

IAStructE



Newsletter of the Indian Association of Structural Engineers

www.iastructe.co.in

July 2022

MESSAGE FROM THE PRESIDENT



Dear Friends, Greetings!!

I hope you are doing good in your professional activities. Pace of economic activities seems to have picked up well after facing the brunt of pandemic. Pandemic has altered the way we live and work to a significant level. We have become much more digital than we ever imagined. Our association's work and activities are still being conducted

remotely. We are trying to switch to hybrid mode.

Last month we conducted our second IAStructE awards ceremony. Winners' of 2021 awards were felicitated in the event. IAStructE awards have started getting attention of professionals, academicians, researchers & students. I am quite hopeful they will achieve prominence in years to come. Soon Awards for 2022 shall be announce. You are requested to participate in these awards and promote in your organisation. First Mahendra Raj memorial lecture was also organised along with awards presentation. It was delivered by Prof Mahesh Tandon. It was very well received by the participants. A brief but very passionate video remembering Late Mr. Mahendra Raj sent by Architect Balkrishna Doshi was also played. It was very well planned and executed program. My sincere thanks to Prof. Prem Krishna, Mr. Alok Bhowmick and their team. I hope all award winners will contribute actively to the affairs of IAStructE.

A new refresher course on "Design and Construction of Short and Medium Span Concrete Bridges" has been started on 23rd July 2022 which will continue till 27th August 2022. It has been very well received by the professionals and engineers. 200 participants are attending it. My great appreciation to Mr. Alok Bhowmick, Mr. Sandeep Patiwar & others engaged in organising it. Next refresher course shall be on "Pile foundations for Buildings & Bridges". Keep following IAStructE social media accounts and other channel of announcements.

It is also heartening to note that we are getting quite good number of quality applications for membership. It is a good sign for any organisation's growth. SED April to June issue on "Precast Segmental Bridges-State-of-the-Art" has been released. Hope you must be finding it useful. Work on next issue dedicated to the theme "Dams & Hydraulic Structures" is in progress. Dr. Shilpa Pal is guest editor. You are encouraged to contribute your papers and case studies for publication. If you have failure case study, you may contribute for publication in our new newsletter "CROSFALL" your name & identity of the project shall not be revealed. We are also planning to start written examination on voluntary basis from early next year for getting special certification from IAStructE. Details are being worked out and shall be announced soon.

Do send your feedback & suggestions. Looking forward towards your active participation in the association's activities.

Best regards

Manoj Kumar Mittal President-IAStructE

FROM THE EDITOR'S DESK



Warm greetings to all the readers!!

The present issue covers the glimpses of the IAStructE 2021 award ceremony along with the first Mahendra Raj Lecture delivered by Prof. Mahesh Tandon. The organization activities such as refresher

courses and details of webinars are covered. Readers are requested to contribute for the upcoming SED journal. Request all our readers to follow, subscribe and like IAStructE events on all digital platforms

Thanks & Regards,

V . .

Dr. Visalakshi Talakokula

CONTENTS

- 1 st Mahendra Raj Memorial Lecture	- 2
- IAStructE National Awards 2021	- 2-3
- Webinars / Events Conducted	- 3
- Forthcoming Events	- 4
- Call for Papers for the SED journal	- 4
- Published SED	- 5
- Advertisement Tarrif	- 5
- IAStructE Publications	- 6
- CROSFALL	- 7
- New IAStructE members	- 8
- About IAStructE	- 9
- Membership Benefits	- 9
- How to become a member?	- 9

1st Mahendra Raj Memorial Lecture

The 1st Mahendra Raj Memorial Lecture was organized on 16th July 2022 at 04:30 PM (IST) through zoom. The first lecture was delivered by Prof. Mahesh Tandon on the topic "Tall Building Innovations". During the event a small video clip of Ar. Balkrishna Doshi was played to Honoring the Genius - Remembering Raj.

A Special Life-Time Achievement Award was conferred to founder President of IAStructE Late Shri Mahendra Raj Posthumously for his outstanding achievement and for contribute towards the Structural Engineering fraternity.



