

Newsletter of the Indian Association of Structural Engineers www.iastructe.co.in September 2021

MESSAGE FROM THE PRESIDENT



Dear Members,

Greetings!!

Hope you are safe & healthy. It is time to keep our guards up particularly during festive season.

As usual September was also quite hectic for IAStructE. IAStructE is regularly organising webinars & refresher courses for the benefit of civil & Structural engineers. Our events are

being widely appreciated by the fraternity for its rich technical content, wide coverage & usefulness. We are getting good feedback and suggestions. Newsletter contains report of all the events organised during the month. Many new events for the month of October have been announced and details are available in newsletter and on our website. You are requested to register for the same and circulate this information to your professional friends.

I strongly believe that Civil/structural engineers must update their understanding & knowledge in the areas like sustainability & structural fire safety. IAStructE has planned a series of activities in these areas as well. Members must join them actively. We have an online webinar on "Strategies for Enhancing Resiliency of Modern Concrete Structures Under Fire Hazard" on 8th October at 5:30 PM which shall be delivered by Dr Venkatesh Kodur of Michigan state University USA. This is the second event in this series.

IAStructE's southern region, Gujarat State Centre, and students' chapters of DTU & CEPT are also organising many technical & professional events. You are also encouraged to take lead and initiate programs in your area. IAStructE secretariat will provide you full support. Our website is also being revamped. Soon you will experience a new look website with many new user-friendly features.

There is need to focus on increasing membership of the association. Your support is very vital for this. Please encourage your engineer friends to apply for the membership. It will improve the effectiveness of the association.

Do send your feedback.

Best regards May Kyme

Manoj Kumar Mittal President-IAStructE

FROM THE EDITOR'S DESK



Warm greetings to all the readers!! This month issue highlights the certification of excellence received by our honorary treasurer Mr. Abhay Gupta for his innovations in science & technology along with the details of the webinars and refresher courses. Nominations for IAStrucE awards for 2021 are called for and all the readers

are requested to disseminate the information among their contacts and nominate eligible candidates for the awards. Readers are requested to contribute for the upcoming themes of SED journal issues. Do follow subscribe and like IAStructE events on all digital platforms.

Thanks & Regards,

Dr. Visalakshi Talakokula

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WEBINARS/ EVENTS CONDUCTED

1. Webinar on Load Testing of Bridges - Current International Practices

The webinar on Load Testing of Bridges - Current International Practices organized on 01 September 2021 through Zoom.

Speaker: Dr. Eva Olivia Leontien Lantsoght, Professor, San Francisco de Quito University, Ecuador.
Moderator: Mr. Alok Bhowmick, Immediate past President, IAStructE.
Panel Members: Mr. Amitabha Ghoshal, Advisory Consultant & Past President CEAI & Mr. R. K. Jaigopal, Managing Director, Struct Geotech Research Laboratories Pvt. Ltd.

The speakers presented the details of the available methods for bridge load testing, recommendations for practice, as well as insights from recent and ongoing research projects.

The webinar can be viewed at the following link: https://youtu.be/eGJvpabq5VY



Fig.1. Glimpses from the webinar

2. Lecture series on "Towards Disaster Resilient India- Earthquake Chapter"

A Lecture series on "Towards Disaster Resilient India – Earthquake Chapter was launched in August 2021. The second lecture in the series on "Geotechnical Aspects of Tall Building" has been organized on 03 September 2021. And the third lecture on "Earthquake Disaster Risk Index - To forecast the relative earthquake risk within and across the cities" organized on 24th September 2021, in which Prof. C. V. R. Murty was the Panelist.

Speaker: Dr. R. Pradeep Kumar, Vice President (South), IAStructE and Professor, IIIT Hyderabad. **Moderator**: Prof. Mahesh Tandon, GC member & Past President, IAStructE

Vote of thanks given by Mr. Manoj Mittal, President IAStructE

The 2nd lecture can be viewed at the following link: https://youtu.be/IWUxCY1f4Ls



Fig.2. Glimpses from the webinar



3. Webinar on Post-installed Fastenings: From Design to Execution with State-of-the-Art Methods & Techniques

The webinar on Post-installed Fastenings: From Design to Execution with State-of-the-Art Methods & Techniques organized on 17 September 2021 through Zoom. The webinar was sponsored by Hilti India.

Speaker: Mr. Amol Singh, Technical Marketing Manager -Structural, Hilti (Singapore) **Moderator**: Mr. Vinay Gupta, Director & CEO, M/S Tandon Consultants Pvt. Ltd.

On this occasion Dr. Visalakshi Talakokula, Secretary IAStructE welcomed all speakers & participants.

