



## Consulting Engineers Association of India NEWSLETTER

OCTOBER 2020

[www.ceai.org.in](http://www.ceai.org.in)

FROM THE

### PRESIDENT'S DESK



IN THIS

# ISSUE

Dear Friends,

Kindly accept my best wishes for the festive season and for your safe enjoyment of the celebrations.

Much as we wish and pray, the threat of the pandemic is not in receding mode yet.

Let us hope that better days will come soon, but we have to keep ourselves prepared for the continuation of the grim situation.

We have been able to keep our activities in positive mode so far and our efforts for the uplifting the condition of our fraternity is bearing fruit.

I am very happy to report that in the six months of restrained operation, we have been able to hold seven international standard webinars and one training session with ADB, - we have another three webinars scheduled for the next two months.

The enthusiastic participation by all of you and the tireless efforts of your GC members have brought CEAI closer to our members and we look forward to continued interaction despite our physical isolation.

You must have received notifications for our biennial election to be held shortly, and we look forward to your enthusiastic participation for electing a new GC with greater vibe and enthusiasm, that will carry our mission forward.

We are in the midst of our Diamond Jubilee celebrations and have been holding events with high visibility at regular intervals. We are hopeful to hold the concluding event as a participatory meet in February 2021. We look forward to greater participation from you and want the event to be a memorable one.

Warm regards,

Amitabha Ghoshal

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WEBINAR ON EMERGING  
TECHNOLOGIES IN INFRASTRUCTURE  
SECTOR – AI/ML, IoT, AR/VR

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WEBINAR ON DAM SAFETY AND  
INSTRUMENTATION

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WEBINAR ON OPERATIONS &  
MAINTENANCE FOR ENGINEERING  
ASSETS

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CEAI GOVERNING COUNCIL ELECTION

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MEMBER NEWS

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VIEW POINT

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## **WEBINAR ON EMERGING TECHNOLOGIES IN INFRASTRUCTURE SECTOR – AI/ML, IoT, AR/VR**

As a part of a series of events celebrating the Diamond Jubilee year, CEAI organized the second webinar in the series on the topic Emerging Technologies in Infrastructure Sector on 16<sup>th</sup> October 2020.

The webinar held on October 16, 2020 was engaging and interactive, covering emerging technologies including Artificial Intelligence and Machine Learning, Internet of Things, Augmented Reality and Virtual Reality. The speakers being leading experts in their respective fields were from academia, industry and infrastructure consulting.

As a critical infrastructure in its own right, technology is becoming a more important aspect of the infrastructure dialogue. The maze of communication and collaboration technologies can be considered as the fourth entity in the asset class, complementing roads, railways and energy.

The webinar was introduced by Mr. Amitabha Ghoshal, President CEAI and enthusiastically moderated by Mr. Pradeep Khanna, Executive Director Asia Pacific & Sydney Chapter President of global Virtual Reality Augmented Reality Association.

The first speaker was Prof. Vincenzo Piuri, a Full Professor in Computer Engineering at the University of Milan. His research interests are, amongst other areas, in artificial intelligence, machine learning, pattern analysis and recognition, intelligent measurement systems, cloud computing infrastructure and internet-of-things. He said that technology adoption is taking place at a rapid pace and the future is going to be different. What lies ahead will be very different from now in the way of working and way of living. He has a wide industry experience and talked about his work on developing infrastructure solutions for monitoring tracks of high-speed trains, and using Biometrics with behaviour analysis for surveillance at airports. Another aspect of his work is in the area of environment management and pollution control. He has developed low cost and flexible wireless devices that can be installed on the windows of houses and buildings; by using AI techniques to measure and monitor the data, predictive analysis could be made for the next few days.

Mr. Somnath Mitra is a digital transformation advisor. This month (October 2020) he has been awarded a PhD at IIT Delhi for his work on Smart Cities. His talk centred around Construction 4.0 covering aspects of Building Information Modelling (5D BIM), Digital Twins, Unmanned Aerial Vehicles (Drones), etc. He elucidated on the application of Construction 4.0 for Smart Cities, Mass Rapid Transport System, Airports, Malls, Campuses, Smart Utilities (Water, Sewage, Power Distribution) and Energy.

Mr. Ananth Kitappa, Founder Vector Solutions, has 27 years of experience in providing solutions for industrial 3D modelling and Virtual Reality Augmented Reality (VRAR). He presented a bird's eye view of the developments that have taken place in the past 3 decades in this field and how VRAR could be used today to provide a realistic view to the stakeholders of an engineering project from design to procurement to construction. This would assist in tracking quality of construction by using Mixed Reality headsets. VRAR is also a useful tool for training purposes.

Mr. Suhas Bhagwat, former Vice President Hydrocarbon Engineering Larsen & Toubro and currently Founder & CEO AvroGlide Consultants provided a consultant's perspective on VRAR in the Oil & Gas Sector. He opined that for a company adopting technology solutions it must be a strategic decision. One must examine by asking questions: Does the adoption of technology help your process? Does it help to improve for efficiency or profitability? By earlier or faster adoption of technology does it enable you to be ahead of the competition? He exemplified the advantage of using VRAR at a hydrocarbon installation site where a maintenance engineer could seek the advice of an expert, remotely located by communicating with the use of mixed reality glasses.

The webinar lasted for 1 hr 45 min. with the attendees participating actively. There were many questions from the attendees that were answered by the panellists.

In his concluding remarks, the CEAI President, Mr. Amitabha Ghoshal said that this has been a learning experience. He thanked the panellists, the moderator and the attendees. In this Diamond Jubilee year CEAI has planned many such events throughout the year, including more such webinars on emerging technologies. He ended with his words that we must work together to jointly transform India.