Fig. 1. Glimpses from the 1st Mahendra Lecture

IAStructE National Award 2021

The Awards Ceremony to felicitate the winners of IAStructE National Award 2021 was organized on 16th July 2022 in the following category:

- ★ Outstanding Structure of the Year
- ★ Outstanding Structural Engineer of the Year
- ★ Outstanding Woman Structural Engineer of the Year
- ★ Outstanding Young Structural Engineer of the Year
- ★ Best M.Tech Thesis of the Year

The Awards Committee under the Chairmanship of Prof Prem Krishna with the members Mr. Amitabh Ghoshal, Prof. Dulal Goldar, Prof. K. Karisiddappa and Dr. T. Visalakshi evaluated the entries individually, and collated their results in on-line meetings to make recommendations for different categories of awards.

During the Ceremony the awards were announced by Prof. Prem Krishna and citations were read by Er. Vinay Gupta and Dr. Shilpa Pal. The Awards, each of which carries a certificate, citation and a memento, were conferred on the winners by the President IAStructE, Er. Manoj Mittal. The entire events was moderated by Mr Alok Bhowmick, Chairman Events Committee & Immediate Past President IAStructE. The winners of the awards in the various categories are as follows:

Outstanding Structure (Buildings category): Narendra Modi Stadium by Larsen & Toubro Ltd.

Outstanding Structure (other than Buildings category): -Phoenix Memorial by Prof. S.Arul Jayachandran

Outstanding Structural Engineer - Mr. V. N. Heggade

Outstanding Woman Structural Engineer - Dr. K. P. Jaya

Outstanding Woman Structural Engineer - Dr. Piyali Sengupta

Outstanding Woman Structural Engineer – Ms. Papia Mandal

Promising Young Structural Engineer - Dr. Debdutta Ghosh

Best M.Tech Thesis - Ms. Malavika V. A.

IAStructE once again congratulates all the winners and wish them greater success in contributing towards excellence in structural engineering.

The webinar can be viewed at the following link: https://youtu.be/ew8WGBjkj4s



Fig. 2. Glimpses from the IAStructE Award Ceremony

WEBINARS / EVENTS CONDUCTED

ONLINE WORKSHOP (Ongoing)

Online Workshop on "**Design and Construction of Short and Medium Span Concrete Bridges**", was launched on 23rd July 2022 and will continue till 27th August 2022. The lectures are being organized on every Saturday. Mr. Sandeep Pattiwar, GC member, IAStructE & Director, Tech Tangent Solutions Pvt. Ltd. is the Course Coordinator. The course is being attended by 200 delegates. It has been supported by Sanrachana Structural Strengthening Pvt. Ltd., Fuji Silvertech Concrete Pvt. Ltd., Tricon Polymers Ltd, Ultratech Cement Ltd and Sanfield India Ltd. Mr. Umesh Rajeshirke, Prof Mahesh Tandon and Mr Rajiv Ahuja were the Panelist during the two sessions organized, so far. The following speakers were made their presentations:

- ★ Mr. V. N. Heggade, Former CEO STUP Consultants Pvt. Ltd.
- ★ Dr. Satish Jain, Managing Director UHPC India Pvt. Ltd.
- ★ Mr. Manish Mokal, DGM-Quality Afcons Infrastructure Ltd.
- ★ Mr. Alok Bhowmick, MD B&S Engineering Consultants Pvt. Ltd.
- ★ Mr. Sandeep Pattiwar, Director Tech Tangent Solutions Pvt. Ltd.
- ★ Mr. Alok Panday, MD Elegant Consulting Engineers
- ★ Mr. Sukumar B. Shetty, Director, Tricon Polymers Pvt Ltd



Fig. 3. Glimpses from the Online Workshop

FORTHCOMING EVENTS

Event	Topic	Speaker	Date & Timing
Online Webinar	Draft Revision of Code IS: 16700, applicable for "Tall Concrete Buildings" Registration Link: https://us02web.zoom.us/webinar/register/WN_ZTTqT7FmQ1GpDB5oqWwcZQ	Mr. Yogendra Singh, Mr. Alok Bhowmick Ms. Sangeeta Wij Prof. Mahesh Tandon Mr. Vipul Ahuja Mr. Abhay Ghate Mr. Girish Dravid	19 th August 2022 from 03:00 PM (IST) onward
Online Workshop	Pile Foundation - Application in Buildings and Bridges Details will be announced shortly	Course Coordinator- Prof. Mainak Ghosal	Starting from 17 th September 2022 from 03:00 PM (IST) onwards

