# IAStructE news Ietter

Newsletter of the Indian Association of Structural Engineers www.iastructe.co.in February 2022

# **MESSAGE FROM THE PRESIDENT**



Dear Colleagues,

Hope you are doing good. I am happy that our association is publishing newsletters and Structural engineering Digest [SED] regularly and on time. Next issue of SED is on the theme 'Precast & Prefabricated Structures' with Dr Gaurav Rastogi as guest editor. You may contribute technical paper or case study for the publication. Our editorial committee shall be happy to consider it for publication as per their process.

Last month we were fortunate to listen to the lectures of Dr. Mike Cook & Mr. Will Arnold on Engineering in a climate Emergency. It was very well attended, and a very interesting program organised by our association jointly with IStructE UK. In future we will try to organise many such programs jointly with other international bodies with whom we have MOUs. A half day course on Ethics & Professionalism in Structural engineering was also very well received by the fraternity. Ethics is and should always be at the core of any profession including ours. IAStructE has also announced its next refresher course on "Assessment, Repair & Rehabilitation of Bridges". It shall start on 18th of March and conclude on 15th April 2022. Registration process is on. You may nominate yourself for the course. I will appreciate if you share this information with your engineering friends who may be interested in attending it.

Governing Council meeting of IAStructE was held on 25th February. Many important issues were discussed. Soon we will announce new initiatives. We are also planning to start written test to check competence before enrolling new members. A committee to suggest and develop systems & procedures has been constituted for this purpose.

Looking forward to your feedback and active support.

Best regards, May Kime

Manoj Kumar Mittal President-IAStructE

## FROM THE EDITOR'S DESK



Warm greetings to all the readers !!

The Latest edition of the newsletter highlights the felicitation of Mr. Sandeep Shah, Fellow IAStructE by Shri Nitin Gadkari for his exemplary contribution to the cause of promoting earthquake safety in India. Some

glimpses of the GC meeting and webinars along with students chapter activities are covered. Request all our readers to follow, subscribe and like IAStructE events on all digital platforms.

Thanks & Regards,

Dr. Visalakshi Talakokula

IAStructE Newsletter \* February 2022 \*

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#### IAStructE Governing Council Meeting

The 97th Governing Council meeting of IAStructE was held virtually on 25 February 2022 through Zoom. Attended by 24 members from different parts of the country. It was a very fruitful meeting in which various decisions were taken and the progress of the various committees was reviewed.

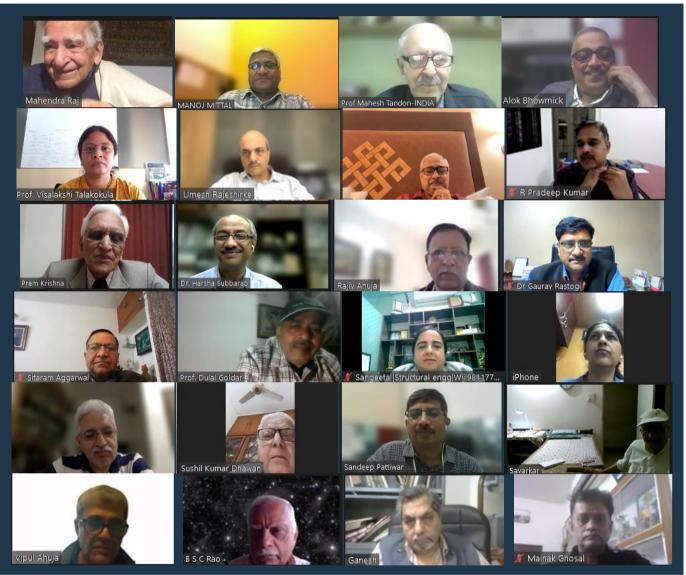


Fig.1. Glimpses from the meeting

#### WEBINARS/ EVENTS CONDUCTED

### 1. Lecture on "Engineering in a Climate Emergency"

The lecture on "Engineering in a climate emergency" jointly organized by IAStructE & IStructE, UK on 10 February 2022 through Zoom. Dr. Mike Cook, FIStructE, visiting Prof. Imperial College and Chairman, Seratech Ltd and Mr. Will Arnold, MIStructE, Head of Climate Action at IStructE, UK were the speakers. The session was oderated by Mr. Ashutosh Nene, IStructE India Representative (West). Vote of thanks given by Mr. Alok Bhowmick, Chairman Professional Development & Technical Events Committee & Immediate Past President IAStructE.





