

# SAFETY CONVENTION 2019



"Safety during Development of Infrastructure Projects"

September 16-18, 2019 • Hotel Le-Meridien, New Delhi

# Report



The 16th Safety convention was organized by Delhi State Centre of The Institution of Engineers (India), under aegis of Safety and Quality forum, during September 16-18, 2018 at New Delhi. The Inaugural session was graced by the Chief Guest Shri Vinod Kumar Yadav, Chairman, Railway Board & Ex-Officio Principal Secretary to Govt. of India and Guest of Honor Shri I K Pandey, DG(Road) & (SS), MoRTH, Govt of India, Dr T M Gunaraja, President, The Institution of Engineers (India) and Shri Sisir Kumar Banerjee, Immidiate Past President, The Institution of Engineers (India) respectively.

The convention started with welcome address by Shri Dinesh Kumar, Chairman, The Institution of Engineers (India), Delhi State Centre mentioned that this Convention is being organized to arrange a platform to collaborate with industries, organizations, corporate and individuals to ensure workplace safety and sustainable manufacturing operations.

Shri R N Rajpoot, Chairman, Safety and Quality forum- IEI in his address apprised that this Safety Convention is very special as IE(I) is entering in its 100 years. On September 13, 2019. We marked the beginning of Centenary Celebration of The Institution of Engineers (India) at Chennai by Tamilnadu State Centre, under the guidance of our President Dr T M Gunaraja. It was really a blast beginning and set the tone.

Shri Pradeep Chaturvedi, Chairman of Safety Convention, in his address mentioned that the high priority to safety issues given by the Institution of Engineers (India); and the presence of large number of senior council members and experts at the convention, prove the point of relative priority and importance of safety. With advancement of technology and analytics, we are now equipped to get in depth understanding of safety issues.

Shri Sisir Kumar Banerjee, Immediate Past President of the Institution of Engineers (India) in his address explained that the vital infrastructure projects provides basic developmental activities including transport, communications, power, water, and accommodation, where proper implementation of safety norms is an integral part. It is significant to evaluate the existing regulations and subsequently assesses the suitability of these regulations and procedures. Adopting safety standards during infrastructure development is one of the core element to ensure a safe built environment. Time-varying factors coupled with geographical considerations take the notion of safety far beyond simply adopting technical standards.

Delivering Presidential Address Dr T M Gunaraja, President of the Institution of Engineers (India), congratulated the organizers for providing a platform to industries and academia to collaborate on safety issues for increasing productivity. President, IEI in his address suggested all foras of IEI may also organize their programs in other regions by rotation for creating greater awareness on relevant issues.

Shri I K Pandey, DG (Road) & (SS), MoRTH, Govt. of India in his address mentioned that project implementation has also moved into a digital space which required a shift in approach and understanding of new engineering and science related to digital platform and developing and training perception have also changed considerably and cyber security and cyber safety in project implementation are gaining important place.

Representatives from NPS School, Sahibabad and Amity University, Nodia were also shared their view on the theme of the Convention.

Chief Guest, Shri Vinod Kumar Yadav, Chairman, Railway Board & Ex-Officio Secretary to Govt. of India congratulated The Institution of Engineers (India) for organizing this Convention on theme "Safety during Development of Infrastructure Projects". He stated that this





is a area which very often gets ignored while planning out the total infrastructure projects. The general impression is that the safety in project implementation is only a small part of the operational exercise of the construction wing. That is not true. Safety in infrastructure projects needs to be discussed at the very concept stage and should be a focus of decision-making at the top.

He apprised that the Government of India has very strongly focused on infrastructure development over the last five years; and after the formation of the present government this activity has moved at a much faster pace. The correlation of investments in inland, road, rail and airport infrastructure to GDP are higher than 0.90 indicating that there exists a strong correlation between GDP and Investment in infrastructure. This further reiterates the fact that massive investment is needed in infrastructure to achieve targeted economic growth in the country.

On the occasion, Prof P B Sharma, Vice Chancellor, Amity University, Maneser was also felicitated on completing 50 years of Academic Career.

Thereafter Chief Guest and dignitaries on the dais released Proceedings-Cum-Souvenir of the Convention and the safety awards were presented to selected industries.

The Session was coordinated by Shri Aman Rajput, Member, Delhi State Centre Committee. The session ended with a vote of thanks presented by Jitendra Kumar Sharma, Honorary Secretary, Delhi State Centre, IEI & Director, SQF.

# **Plenary Session-I**

# Theme : "Safety Challenges of Large Infrastructure Projects"

The session was chaired by Shri J S Sharma, ADG (Border), CPWD and Shri O P Goel, Past President, IEI, as cochairman. Shri R K Gupta, Former Hony Secretary, IEI-DSC coordinated the Session. Session covered presentations, as per following details :

 Dr R K Bhandari, Distinguished Visiting Professor, IIT-Roorkee & Chairman, Forum on Disaster Mitigation, Indian National Academy of Engineering made a presentation on "The Urgency for a Paradigm Shift in the Engineering of Infrastructure Projects in a Multihazard Ecosystem".

