



# IAStructE

# news letter

Newsletter of the Indian Association of Structural Engineers  
March 2019

## Message from the immediate past President



Dear Friends,

The e-Newsletter of IAStructE was started in October 2017. The main objective of the newsletter is to share news about the activities of the association and other important happenings in our profession with civil/structural engineering fraternity. It is being widely circulated to members and other professionals. I am happy to share that it is serving the purpose it was intended for. Editorial team of newsletter headed by Ms. Anal Seth deserves special appreciation for the same.

As you know, the 15<sup>th</sup> Annual General Meeting was held on 23<sup>rd</sup> March 2019 wherein the newly elected Governing Council for the session 2019-21 has been installed and Mr. Alok Bhowmick, Managing Director, B&S Engineering Consultants Pvt Ltd was unanimously elected as the new President of IAStructE for the term 2019-21. Mr. Bhowmick served the association with me as Honorary Secretary. I am fully aware about his potential and I am confident that the new Governing Council under the leadership of Mr. Alok Bhowmick will take several new initiatives for the betterment of our profession.

I once again express my sincere thanks to you all and outgoing Governing Council for extending enormous support during my tenure. I shall always be available for the IAStructE & profession.

Best Regards & Good Wishes,

  
**Manoj Mittal**

## Message from the President



It is my immense pleasure and proud privilege to accept the role of President of this esteemed Association. I am extremely thankful to the newly formed Governing Council members for the trust and faith they bestowed in me as the incoming President. I take the role of the President, with a strong commitment to work for the betterment of our fraternity.

With all the opportunities and challenges that come with my acceptance to serve our fraternity, I am of the belief that this journey will not be a smooth one if I am to walk it alone. However, I thank our founder members in general and Mr Mahendra Raj in particular for drafting the constitution of this association in such a manner that recognizes the importance and leadership of the Vice Presidents, Secretary, Treasurer, and various committee chairpersons. It is through collective participation and through this synergism that we are going to make sure that we achieve our goals.

Let me take this opportunity to acknowledge the achievements and initiatives that were undertaken by the immediate past President Mr Manoj Mittal and his team. They have raised the bar for the association and made our job a little easier by showing us our path. I am certain though, that with this team that we have in the Governing Council and with the support from our esteemed members, we will be able to reach greater heights and increase our outreach.

Structural Engineering is a wonderful profession which is a fine balance between art and engineering. Art without engineering is dreaming and engineering without art is mere calculations. In order to exploit the profession fully, which demands high degree of creativity, imaginative and innovative ideas, the structural engineers have to work hard and match their skills with their counterparts in the developed countries. This is a huge challenge and IAStructE is committed to work for the capacity building of structural engineers in the country.

Best Regards

AlokBhowmick

### Newsletter Editorial Team

Chief Editor: Er. Anal Sheth  
Editorial team members:  
Er. Manoj Mittal  
Er. Alok Bhowmick  
Er. Bhavin Shah  
Er. Maulesh Shah

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## Call for advertisement in Newsletter

The association invites sponsored advertisement for the IAStructE newsletter.

Annual advertisement (12 issues) of 1 page may be incorporated for INR 50,000.