Fig.2. Glimpses from the webinar

#### 2. Half day Online Course on "Ethics & Professional Practice in Structural Engineering"

The half day online course on "Ethics & Professional Practice in Structural Engineering" was organized on 11 February 2022 through Zoom. Mr Manoj Mittal, President IAStructE and Consulting Civil/Structural Engineer, Prof. Mahesh Tandon, Past President IAStructE and MD, Tandon Consultants Pvt Ltd and Mr. Alok Bhowmick, Immediate Past President, IAStructE and MD, B&S Engineering Consultants Pvt Ltd were the speakers. The course was moderated by Dr. T. Visalakshi, Honorary Secretary IAStructE

The webinar can be viewed at the following link: https://youtu.be/HvfIq7Cz7eE



Fig.3. Glimpses from the course

## IASTRUCTE CEPT STUDENT CHAPTER ACTIVITY

**1.** Webinar on "Tunneling: Technology and Challenges" organized on 4 February 2022 by Dr. Manoj Verman, Tunneling & Rock Engineering Expert; and President, ISRM Commission

**2.** Webinar on "An architect's Notebook on Learning Structures" organized on 12 February 2022 by Mr. Sankalpa, Architect & Mr Anand Shah, Structural Engineer

**3.** Webinar on "Demountable ship container stadium: Design & Construction" organized on 25 February 2022 by Mr. Shashi Narayanan, Associate, Senior Sustainability Manager, WSP – Middle East

#### FORTHCOMING EVENTS

Event	Торіс	Speaker	Date & Timing
Online Workshop	Assessment, Repair & Rehabilitation of Bridges: Registration Link: http://iastructe.co.in/online-refresher- course.php	Eminent Experts from India & abroad have been invited	18 <sup>th</sup> March 2022 to 15 <sup>th</sup> April 2022 (every Friday from 03 PM to 06 PM)



## AN INTERVIEW OF PRESIDENT IAStructE MR. MANOJ KUMAR MITTAL PUBLISHED IN ASSOCIATION CORPORATE BUZZ

# AB. Please tell us when you joined IAStructE and what motivated you to join this association? Please share with us about your work and achievements as an engineer or researcher?

*Manoj Kumar Mittal.* I joined IAStructE in 2003. I am practicing as Civil & Structural Engineering consultant since 1992 after graduating from BITS-Pilani in 1985. Our organization engages in the structural engineering related services for buildings. Since then, we have designed more than one thousand structures of various magnitude and complexities. We also specialize in structural audit & retrofitting of buildings.

During the last three decades we have been able to contribute meaningfully to the profession. Our interest areas also include construction management & sustainability related aspects of the project. I joined IAStructE in 2003 since it was the only professional body in India dedicated to the structural engineering domain. All other professional bodies lacked the desired focus.

# AB. Specifically, what was the motivation behind the conception and organizational formation of the Indian Association of Structural Engineers? Please recount its brief history and major milestones reached in fulfilling its plans.

*Manoj Kumar Mittal.* The Indian Association of Structural Engineers, identified as IAStructE, was conceptualized and constituted in the year 2002 by a group of senior professional Structural Engineers from all regions of the country. IAStructE is a national body of structural engineers established with the objective to cater to the overall professional needs of structural engineers in India. IAStructE is purely a professional learned society with the prime objective of supporting and protecting the profession of structural engineering by upholding professional standards and acting as a mouthpiece for structural engineers in India.

The aim of the Association is to exchange knowledge and to advance the practice of structural engineering worldwide in the service of the profession and society. Now we have presence all over India. We have four regional centers. WE all encourage students to join as student members. We also try to establish student chapters in various engineering institutions. Members are selected after going through well laid down process of scrutiny of qualification & experience. With time It is growing in reach and impact.

# AB. How does IASE do its utmost to conduct the mission for the betterment of its members? How does IAStructE contribute to the overall professional needs of structural engineers?

*Manoj Kumar Mittal.* IAStructE deals with all aspects of structural engineering: the science and art of planning, design, construction, operation, monitoring and inspection, maintenance, rehabilitation and preservation, demolition and dismantling of structures, taking into consideration technical, economic, environmental, aesthetic, and social aspects. The prime areas of the association are conducting inservice training programs for newcomers entering structural engineering, updating senior structural engineering professionals / consultants by initial professional development (IPD), and continuing professional Development (CPD) programs to practicing civil & structural engineering professionals. The purpose of Association is to associate together and contribute to a common goal for upliftment of Structural Engineers fraternity in India at large. This further helps in advancement of strengthening of civil Structures of public utility and ensuring safety of Indian Citizens.