Vote of thanks given by Mr. Manoj Mittal, President IAStructE

The webinar can be viewed from this link: https://youtu.be/44BOWvy8ddg



Fig. 3. Glimpses from the webinar

4. IAStructE and IIIT Hyderabad Monthly Lecture Series

In August 2021, IAStructE partnering with IIIT Hyderabad initiated a joint lecture series on different topics of structural engineering. The second lecture of IAStructE and IIIT Hyderabad joint online lecture series was held on 29th September 2021. The lecture was on "Fire Safety in Highrise Buildings-Some Important Clauses from NBC" by Shri C. Lakshmi Prasad, Director, State Disaster Response and Fire Services Department, Telangana. About seventy-five participants comprising of practicing engineers, academicians, research scholars and students from India and abroad participated in the lecture. The president of IAStructE, Mr. Manoj Mittal welcomed the participants of the lecture and emphasized on the importance of understanding the various dimensions and challenges of achieving structural fire safety.

Later, Prof. R. Pradeep Kumar gave a brief about the lecture and introduced the speaker to the audience. Followed by that Shri C. Lakshmi Prasad delivered his lecture. Highlights of the lecture are given below:

- All the provisions of National Building Code, Part 4 Fire and Life safety, presented and discussed in detail.
- The objectives of fire safety and the logic required to achieve fire safety by prevention or managing during the fire were highlighted through the fire concept tree from National Fire Protection Association (NFPA 550), USA.
- Details related to planning exit paths with exit widths according to provisions in the code, the travel distance, importance of staggered staircases, safe egress design and provision of the safe

refuge area, at every 15m height after initial 24m of building with protection from fire and one end open to atmosphere were highlighted.

- The important concepts of fire modelling using performance-based design were touched upon briefly.
- Periodic fire drills help people follow the do's and don't during the event of a fire, and the evacuation measures to be adopted the differently abled and elderly people.
- The problem of fire safety should be addressed in an integrated fashion with contributions from professional of multi disciplines.
- The discussion in the question-and-answer session was enriching with the speaker sharing the practical experiences noting down the importance of common sense before, during and post the event averting life loss.

Post the lecture the participants applauded the lecture and its significance. The video of the lecture is made available at YouTube link **IAStructE-Fire** for the benefit of the members who couldn't attend the lecture. Link: https://youtu.be/SfMVH0-dSj0

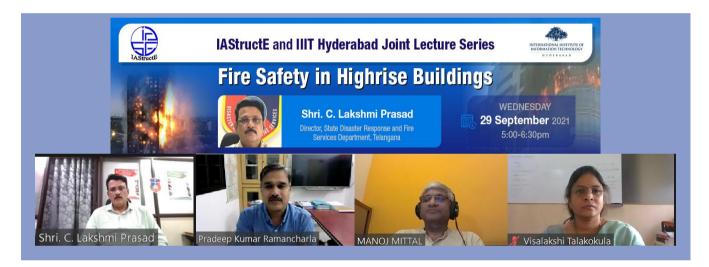


Fig. 4. Glimpses from the webinar

ONLINE REFRESHER COURSE

Online Refresher Course on "Seismic Rehabilitation and Retrofitting of Buildings"

Online Refresher Course on "Seismic Rehabilitation and Retrofitting of Buildings", was launched on 04 September 2021, which will continue till 02 October 2021. The lectures are being organized on every Saturday from 03:00 PM to 06:00 PM (IST). Dr. Shilpa Pal, G Member, IAStructE & Associate Professor, DTU is the Course Coordinator and Mr. Sandeep Shah, Country Head and MD, Taylor Devices, India and Fellow IAStructE is the Course Co-Coordinator. The course is supported by Taylor devices India, Mageba Bridge Products Pvt. Ltd., Construction Equipment Company and Dextra India. The courses are being attended by 145 delegates. Four sessions were organized so far. Mr. Sanjay Pant, Deputy Director General (Standardization-II), Bureau of Indian Standards and Mr. ArunKumar S., Scientist 'D', CED, BIS and Prof Mahesh Tandon, Past President and GC member IAStructE were invited as the Panelist during the Inaugural session on 04 September 2021. Dr. Harshavardhan Subbarao was invited as the Panelist during the fourth session. The presentations were made by the following eminent speakers.