Extraordinary General Meeting of IAStructE



15<sup>th</sup> Annual General Meeting of IAStructE



Social Event following AGM



Member Achievement: Prof. Mahesh Tandon



Social Event following AGM



Technical Lecture by Mr. K. P. Abraham



Refresher Course Session in Progress

Meetings: Agendas and Decisions	Member Achievements
<p><b>Extraordinary General Meeting (EGM)</b></p> <p>An Extraordinary General Meeting (EGM) of the Association was held 23rd March 2019 at New Delhi. In which the amendment in IAStructE Bye-laws pertaining to open the option of Life membership for Associate Members who have minimum 5 years of professional experience was adopted. 27 Corporate members attended the meeting.</p> <p><b>15<sup>th</sup> Annual General Meeting</b></p> <p>The 15<sup>th</sup> Annual General Meeting of Indian Association of Structural Engineers was held on Saturday, 23<sup>rd</sup> March 2019 at New Delhi, in which the Annual Report for the FY 2017-18 was approved; Audited Account for the year ended 31<sup>st</sup> March 2018 were passed and the same auditors were appointed for the ensuing year 2018-19. During the 15<sup>th</sup> Annual General Meeting held Mr Alok Bhowmick, Managing Director, B&amp;S Engineering Consultants Pvt Ltd was unanimously elected as the new President of IAStructE and the new elected Governing Council members were installed for the term 2019-21.</p> <p>The spouses of the Members were also invited to join the cocktail dinner just after followed by the AGM. Where some entertaining activities were organized for the spouses during the meeting time.</p>	<p><b>Prof. Mahesh Tandon, Past President and GC member IAStructE honoured with UKIERI (UK-India Education and Research Initiative) and NIT Jalandhar Awards</b></p> <p>Prof Mahesh Tandon was honoured with the above award for his Outstanding Contributions in the area of Cement and Concrete Science, Technology, Design and Construction at the UKIERI Concrete Congress held during 5-8 Mar 2019.</p> <p>Prof.Tandon graduated in 1962 from University of Roorkee (now IIT-Roorkee) in the field of Civil Engineering. During his illustrious career spanning 53 years, Mr. Tandon has made significant contributions in the development of a culture for innovation in structural engineering both within and outside his organization by sharing his expertise and experience. Since 1986, he is the Managing Director of Tandon Consultants Pvt. Ltd. He was appointed INAE Distinguished Visiting Professor for IITs at Kanpur, Roorkee, Gandhinagar during 2005-2015 by AICTE.</p> <p>Prof.Tandon is an international expert in the field of Structural Engineering. Many of the structures designed by him and his firm Tandon Consultants Pvt. Ltd. have been widely acclaimed and have received recognition internationally. He has spearheaded the development of new codes of practice and path-breaking bridge technologies suited to Indian conditions.</p>
<b>Technical Lectures</b>	<b>Forthcoming Event</b>
<p>Technical Lecture by Mr. K. P. Abraham, Former Chief Engineer, CPWD and Vice President (North), Indian Concrete Institute on the topic “Innovative Pre casting Technologies in Transportation Structures” was organized on 28th March 2019 at New Delhi.</p>	<p>The details of the Refresher Course on "Building Sustainable Structures: Green Concepts" starting in May 2019 at Bennett University, Greater Noida shall be announced soon.</p>

## Refresher Courses on “Wind Induced Forces & Effects on Buildings & Structures”

The Refresher Course on “Wind Induced Forces and Effects on buildings and structures” was organized from 02 February 2019 to 23<sup>rd</sup> March 2019 at PHD House New Delhi. This was a 32 hrs course with a lectures held on Saturday morning from 9.00 AM to 01.15 PM. It was attended by 51 delegates from various organizations. Er. (Dr.) Abhay Gupta, GC member IAstructE was the Course Coordinator. The course was very well appreciated by all the participants. Lectures were delivered by the following eminent speakers:

- Dr. Prem Krishna, Former Prof. IIT Roorkee
- Prof. P. D. Porey, Former Director, SVNIT Nagpur
- Dr. S. Arunachalam, Professor & Director (WEAC), Jaypee Univ. of Engg. & Tech., Guna
- Dr. Lakshmy Parameswaran, Chief Scientist, CSIR-CRRI, Delhi
- Dr. G. R. Sabareesh, Assistant Professor, Dept. of Mechanical Engg., BITS-Pilani, Hyderabad
- Dr. Sanjaya Kumar Patro, Professor & Head, (Civil Engg. Department ), VSS University of Technology, Odisha
- Er.(Dr.) Abhay Gupta, Director, Skeleton Consultants Pvt. Ltd.
- Mr. Rahul PS, Wind Engg. Specialist - Associate, RWDI Consulting Engineers (India) Pvt. Ltd
- Dr. Achal Mittal, Sr. Principal Scientist, CSIR-CBRI, Roorkee
- Dr. O. R. Jaiswal, Professor, VNIT Nagpur
- Mr. Rajan Govind, BES Consultants Pvt Ltd, Mumbai

The Question Answer & feedback session was organized on 23<sup>rd</sup> March 2019 the last day of lecture, in which Mr Sanjay Pant, Director & Head (Civil Engg) Bureau of Indian Standards (BIS) was invited as the Guest of Honour and Prof. Prem Krishna, Mr Rajan Govind and Dr Abhay Gupta as Panelists. Mr Sanjay Pant distributed the participation certificate to the delegates.

### Structural Engineering Digest:

The quarterly Journal of Indian Association of Structural Engineers

### Contents of last Issue

The Chairman and other members of the SED Editorial Board invite article contributions for the quarterly journal.

Write to [iastructe@gmail.com](mailto:iastructe@gmail.com) for

- ✚ Journal subscription
- ✚ Article Submission
- ✚ Sponsored Advertisement

Deadline for submission of next issue:

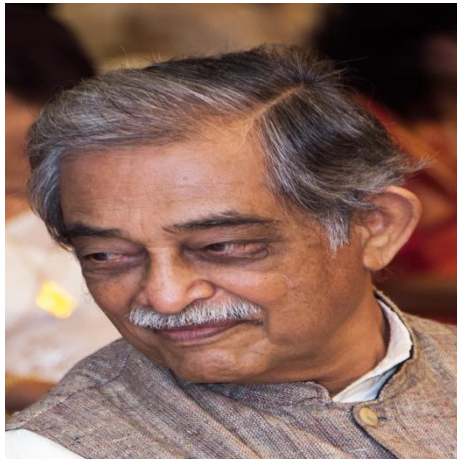
**1<sup>st</sup> May 2019**

Link to submission template and ethics and plagiarism policy will be shared shortly.