Meida Reports are given in the below links:

<https://www.internationalnewsandviews.com/the-largest-urban-transformation-of-the-21st-century-is-happening-in-india/>

<https://dwarkaparichay.com/blog/engineers-urged-to-adopt-emerging-new-technologies-to-increase-business-prospects/>

## WEBINAR ON DAM SAFETY AND INSTRUMENTATION

The third webinar in the series will be held on the topic 'Dam Safety and Instrumentation' on 6<sup>th</sup> November 2020 at 3.00pm.

The Session will cover:

- Design, Construction and Operation aspects of Dam Safety – A case of Tehri Dam
- Experience of Inter-State River Valley Projects from Dam Safety and Instrumentation  
Perspective – A Case of Multi Stakeholder Operation & Management
- Dam Safety in India-Status and Issues
- Dam Safety with focus on the Instrumentation aspects

The following experts will make the presentations:

- Mr S Masood Husain, Former Chairman-CWC
- Dr M K Sinha, Executive Member-Narmada Control Authority
- Mr Rajiv Vishnoi, Director (Technical)-THDC Ltd.
- Mr Krzysztof Glodzik, Team Leader- Hydrotechnical & Mechanical Team - Royal Haskoning DHV
- Dr Ajay Pradhan will be the moderator for the event.

The link for registration is

[https://us02web.zoom.us/webinar/register/WN\\_nV1wDrNnQKeF4zCJSts5lQ](https://us02web.zoom.us/webinar/register/WN_nV1wDrNnQKeF4zCJSts5lQ)

## WEBINAR ON OPERATIONS & MAINTENANCE OF ENGINEERING ASSETS

In continuation of the Diamond Jubilee Celebration, the fourth Webinar on the topic "ASSET MANAGEMENT- THE NEED OF THE HOUR" will be held on 19th November 2020.

Renowned Speakers will be addressing the participants.

- Dr. Navil Shetty on Importance of Asset Management
- Prof Pradip K Ray on Engineering Asset Management Systems – Implementation Challenges
- Mr Subrata Mitra on Integrity Management Issues and Digital Technologies
- Mr P P Chowdhury on Highway Asset Management
- DR H Subbarao will be the Moderator of the event.

**WEBINAR on DIGITALISATION of ENGINEERING will be held on December 18,2020**



## CEAI GOVERNING COUNCIL ELECTION

The election process for the Governing Council 2020-2022 has already been started. Notice inviting nominations has been issued to all eligible members on 15<sup>th</sup> October 2020. The last date for submission of the nomination is 3<sup>rd</sup> November 2020 before 4.00 p.m. Voting Notice with the instructions of voting will be issued by the Returning Officer on 16<sup>th</sup> November 2020. The e-voting will start from 21<sup>st</sup> November 2020 and the closing date will be on 27<sup>th</sup> November. The result will be declared on 28 November 2020.

As per the Rules of the Association, membership subscription shall not be in arrears and the member who has no outstanding dues to CEAI, shall be eligible to participate in the Governing Council elections. In view of this, members are requested to clear their dues, if any, at the earliest for participation in the elections.

## MEMBER NEWS

### WEBINAR ON ‘THE STORY OF MORANDI BRIDGE COLLAPSE, ITALY’

IAStructE organised a webinar on “The Story of the collapse of Polcevera Viaduct (also known as Morandi Bridge), Italy” on 15<sup>th</sup> October 2020.

The story was presented by Mr Alok Bhowmick, Governing Council Member of CEAI. The webinar was moderated by Prof Mahesh Tandon.

## VIEW POINT

September issue of the View Point on the topic “Stakeholder Management in Public Infrastructure Projects” has been printed and circulated to all concerned.

The themes for the next issue (December 2020) of Viewpoint would be **Digital Engineering**

Considering the experience of CEAI members and various stakeholders in the subjects, CEAI would be happy to receive articles on the above themes.

Authors could share their knowledge and experience by providing case studies of the works executed or in execution, first-hand accounts of the challenges faced, practical issues experienced and the solutions to those. Photographs, charts, diagrams, drawings, etc. would benefit our readers for better appreciation of the issues encountered and addressed.

The articles for an issue need to reach CEAI at least 6 weeks prior to the end of the month of the View Point issue.

Articles need to be in Times New Roman 12 with single line spacing with before and after 6 pt and normal margin on A4 size. A recent clear and bright passport size photograph of the author is to be sent along with the article.

### Advertisement in View Point

VIEW POINT is circulated to all CEAI Members, FIDIC, Ministries of the Government of India, Public & Private Sector Undertakings, Construction Firms, Contractors, Consultants, Foreign Missions and Funding Institutions in India and other organisations related to or dealing with the engineering profession.

### Advertising in the VIEW POINT gives the advertiser wide exposure and visibility.

Support from CEAI members and stakeholders are sought in increasing the number of advertisements, such that View Point gain in its stature as a unique Technical Publication.

The rates for advertisements in VIEWPOINT are given below. This is excluding GST @ 5% or as prescribed, which will be extra:

Item	Rate Per issue* (Rs)	Discounted rate at 20% for 4 consecutive issues* (Rs)
Back Cover	25,000/-	80,000/-
Inside Front Cover **	15,000/-	48,000/-
Inside Back Cover	15,000/-	48,000/-
Full Page	10,000/-	32,000/-

*\*GST @ 5% or as prescribed will be added to the above rates.*

*\*\*Inside Front Cover booked till June 2021*