is scheduled to be held at Fukuoka, Japan. **For more details**, please visit: <https://www.ic-crest.com/>; Email: info@ic-crest.com

DECEMBER 14–16, 2023

Indian Geotechnical Conference 2023 (IGC-2023) on ‘Geotechnical Advances in Sustainable Infrastructure Development and Risk Reduction’, organized by Indian Geotechnical Society, Roorkee Chapter, IIT Roorkee and CSIR-CBRI, Roorkee, is scheduled to be held at IIT Roorkee. **For more details**, please visit: <https://igc2023.com/>; E-mail: igc2023roorkee@gmail.com

MAY 7–10, 2024

8th International Conference on Earthquake Geotechnical Engineering (8ICEGE) is scheduled to be held at Osaka, Japan. **For more details**, please visit: <https://confit.atlas.jp/guide/event/icege8/top?lang=en>

JUNE 30–JULY 5, 2024

18th World Conference on Earthquake Engineering (WCEE2024) is scheduled to be held at Milan, Italy. **For more details**, please visit: <https://www.wcee2024.it/>; Email: wcee2024@aimgroup.eu

JULY 8–10, 2024

11th International Conference on the Behavior of Steel Structures in Seismic Areas (STESSA 2024) is scheduled to be held at Salerno, Italy. **For more details**, please visit: <https://stessa2024.it/>

Brief Report on 1st Webinar Series on Geotechnical Earthquake Engineering (GEE) (December 2021 – December 2022)

The Department of Earthquake Engineering, IIT Roorkee, and the Indian Society of Earthquake Technology organized the first series of geotechnical earthquake engineering webinars under Shamsher Prakash Chair, IIT Roorkee from December 2021 to December 2022. These webinars are also supported by the Indian Geotechnical Society (IGS) Roorkee Chapter, CSIR - Central Building Research Institute (CBRI), Roorkee, and TC203 of ISSMGE.



This webinar series is in honor of **Dr. Shamsher Prakash, Professor Emeritus, Missouri Science and Technology**, for his contributions to geotechnical earthquake engineering. Prof. Prakash is an international expert in soil dynamics and earthquake engineering. He has published three books in India and four books in the USA as well as over three hundred technical papers.

Prof. Kenji Ishihara, Chuo University, Japan inaugurated the GEE webinars on December 8, 2021. He has been affiliated with the University of Tokyo since 1977, taking the position of professorship in geotechnical engineering. In 1995, he took up the position of Professor of Geotechnical Engineering at the Tokyo University of Science and then at Chuo University.



1st GEE Webinar entitled “**Mechanics-based Evaluation of Soil Liquefaction**” was delivered on December 8, 2021 by **Prof. Misko Cubrinovski**, University of Canterbury, New Zealand, and Chair of TC203 of ISSMGE. While over 360 people registered for the webinar series, a total of 293 participants attended the inaugural webinar which included 59 foreign delegates from 13 countries.

2nd GEE Webinar entitled “**Ground Water is More Important in Triggering Landslides than so far Supposed**” was delivered on January 27, 2022 by **Prof. Ikuo Towhata**, Prof. Emeritus, University of Tokyo, Japan. There were more than 595 registrations, and a total of 251 participants (including 50 foreign delegates from 11 countries) attended the webinar.



3rd GEE Webinar entitled “**Seismic Analysis of Levee Systems**” was delivered by **Prof. Scott J. Brandenburg**, University of California at Los Angeles, USA on February 10, 2022. Of the (more than) 686 registered participants, a total of 209 attended the webinar including 32 foreign delegates from 7 countries.

4th GEE Webinar entitled “**Stochastic Analysis of Seismic Ground Response**” was delivered by **Prof. Sebastiano Foti**, Politecnico di Torino, Italy on March 24, 2022. While more than 700 participants registered, 125 attended and this included 26 foreign delegates from 5 countries.