- Lecture on Engineers Day 2018: Sir Mokshagundam Visvesvaraya
- Applications of Natural Rubber Bearings for Protection of Civil Engineering Structures against Earthquakes
- Application of Vibration Control in The Indian Landscape & Need for Important Provisions for Future Codes
- Structural Retrofit of Heritage Building Using Seismic Isolation
- Sri Sathya Sai Sanjeevani Hospital at Ballabgarh, Haryana
- Cracking in Concrete and its effect on Post-Installed Anchorages
- High performance Concrete
- Strength Assessment and Repair of Pipe Bridge: A Case Study
- Bridge-O-Phobia in Today's Bengal

**Featured Article : The lowest bid that drives buck-passing  
by Mr. Shirish B. Patel**

*(published in Mumbai Mirror, March 18, 2019)*



Would you select your doctor or dentist based on who quotes the lowest fee? If not, why not? It is important to think about this, and understand exactly why not, if you want to understand why the footbridge at CSMT collapsed on Thursday

In former times, owners engaged builders to build temples and cathedrals and all kinds of lesser buildings. The builder understood both design and construction. He took responsibility for the entirety of the project, the concept, the layout, the aesthetics, the structural stability, the embellishments, the bringing it in on budget, everything.

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Medical practice was similar. The doctor both prescribed, and with his assistant, mixed his own drugs. Now that drugs are far more complex, they are made by specialist pharmaceutical companies, subject to very long and strict trials and proof of effectiveness, plus clear statements of side effects. But the doctor's total responsibility towards his client remains undiluted.

With buildings and bridges, the change from former practices has been different. The mounting complexity arising from new materials and latest technology demanded specialization and led first to a split between design and construction.

Construction now is a hugely complex activity, calling for rapid mobilization of large machinery and skilled manpower, and organizing the supply of significant quantities of different materials. And design too is increasingly complex, requiring more and more specialist training and experience.

But one principle, ideally, should remain unchanged, and indeed does, in the most outstanding projects: a single point responsibility for the totality of the outcome. And that rests not with the owner, but with the designer of the project. It is the designer who should be concerned not only with the design but also with drawing up the specifications, ensuring that the structure is indeed buildable, preparing a construction scheme if necessary, making sure an incompetent contractor is not appointed, and finally ensuring that good supervision practices are in place and the structure is well built. Too often these days designers think their responsibility ends with the delivery of drawings. So, if a structure collapses, who is responsible? The designer of course.

Will this kind of failure happen again? Yes, it will. Because there is a deeper source of the failure that remains unaddressed even if you punish the designer. This is with the process of how an incompetent designer was appointed in the first place.

There are currently two ways in which designers are selected for public projects. One is to invite bids from designers and award the work to the lowest bidder. Technical evaluation is supposed to weight the bids, but in practice that weight is slight, and anyone who quotes half the fair price is sure to get the job.

The result is that design professionals are competing not in regard to who can deliver the best quality, or the most economical design, but on who can quote the lowest fee. Over time the quality of design is sure to degrade, as designers pursue lowering costs and cutting corners rather than enhancing their skills. Salaries are cut, fewer of the brighter students enter the profession, and the downward spiraling cycle continues.

The second way of a client selecting a designer is to abdicate responsibility entirely. This is done by recasting contracts as design-construct contracts, where the responsibility for design vests in the contractor. It is now the contractor who appoints the designer.

In the earlier arrangement it was the job of the designer to act as the technical arm of the owner, and as such to protect the owner's interests, both short-term and long-term regarding lowered maintenance costs. With the contractor appointing the designer, the focus is on maximizing profits. The designer now pursues the contractor's interests and protecting the owner's interests becomes irrelevant.

So, finally, I would say the ultimate responsibility for this collapse, and others that are sure to come, is with the financial audit procedure that encourages professionals to work for lower and lower fees, and never mind the quality of what they do.

*Shirish B. Patel is an urban planner and civil engineer.*

## About IAStructE

The 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 centers 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.



### How to become a member?

Membership form and details are available at <http://www.iastructe.co.in/membership-form.html>

For membership information and other details contact the Indian Association of Structural Engineers Secretariat.

### 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. [Released]
- ✚ 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