IAStructE has signed MoU with Institution of Structural Engineers (IStructE) UK, Japan Society of Seismic Isolation (JSSI), The Institution of Civil Engineers (ICE) UK, Structural Engineers Association of Northern California (SEAONC), Structural Engineers Association of Nepal (SEANep) for exchange of information and promotion of Structural Engineering profession.

The Association provides opportunity for all the members to develop skills in Structural Engineering and helps members to be at the forefront of Structural Engineering practice. Towards achievement of its aims and objectives, IAStructE is engaged in organizing the following:

- Continuing Professional Development (CPD) Courses for Professionals
- Refresher Courses for young & Practicing Engineers
- Seminars/Workshops/Conferences-in person, online & Hybrid mode
- Technical Lectures related to the latest technological advancements and Technical Discussions
- Publishing of Structural Engineering Digest (SED) Technical Journal of IAStructE
- Publication of code commentaries. Handbooks and guidelines

Members have full access to these documents & resources. Members also get significant discount in association's activities. Further affiliation with IAStructE significantly enhances the prestige & credibility of the members. Members also gets the opportunity to interact and network with well known renowned structural engineers.

# AB. With the advancement of Science – What are the majors strides Civil and Structural Engineering has taken in its own niche domain? Furthermore, we would like to know how "Structural Engineering helps us to fulfill our need for nature's bounty in the most efficient way possible."

*Manoj Kumar Mittal.* Emergence of new high performing construction materials / chemicals, analytical tools, vibration control devices & use of AI and data analytics has led to significant development and improvements in Structural Audit, Repair & Retrofitting, Structural Health monitoring of the structures. It has also led to complete automation and seamless integration of entire design and construction process. Increased focus on sustainability is propelling structural engineering to stretch beyond its traditional frontiers. Structural Engineering is an art and science of creating safe, innovative, and durable structures to fulfill the human needs by optimum and judicious use of natural resources for sustainable development. It is crucial for the development and sustenance of human race. All aspects of human life are touched by structural engineering. It is also key driver of any economy.

# AB. Can you highlight any recent activities or events that IASE has hosted considering the current challenges posed by the Pandemic and how have these activities/events helped the fraternity at large?

*Manoj Kumar Mittal.* In view of the pandemic due to the outbreak of COVID-19, IAStructE is organizing the online courses and webinars for the betterment of their members and other stakeholders. In the recent past IAStructE organized the Online Refresher Course on Design & Construction of Steel Bridges, during July-August 2021 and another online Refresher course on Seismic Rehabilitation and Retrofitting of Buildings, during September – October 2021. It also organized many webinars on the diverse topics related to structural engineering profession. The main objective of these Refresher Courses was to build capacity by throwing light on the current scenario, giving background information about the works done so far, new developments and to apprise the future strategies in the field. This format enabled engineers' members from all parts of India and abroad to attend the events. Even we were able to invite speakers from other countries as well. It improved the participation; quality of the events and large numbers of engineers were able to take benefit.



# AB. How badly has COVID-19 affected this industry? What has the epidemic taught us about the current state of your industry?

*Manoj Kumar Mittal.* COVID-19 has affected constriction industry very badly like many other sectors of the economy. It slowed down the customer's demand. Unavailability of resources and workforce during lockdown period was problem across all sectors of economy. Following COVID protocols and getting prepared for it also took some time. Apart from lifestyle changes in one's life at personal level lot of changes have happened the way we use to work. Now many of operations and most of our meetings are remotely managed. Automation, online & working from home have become quite common. Pandemic has caused lot of agony to most of us but also taught many lessons for time to come.

# AB. What are the top three major challenges surrounding the industry? What in your view are the current opportunities in this sector?

*Manoj Kumar Mittal.* In my view non-availability of skilled & trained workforce, absence of regulatory mechanism of engineering profession & lack of ethical professional practice are three major challenges. These issues need urgent attention of government. Solution of these involves combined coordinated efforts by government, academic institutions & professional bodies apart from other stakeholders. Affordable mass housing & infrastructure projects will be the areas in focus in time to come.

### AB. If you had to develop an even more radical vision for the association, what would it be?

*Manoj Kumar Mittal.* Merger/amalgamation of all associations in the domain of structural engineering, mandatory enrollment of all structural engineers based on written assessment test, periodical review after 5 years, complete automation of all processes of the associations and quality technical events in hybrid mode, termination of membership on disciplinary & non ethical practices and publication of quality journal of international standards would be my dream list.

#### AB. Also, we would like to know what keeps you busy when you are away from work?

*Manoj Kumar Mittal.* Listening music & podcast, going for long walks, reading books are my hobbies. Apart from I have started my podcast SamVad which is a deep and extended conversation with a guest on a particular topic. Till now I have done episodes on ethics and education. It is available on all podcast platforms like anchor, Spotify, apple & google etc.