5th GEE Webinar entitled “**Vulnerability Assessment and Retrofit of Existing Bridge Foundations**” was delivered by **Prof. Ioannis Anastasopoulos**, ETH Zurich, Switzerland on April 13, 2022. With registrations exceeding 860, a total of 155 delegates attended the webinar including 29 foreign delegates from 6 countries.

Prof. Jonathan D. Bray, University of California, Berkeley, USA, delivered the 6th GEE Webinar entitled “**Selection of Seismic Coefficient in Assessing Seismic Slope Stability**” on May 11, 2022. While more than 1005 people registered for the webinar, 178 attended it which included 37 foreign delegates from 8 countries.



7th GEE Webinar lecture was delivered on June 07, 2022 by **Prof. Deepankar Choudhury**, Prof. T. Kant Chair Professor, IIT Bombay and entitled “**Design Solutions for Complex Geostuctures under Dynamic Loadings: Case Studies**”. Of the 1305 registered participants, 239 attended the webinar and this comprised 23 foreign delegates from 7 countries.

8th GEE Webinar was delivered by **Prof. Kyle Rollins**, Brigham Young University, USA on July 28, 2022 and entitled “**Liquefaction-Induced Downdrag in Single Piles and Pile Groups**”. A total of 160 participants attended this webinar, which including 29 foreign delegates from 12 countries. The registered participants were more than 1265.



9th GEE Webinar entitled “**Engineering Preparedness for Earthquake Disaster Mitigation - Towards Disaster Resilience Society**” was delivered by **Prof. T. G. Sitharam**, Indian Institute of Technology Guwahati, India on August 26, 2022. While more than 1350 participants registered, a total of 150 attended the webinar including 15 foreign delegates from 6 countries.

Prof. George Gazetas, National Technical Univ. of Athens, Greece delivered the 10th GEE Webinar entitled “**Design of Rocking Foundations for Seismic Safety and Resilience**” on September 20, 2022. More than 1400 people registered and 195 participants attended the webinar (including 33 foreign delegates from 8 countries).



The 11th and final GEE Webinar was held on November 22, 2022. It was delivered by **Prof. M. Hesham El Naggar**, Distinguished University Professor, Canada and entitled “**Performance-Based Design of Extended Pile Shafts Subjected to Cyclic Loading**”. While registrations exceeded 1400, a total of 195 participants attended the webinar including 27 foreign delegates from 5 countries.

Following the successful completion of the 1st GEE Webinar series, a valedictory ceremony was held (in hybrid mode) on December 9, 2022. **Prof. Izzat M. Idriss**, University of California Davis, USA was the chief guest and **Prof. Kenji Ishihara** was the guest of honor. The ceremony was followed by a panel discussion with the speakers of the webinar series and this was moderated by **Prof. Misko Cubrinovski**.



The GEE Webinar Series has been chaired by **Prof. B. K. Maheshwari**, former Vice-President, ISET and Shamsheer Prakash Chair Professor, IIT Roorkee. The **recording of each webinar is available at:** <https://www.iitr.ac.in/geewebinars/speakers.html>. Further, the **Abstract Volume can be downloaded from:** <https://www.iitr.ac.in/geewebinars/pdf/book.pdf>.

Book “Guidelines for Earthquake Resistant Non-Engineered Construction”

The Society has reprinted (on no-profit/no-loss basis) 500 copies of the book entitled “**Guidelines for Earthquake Resistant Non-Engineered Construction**”, which was originally published by UNESCO in 2014. This publication has been brought out with prior permission of the original publisher (UNESCO) and the authors, Anand S. Arya, Teddy Boen, and Yuji Ishiyama. The cost of this publication is Rs. 300/-. Interested individuals can obtain a copy from Secretary, ISET, Roorkee after paying Rs. 300 + postage charge.

Activities of ISET and Local Chapters

ISET Guntur Chapter organized an **Online Workshop** on “Sustainable Construction for Disaster Mitigation” during March 23–24, 2023, in association with Student Chapter, Department of Civil Engineering, Velagapudi Ramakrishna Siddhartha Engineering College (VRSEC) and IGS-VRSEC Guntur Chapter.