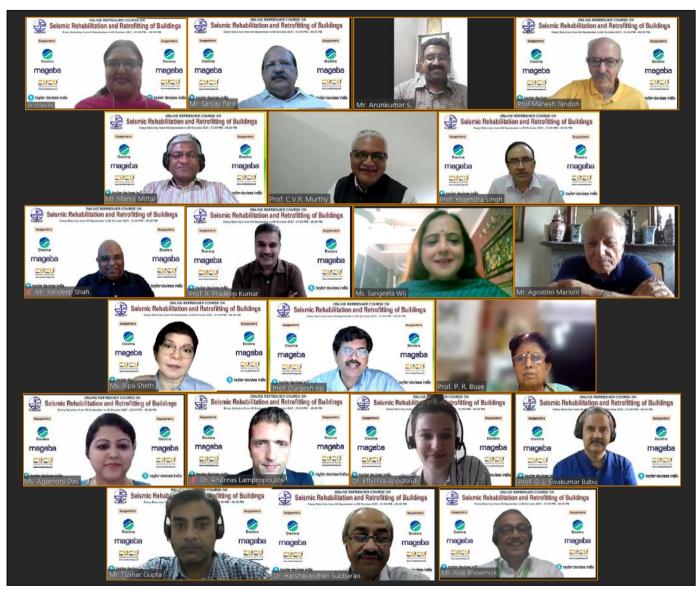


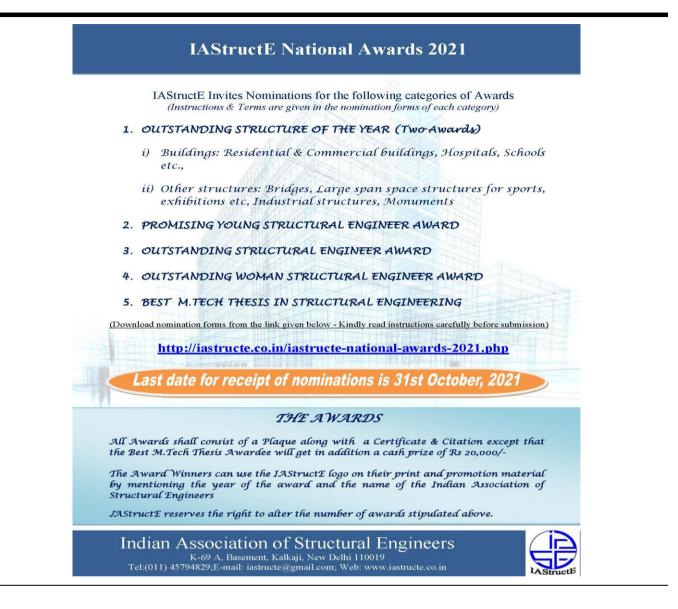
Fig.5. Glimpses from the Online Refresher Course



FORTHCOMING EVENTS

Event	Торіс	Speaker	Date& Timing
Webinar	The Iconic Structure Mahatma Mandir by IAStructE Gujarat State Centre Google Meet Video call link: https://meet.google.com/kvc-hzua-nzg	Mr. Hrushikesh Patel, Principal, Parvati Techno Consultants, Ahmedabad	02 October 2021 at 09:30 AM
Lecture Series	Fourth Lecture on Protection of Built Environment from Earthquakes through Mitigation and Preparedness Efforts <i>Registration Link:</i> https://us02web.zoom.us/webinar/regist er/WN_bL1CztEkQTydA9iSBVt9_w	Prof. R. Pradeep Kumar Vice President (South),IAStructE & Professor, IIIT Hyderabad	07 October 2021 at 04:00 PM
Webinar	Strategies for Enhancing Resiliency of Modern Concrete Structures Under Fire Hazard <i>Registration Link:</i> https://us02web.zoom.us/webinar/regist er/WN_bL1CztEkQTydA9iSBVt9_w	Dr. Venkatesh Kodur University Distinguished Professor & Director, SAFE-D Center, Dept. of Civil and Environmental Eng., Michigan State University, USA	08 October 2021 at 05:30 PM
Webinar	Structural Health Monitoring for rehabilitation of structures in the era of Digitalization <i>Registration Link:</i> https://us02web.zoom.us/webinar/regist er/WN_FQBDIanCQRid9yg5AicxGg	Ms. Rithika_Nanaiya, Assistant Manager and Ms.Sahana B Gangal, Senior Engineer Tata Consulting Engineers Limited	09 October 2021 at 04:00 PM
Webinar with Professional tour	The Signature Bridge at Ahmedabad by IAStructE Gujarat State Centre Followed by guided visit to site between Okha and Beyt Dwarka Interested participants / groups may express interest through following link: https://forms.gle/JrPUSMPNm7wgmM zR9	Mr. Anand <i>ME (Structural Engg.)</i>	15 October 2021 to 17 October 2021
Webinar	Fire Safety For Buildings Details shall be announced shortly	Ms. Anamika Kadam GC Member IAStructE & DGM-Civil, Larsen & Toubro Construction Pvt. Ltd	16 October 2021 at 04:00 PM
IAStructE Awards 2021	Call for Nominations: IAStructE is cond year 2021. The nominations forms for links given below. The last date for recei- http://iastructe.co.in/iastructe-national	various categories can be do pt of nominations is 31st Oct	wnloaded from the





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

https://www.youtube.com/channel/UCvv7ojXO9Dxq1WtP_yHZTKw



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:

October – December 2021 issue: Theme: Durability of Structures

Guest Editor- Mr Aman Deep Garg, Member IAStructE & Director, Creative Design Consultants & Engineers Pvt Ltd.