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 theme, which shall be published in e-book format. Details are as under:

July - September 2022 issue: Theme: Dams & Hydraulic Structures

Guest Editor- Dr. Shilpa Pal, GC member IAStructE

Sub - Themes:

Lessons from failures of Dams & hydraulic structures
Physical and Numerical Modelling
Energy Dissipaters
Scouring around hydraulic structures
Storage and Diversion Structures
Best Practices in Risk Management
Instrumentation of Dams
Miscellaneous Structures
Site investigation studies for Dams

Interested professionals may send the full paper along with their photograph and brief resume by 15th August 2022 or at the earliest convenience.

October - December 2022 issue: Theme: Structural Fire Safety

Guest Editor: Mr. Manoj Mittal, President IAStructE

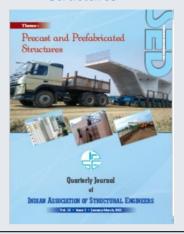
Articles are invited from i) Members of IAStructE; ii) Specialists in the field even though they are not members of IAStructE.

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.

PUBLISHED SED

January - March 2022 issue:

Precast and Prefabricated Structures



Articles:

- 1. Precast and Prefabricated Structures in Highway Projects
- 2. Emerging Sustainable Construction Systems for Mass Housing
- 3. Prefabricated Steel-Foam Concrete Composite Structural Components and connections for G+3 Buildings in Zone-V Seismic Regions
- 4. Modular Steel Bridges: A Case Study of the Sonprayag ACROW Panel Bridge
- 5. Eco-Effciency, Building Optimization and Potential of Pre Engineered Buildings
- 6. Overview on Precast and Prefabricated Structures
- 7. Precast Large Concrete Panel System: An Overview of Design and Connections
- 8. A critical review on concrete mix design as per Indian standards considering the parameters like durability
- 9. Sustainability with Precast Concrete Construction Technology
- 10. Durable concrete in Indian conditions (Non-theme Paper)
- 11. Influence of unreinforced masonry infill's on behaviour of reinforced concrete frames (IS 1893: 2016, CLAUSE 7.9) (Know Your Codes)

April – June 2022 issue:

Precast Segmental Bridges-State-of-the-Art



Article on Eminent Personality

Er. Mahendra Raj - One of India's Great Structural Engineers, Passed Away

- 1. Precast Segmental Bridges State of the Art
- 2. Precast segmental bridges key points for success
- 3. Precast Segmental Bridge Deck Erection Problems
- ${\bf 4.\ Planning\ \&\ Concept\ Design\ of\ Segmental\ Superstructure\ for\ Long\ Viaducts\ \&\ Bridges}$
- 5. Critical Analysis, Design & Detailing Aspects for Precast Segmentally Constructed Superstructure
- 6. Avoidance of collapse of precast segmental bridges during construction
- 7. A Comparative Study of Two Methods of Precasting of Spine & Wing Superstructure in Ludhiana
- 8. Pre-Casting Techniques and Logistics in casting yard for Dhubri- Phulbari Bridge Project
- 9. Design & Construction for extradosed precast segmental post tensioned concrete box girder bridge using erection gantry in Dhubri Phulbari Project
- 10. Casting and Launching of Precast Segments for Ludhiana Elevated Road
- 11. Design Construction of 9.759km six lane Extradosed Bridge with 150m span length crossing River Ganga-in the state of Bihar, India
- 12. Hybrid Erection of 60m Multiple Span Precast Segmental PSC Girder
- 13. Behaviour of tall buildings with transfer storey

ADVERTISEMENT TARIFFS

Structural Engineering Digest (being published in PDF format)