The article may also be read from the following link: https://www.associationbuzz.in/2022/01/31/manoj-kumar-mittal-president-iase/

Message from IAStructE Social Media & Digitization Committee

## Let's get "DIGITIZED"

With all new look of our website and media handles, please follow us on all major media platforms. For joining us, below mentioned links to be pasted in browser. Let's join hands together to promote the profession of Civil Engineering.

1. on TWITTER as IAStructE :- https://twitter.com/iastructe

2.on **Facebook** as **IAStructE :-** https://www.facebook.com/IAStructE-100114022302316

3.on LinkedIn: The group is defined as Indian Association of Structural Engineers-IAStructE

https://www.linkedin.com/groups/6646248/

4.on YouTube as IAStructE Webinar. Subscribe and press bell icon

### ADVERTISEMENT TARIFFS

### Structural Engineering Digest (being published in PDF format)

	Rates Per issue	Discounted rate at 20% for 4 consecutive issues	Advertisement Size
Full Page	Rs. 20,000/-+ 18% GST	Rs 64,000/- + 18% GST	9.5 inch x 7 inch

#### IAStructE Monthly Newsletter (being published in PDF format)

- **Half page** : Rs. 7,000/- + 18% GST per issue, 10% rebate for quarterly, 20% rebate for half yearly and 30% rebate for yearly booking.
- **Full page :**Rs. 10,000 per issue, 10% rebate for quarterly, 20% rebate for half yearly and 30% rebate for yearly booking.

#### **MEMBERS** ACHIEVEMENT

Mr. Sandeep Shah, Fellow IAStructE was felicitated by the Honorable Minister of Road Transport and Highways of India Shri Nitin Gadkari on 23-Feb-2022 for his exemplary contribution to the cause of promoting earthquake safety in India."



## CALL FOR PAPERS FOR THE THEME BASED ISSUE OF SED JOURNAL

SED Editorial Board invites article contributions for the forthcoming issue of the Structural Engineering Digest on the following themes, which shall be published in e-book format. Details are as under:

#### January – March 2022 issue: Theme: Precast and Prefabricated Structures

#### Guest Editor-Dr. Gaurav Rastogi, GC Member IAStructE & Proprietor – Gaurav & Associates

#### Sub-themes:

- Environmental impact on precast concrete structures
- Precast concrete structures
- Prefabricated structures
- Performance of precast structures
- Performance of precast structural connections
- · Achieving sustainability with precast concrete
- prefabrication
- Eco-efficiency and building optimization, potential of prefabricated structures

Interested professionals may send the Full paper along with the abstract, photograph and brief resume by end of March 2022 at the earliest convenience.

#### April – June 2022 issue: Theme: Precast Segmental Bridges - State of The Art

#### Guest Editor- Mr. Alok Bhowmick, Immediate past President IAStructE

#### **Sub Themes:**

- Planning & Conceptual Design
- Construction
- Bridge Deck Erection Issues
- Detailed Design Considerations
- Failure Case Studies
- Rehabilitation Case Studies
- Structural Health Monitoring & Maintenance Issues
- Casting, Handling and Storing Precast Segments in Casting Yard

Interested professionals may send the abstract along with their photograph and brief resume by 15<sup>th</sup> March 2022 and full paper by end of March 2022 or at the earliest convenience.

Articles are invited from i) Members of IAStructE; ii) Specialists in the field even though they are not members of IAStructE.

Interested authors/ contributors may kindly mail to **iastructe@gmail.com** regarding i) Broad guidelines on areas of coverage; ii) size of the article; iii) format of paper submission.

As per the laid down procedures all the papers shall be sent to the referee for review and the comments will be informed to the authors for incorporating the same. Papers shall be published after peer review & approval of SED editorial board.



#### IAStructE PUBLICATIONS

**Commentary with Worked Examples for IRC:6-2017**: It is a document having commentary with worked example on IRC:6 2017 (The code for Loads & Load Combinations for design of Highway Bridges). This commentary is in two separate volumes. Volume-1 pertains to the Commentary while Volume-2 pertains to Illustrative Worked Examples. It has 48 worked examples demonstrating application of various codal clauses

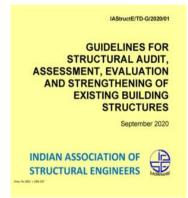
2020/02	IAStructE/TD-CC/202	IAStructE/TD-CC/2020/01
	COMMENTARY WITH WORKED EXAMP FOR IRC:6-2	COMMENTARY WITH WORKED EXAMPLES FOR IRC:6-2017
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AMPLE	VOLUME 2 OF 2 : ILLUSTRATIVE WORKED EXAN	VOLUME 1 OF 2 : COMMENTARY

It's a priced document and hence not freely downloadable.