Sub-themes:

- Durability for PT structures for pre-stressing tendons
- RCC buildings/ structures with concrete surfaces exposed to environment
- Measures for Existing RCC buildings having High Chloride contents in reinforced cement concrete
- Measures for Existing RCC Bridges having exposure to aggressive environment caused by contaminated water/ air pollution
- Durability of RCC foundations exposed to aggressive soils/ ground water having high chlorides/ sulphates
- Durability for Steel Structures
- Durability for Composite structures having hot rolled steel inside the concrete jacket exposed to extreme environment
- Durability of masonry structures
- Comparative studies of durability for various types of reinforcements like TMT Steel, Stainless Steel, Coated steel bars, other new reinforcement materials for concrete.
- Any other related research findings for maintenance free, durability of structures.

Interested professionals may send the abstract along with their photograph and brief resume by 15th October 2021 and full paper by end of October 2021 or at the earliest convenience.

January - March 2022 issue: Theme: Sustainability of Precast and Prefabricated Buildings

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

Sub-themes:

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

Interested professionals may send the abstract along with their photograph and brief resume by 15th January 2022 and full paper by end of January 2022 or 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 31st October 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

IAStructE/TD-CC/2020/02	IAStructE/TD-CC/2020/01
COMMENTARY WITH WORKED EXAMPLES	COMMENTARY WITH WORKED EXAMPLES
FOR IRC:6-2017	FOR IRC:6-2017
STANDARD SPECIFICATIONS AND	STANDARD SPECIFICATIONS AND
CODE OF	CODE OF
PRACTICE FOR ROAD BRIDGES	PRACTICE FOR ROAD BRIDGES
SECTION II : LOADS & LOAD COMBINATIONS	SECTION II : LOADS & LOAD COMBINATIONS
(SEVENTH REVISION)	(SEVENTH REVISION)
NOVEMBER 2020	NOVEMBER 2020
VOLUME 2 OF 2 : ILLUSTRATIVE WORKED EXAMPLE	VOLUME 1 OF 2 : COMMENTARY

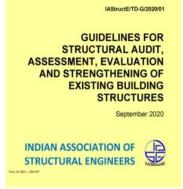
It's a priced document and hence not freely downloadable.

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.

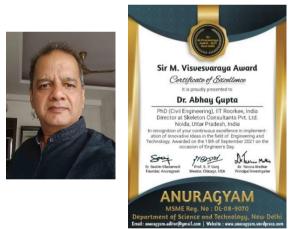
The price of this e-document is Rs 200/-. Interested professionals who wish to obtain the soft version of the Guideline in pdf format, may register with the following link. Registration Link: http://iastructe.co.in/guidelines-for-structural-audit.php

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.

MEMBERS ACHIEVEMENT

Er. Dr. Abhay Gupta, Honorary Treasurer, IAStructE & Director, Skeleton Consultants Pvt Ltd Noida, has been conferred Sir M. Visvesvaraya Award Certificate of Excellence by Anuragyam, a platform for Indian heritage, culture, Science, Engineering & Technology under Department of Science and Technology GoI, on 15th September 2021, Engineers Day based on nomination highlighting his continuous excellence in implementation of innovative ideas in the field of Engineering and Technology. He is one of the three awardees in India.



NEW MEMBERS

"Fellow" Grade

M/S No	Name	Designation, Organization	City
F-501	Dr. Anil Kumar Sachan	Professor, M. N. N. I. T. Allahabad	Prayagraj (UP)

"Associate Member" Grade

M/S No	Name	Designation, Organization	City
AM-346	Mr. Siyas V. K.	Structural Engineer	Kerala
AM-347	Mr. Kishor Anand Solanki	Structural Engineer	Thane (E)
AM-348	Mr. Arijit Karmakar	Graduate Design Engineer Trainee, ION Exchange India Ltd,	Nadia (WB)
AM-349	Mr Sarath S.	Structural Designer, Courteous Infrastructures & Projects Pvt Ltd	Kerala

IAStructE Newsletter*September 2021 *



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.html ; For more information and other details contact the Indian Association of Structural Engineers Secretariat