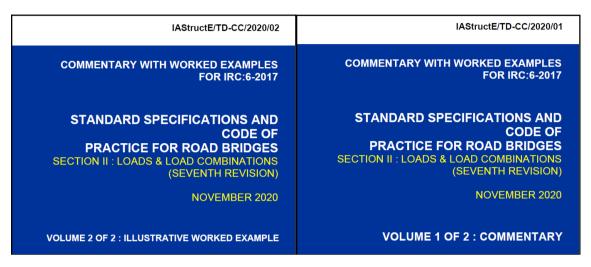
	Rates Per issue	Discounted rate at 20% for 4 consecutive issues	Advertisement Size
Full Page	Rs. 20,000/-+ 18% GST	Rs 64,000/- + 18% GST	9.5 inch x 7 inch

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

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

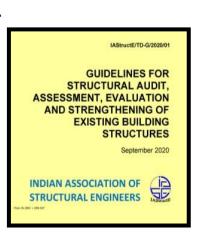


It's a priced document and hence not freely downloadable.

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.

CROSSFALL (Confidential Reporting of Structural Failures and Lessons Learnt)

IAStructE is starting a unique quarterly newsletter "CROSFALL" (Confidential Reporting of Structural Failures and Lessons Learnt), where the reporter's name and identity as well as the project name, location and identity will not be divulged. IAStructE has developed a multi layered robust mechanism to keep the identity of the reporter & Project confidential.

The objective of this newsletter is to share lessons learnt from "structural failures" or "near misses" or even "concerns" and help to prevent / mitigate future catastrophic failures by providing insight into how safety issues occur and spurring the development of safety improvement measures.

The poster giving more details is attached herewith for your kind perusal. Interested Professionals may visit the following link to get more information regarding procedures and to submit the report about structural safety issues related to any type of structures: www.iastructe.co.in/crosfall.php



NEW MEMBERS

"Fellow" Grade

M/S No	Name	Designation, Organization	City
F-527	Mr. Debendra Narayan Chattopadhyay	Partner, BABTECH,	Kolkata
F-528	Mr. Jayakumar P.	Chief General Manager, Kerala Rail Development Corporation	Thiruvanantha puram

"Member" Grade

M/S No	Name	Designation, Organization	City
M-333	Mr. Subramanian R.	Resident Consultant,	Chennai
		Tandon Consultants Pvt. Ltd.	
M-334	Mr. Nivoi V. Ibo	Assistant Engineer Manager,	Delhi
M-334	Mr. Niraj K. Jha	Larsen & Toubro Ltd.	Deini
M-335	Mr. Shriket Rajeshirke	Deputy Design Manager	Mumbai
		Tech Tangent Solutions Pvt. Ltd.	

"Associate Member" Grade

M/S No	Name	Designation, Organization	City
AM-367	Mr. Abdullah Lala	Trainee Structural Engineer Project Consultant & Structure Designer	Surat
AM-368	Mr. Ishu Jindal	Structural Engineer Buildtech Engineers	Bathinda
AM-369	Mr. Mohit Karan Garg	Owner and Principal Consultant Buildtech Engineers	Bathinda
AM-370	Ms. Ezhil Kothai Nagarajan	Free-lance MOOC creator Structural software Goldfish Academy	Bangalore
AM-371	Mr. Aruljothi Jothi Ramalingam	Consulting Chartered Civil & Structural Engineer Kalaimahal Education Institution	Tamil Nadu
AM-372	Mr. Ajay Kumar M.	Technical Manager Edge2 Engineering Sol. India Pvt. Ltd.	Karnataka
AM-373	Ms. Pampa Sen	Structural Consultant APC Marine	Kolkata
AM-374	Prof. Ronak Motiani	Assistant Professor Pandit Deendayal Energy University	Gujarat
AM-375	Mr. Sushil Kumar Maity	Bridge Engineer LEA Associates South Asia	Faridabad
AM-376	Mr. Akash Dahalkar	Deputy Engineer – Structures Jacobs Solutions India Pvt. Ltd.	Nagpur
AM-377	Mr. Nikhil Mehta	Design Engineer Tech Tangent Solutions Pvt. Ltd.	Mumbai
AM-378	Mr. Gourav Krishnath Koshti	Assistant Engineer, AECOM, India	Bangalore

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 https://www.iastructe.co.in/membership-grades.php; For more information and other de ils contact the Indian Association of Structural Engineers Secretariat