The documents are available for sale @ Rs 1200/- for Volume 1, and @ Rs 800/- for Volume II. Members of IAStructE and IRC will be entitled for a discount of 10% on this amount. Interested professionals who wish to purchase the commentary may kindly register with the following link or contact IAStructE Secretariat at iastructe@gmail.com:

Registration link:http://iastructe.co.in/new-iastructe-publication.php

2. Guidelines for Structural Audit, Assessment, Evaluation and Strengthening of Existing buildings Structures :This document will guide structural engineers in proper assessment of building structures before issuing structural stability certificate. These guidelines may be used by IAStructE members, all other structural engineers, house owners, housing society welfare associations, clients and corporation engineers for understanding structural audit of the private and public building structures. The Guideline focuses on the urgent need to strengthen risk resilience of buildings from any kind of risks due to earthquake and other hazards. It is hoped that this document will be useful to ensure that all structures across the country remain safe from any kind of disaster risk.



It's a priced document and hence not freely downloadable.

The price of this e-document is Rs 200/-. Interested professionals who wish to obtain the soft version of the Guideline in pdf format, may register with the following link. Registration Link: http://iastructe.co.in/guidelines-for-structural-audit.php

**3. Commentary on IS: 13920:** The commentary is available on **www.iastructe.co.in** under IAStructE Professional Documents. IAStructE member can access this document after login.

**4. Commentary on IS: 1893 Part 1:** The commentary is available on **www.iastructe.co.in** under IAStructE Professional Documents. IAStructE member can access this document after login.



### ABOUT IAStructE

Indian Association of Structural Engineers (IAStructE) is the national apex body of structural engineers in India established with the objective to cater to the overall professional needs of structural engineers. The association has become the source of expertise and information concerning all issues that involve structural engineering and public safety within the built environment. It has no commercial aim or objective. IAStructE is purely a professional learned society with the prime objective of supporting and protecting the profession of structural engineering by upholding professional standards and acting as a mouthpiece for structural engineers. IAStructE endeavors to ensure that its members develop the necessary skill in structural engineering and work to the highest standards by maintaining a commitment to professional ethics and standards within structural engineering. IAStructE strives for continued technical excellence; advancing safety and innovation across the built environment. It also strives to make available to the Government, Public Sector and Private Sector - a credible source of well qualified and experienced Structural Engineers. A nationwide database of Structural Engineers has been compiled and is being constantly updated. IAStructE undertakes a broad range of technical activities which are aimed at information sharing and capacity building. The association provides opportunity for all the members to develop various skills in structural engineering and helps members to be at the forefront of structural engineering practice. Towards achievement of its aims and objectives, IAStructE is engaged in organizing the following: CPD Courses for Professionals at all levels Refresher Courses for Fresh Graduate Engineers, Student's orientation program, Seminars/Workshops, Technical Lectures by Experts, Technical Discussions on Contentious Issues. IAStructE is currently operating from four regional centers. These regional centres located in the Eastern, Western, Northern and Southern parts of the country effectively cater to the professional needs of members residing/practicing all over the country.

#### MEMBERSHIP BENEFITS

Membership of IAStructE is a sought after professional accreditation. Your membership of IAStructE can help you enhance your intellectual, academic, technical and professional status. It provides inter connectivity to the fellow professionals and the fraternity. Some of the benefits of membership is provided below:

- Complimentary magazine subscription: All members (except Student Members) receive a complimentary subscription to the Institution's flagship publication 'Structural Engineering Digest' (SED). Published quarterly, each issue allows members to remain connected to the association through the provision of technical papers, Industry and Institution News, Featured articles, Professional Guidance on everyday matters affecting the practicing structural engineers.
- Access to the professional documents
- Access to all Technical Lectures, organized every month, at no charge
- Access to Technical Discussions held regularly
- Access to the association's library (Including e-library)
- Discounts in attending Seminars and Workshops organized by the association
- Full on-line access to the current volume and entire e-archive of journal "Structural Engineering Digest (SED)", Refresher Course Materials, Technical Lectures, E-Newsletters and other Technical Resources of the Association.
- Opportunity to network with professional structural engineers of eminence and to meet potential employers in the association.
- Opportunities for professional development

#### HOW TO BECOME A MEMBER?

Membership form and details are available at http://www.iastructe.co.in/membership-form; For more information and other details contact the Indian Association of Structural Engineers Secretariat