National Institute of Technology Karnataka, Surathkal, in association with **ISET**, organized an **International Conference** on “Sustainable Infrastructure: Innovation, Opportunities, and Challenges – 2023 (SHOC – 2023)” during April 20–21, 2023.

Centre for Disaster Mitigation and Management (CDMM), VIT Vellore, in association with **ISET Vellore Chapter**, organized a **Workshop** on “Earthquake Resistant Design of Concrete Structures and its Mitigation Techniques” on April 28, 2023. Experts from IIT Madras and VIT Vellore delivered lectures on topics such as ‘design of concrete structures for seismic forces’, ‘significance of soil-structure interaction’ etc. Participants from both industry and academia attended the workshop.

ISET co-hosted the **International Conference on Interdisciplinary Approaches in Civil Engineering for Sustainable Development (IACESD-2023)**. This event was organized in hybrid mode under the banner of **G20 C20** by **Jyothy Institute of Technology, Bangalore** during July 7–8, 2023 and was supported by CIIRC, KSCST, ICI, IGBC, VTU, Amrita Vishwa Vidyapeetham and ISTE.

The **Indian National Committee on Large Dams (INCOLD)** in association with Central Board of Irrigation & Power (CBIP), New Delhi; Department of Earthquake Engineering, IIT Roorkee; and **ISET** organized its second curtain raiser **National Level Workshop** on “Seismic Response Analysis of Dam - Numerical Analysis” during August 24–25, 2023 at Department of Earthquake Engineering, IIT Roorkee. The workshop was attended by over 70 people from academia and industry in hybrid mode.

Attention ISET Members

Please send your latest/working Email ID and Mobile/Telephone number to the ISET office in the following format:

Name & Address	Permanent Address	
	Current Address	
Membership No.		
Email ID (preferably Gmail)		
Mobile/Telephone No.		

ISET Office will update the above information in the database and use the same for future correspondence. Please send the above information at the earliest.

Online Application for ISET Membership

The homepage of the Society has been updated and a new online membership platform has been created to facilitate joining of new members. For applying membership online, please log on to: <https://www.iset.org.in/signUpUserForm>

ISET Membership Corner

The Executive Committee of ISET extends a hearty welcome to the following Members, who have been admitted to the Society during the period November 15, 2022 to August 28, 2023.

Life Fellows:

LF 63	Prof. N.K. Samadhiya	CED, IIT Roorkee
LF 64	Prof. O. Eswara Reddy	Chairman-BoS and Former Prof. CED, Tirupati

Life Members:

LM 1860	Er. Rahul Ganguli	Structural Consultant, Dolphin, Kolkata
LM 1861	Er. Radhika Prakash Pajgade	Ph.D. Student, IIT Bombay
LM 1862	Dr. Simanchal Padhy	Earth Sciences Dept., IIT Roorkee
LM 1863	Dr. Divyalakshmi K.S.	NIRM, Bengaluru
LM 1864	Dr. Vikalp Kumar	NIRM, Bengaluru
LM 1865	Dr. V.R. Balasubramaniam	NIRM, Bengaluru
LM 1866	Dr. Abhishek Kumar	CED, IIT Guwahati
LM 1867	Dr. Sumer Chopra	Director, ISR, Gandhinagar
LM 1868	Dr. K.K. Kiran	CED, SJBIT, Kengeri, Bengaluru
LM 1869	Er. Hari Padmanabhan M.P.	RS, Srinivas University, Mangaluru
LM 1870	Er. Pavan Kumar Thippa	Research Scholar, NIT Raipur
LM 1871	Er. Hemanth Kumar Karaka	Research Scholar, NIT Raipur
LM 1872	Er. Bansode Ravindra Yashwant	Structural Engineer, Aurangabad
LM 1873	Er. Thilak Ranjith	Structural Consultant, Coimbatore
LM 1874	Dr. Pavan G.S.	CED, NITK Surathkal
LM 1875	Dr. Diptesh Chanda	Post-Doctoral RF, IIT Bombay
LM 1876	Dr. O. Eswara Reddy	CED. Sree Vidyanikethan Eng. College, Tirupati
LM 1877	Dr. Meghna Sharma	Post-Doctoral RF, IIT Bombay
LM 1878	Prof. Dasaka Satyanarayana Murty	CED, IIT Bombay
LM 1879	Er. Anshuman Shukla	CEO, Retrota Technology (P) Ltd., Dehradun
LM 1880	Sri Alok Bhowmick	Structural Engineer, Noida
LM 1881	Dr. Aditya Singh	CED, IIT Roorkee
LM 1882	Dr. Dinesh Babu Nagwekar	Chartered Civil Engineer, Sindhudurg
LM 1883	Dr. Hari Kumar	Geo Hazards Society, New Delhi
LM 1885	Dr. Manojit Samanta	Principal Scientist, CSIR-CBRI, Roorkee
LM 1886	Dr. Kunjari Mog	Post-Doctoral RF, IIT Bombay
LM 1887	Dr. Sreekeshava K.S.	CED, Jyothy Institute of Tech., Bangalore
LM 1888	Mr. Ganesh C.R.	CED, Jyothy Institute of Tech., Bangalore
LM 1889	Ms. Bhargavi C.	CED, Jyothy Institute of Tech., Bangalore
LM 1890	Mr. Pavan Kumar V.	CED, Jyothy Institute of Tech., Bangalore
LM 1891	Dr. Manish Kumar	CED, IIT Bombay
LM 1892	Sri Mahendra K. Bhabal	SSOE Consultancy Pvt. Ltd.
LM 1893	Dr. Sumeet Kumar Sinha	Civil Engineering Department, IIT Delhi
LM 1894	Er. Anand Kumar Sonkar	Sr. Manager Tech., Arun Soil Lab Pvt. Ltd, LKO
LM 1895	Dr. Sohom Ray	Earthquake Engineering Dept., IIT Roorkee
LM 1896	Dr. Deepak Yadav	DEQ, IIT Jammu
LM 1897	Er. S. Ramaraj	CCL Consultancy, Coimbatore
LM 1898	Dr. Anindya Pain	CSIR-CBRI, Roorkee
LM 1899	Dr. Narayan Roy	CED, Jadavpur University, Kolkata
LM 1900	Dr. Rahul Bhartiya	CED, IIT (ISM), Dhanbad
LM 1901	Er. Kingshuk Jana	CED, IIT (ISM), Dhanbad
LM 1902	Dr. Srikrishnan Siva Subramanian	CoEDMM, IIT Roorkee
LM 1903	Dr. Mohit Agrawal	Dept. of Applied Geophysics, IIT Dhanbad
LM 1904	Dr. Koushik Roy	CED, IIT Patna
LM 1905	Dr. Kavitha B.	CED, NIT Warangal
LM 1906	Dr. Lohitkumar Nainegali	CED, IIT (ISM), Dhanbad
LM 1907	Dr. Yati Aggarwal	Research Associate, IIT Mandi
LM 1908	Dr. Madhavi Latha Gali	CED, IISc, Bangalore

Annual Members:

AM 891	Ms. Akshara S.P.P.	RS, NIT Calicut
AM 892	Sri Om Aditya Verma	Institute Works Department, IIT Roorkee
AM 893	Sri Karuppasamy Kalimuthu	SGE, AECOM, Sivakasi, TN
AM 894	Dr. Ashok Kumar Dhawan	New Delhi
AM 895	Aakash Varma	Research Scholar, VNIT, Nagpur

Permanent Institution Member:

IM 136(P)	Principal, Jyothy Institute of Tech., Bangalore
-----------	---