- Shri Vijay Kumar, Director (RS), National High Speed Rail Corporation spoke on "High Speed Train Initiative and Safety Concerns".
- Prof P B Sharma, Vice Chancellor, Amity University, Maneser highlighted on "Engineering Education and Safety".
- Shri S K Nirman, Secretary, IRC spoke on "Safety in Highway Projects".
- Shri Arvind Singh, CPM, GAMAN India made a presentation on "Safety aspects of Signature Bridge Project"
- Shri R S Sharma, Managing Director, Sugam Technocrafts spoke on "Safety in Highway Projects"

#### **Plenary Session-II**

Theme: "Safety Concerns of Start-Ups – Role of Young Engineers"

The session was chaired by Shri Aman Rajput, Member, Delhi State Centre Committee with Shri Sujit Banerjee, Council Member, IEI as co-chair and Shri Sanjeev Kumar, Member, Delhi State Centre Committee as the coordinator. Session covered presentations, as per following details:

- Shri Atul Bal, Immediate Past President, PAN IIT Alumni Association a detailed presentation on "Safety Concern of Start-Ups".
- Shri Arpeet Gupta, Director, Yellow Rentals explained an overview of Safety Utmost Concern in Large Scale Events.
- Shri Parmendra Singh, Founder & CEO, For Securiefire Safety Industries P Ltd and Ms Richa Malik spoke on "Safety Concerns of Start-Ups.
- Shri O P Mehta, Director, MSME spoke on "Mentoring MSME Directors to Integrate Safety"

#### **Technical Session I**

### Theme: "Transport & Public Safety"

The session was chaired by Shri S K Pathak, Chief Commissioner of Railway Safety, Ministry of Civil Aviation (India) with Dr G S Yadava, Past Chairman, Delhi State Centre-IEI as co-chair, Shri Subhash Chander, Past Honorary Secretary, Delhi State Centre, IEI coordinated the session. Session covered presentations, as per following details:

• Dr A S Kamble, Sr. Directro, MEITY delivered the lecture on "Cyber Safety and Security".



- Shri A C Mathur, Sr. Scientist, ISRO made a presentation on "Safety in Space Programme".
- Shri R C Sharma, Former Director, Delhi Fire Service made a presentation on "Fire Safety Concerns of Large Infrastructure Projects".
- Shri Naresh Goel, Principal Executive Director, Railway Board made his presentation on "Safety in Railway".
- Shri Anil Jauhri, Former, CEO, Quality Council of India discussed the Impact of Standards on Infrastructure Safety.
- Shri S N Jha, Project Manager, DMRC made his presentation on "Safety in DMRC"

# **Technical Session-II**

# Theme : "Safety in Energy Sector"

The session was chaired by Shri R N Rajpoot, Chairman, Safety and Quality Forum-IEI and with Shri M R Kothari, Council Member, IEI as co-chairman and Shri J K Mehta, Former Regional Manager, World Energy Council, coordinated the session. Session covered presentations, as per following details:

Case Study Presentation was presented by Safety Innovation Awardees as:

- Shri Rakesh Kumar, Vice President, BSES Yamuna Power Limited
- Shri Rajesh Bahl, Head (SHE&DM), TATA Power Delhi Distribution Limited
- Shri Anurag Jain, VP & Head (EHS), ReNew Power Limited
- Shri Mukesh Singh Rathore, Sr. Manager, GAIL (India) Limited, GUP-Gandhar
- Shri Ajay Khatri, Chief Manager (F&S), Indraprastha Gas Limited
- Shri Mahesh Kumar, General Manager, IOCL Mathura Refinery
- Shri Suresh Bharadwaj, JGM and Head HSE, L&T Hydrocrabon Engineering

# Technical Session -III

### Theme : "Safety in Industry"

The session was chaired by Shri Keshav Chandra, Former Member (Mechanical), Railway Board with Shri Pradeep Chaturvedi, Council Member IEI & Convention Chairman as coordinator. Shri Rajesh Sharma, Member, Delhi State Centre Committee coordinate the session. Session covered presentations, as per following details:



• Dr O P Mehta, Director, MSME, delivered this address on Impact of Safety on Performance of MSME Sector.

**Case Study Presentation** was presented by Safety Innovation Awardees as:

- Shri Hansal Thakar, Manager, Essar Steel India Limited
- Shri Sujeet Kumar Singh, DGM (Safety), J K Lakshmi Cement Limted, Sirohi
- SHri Ajendra Agarwal, ESH-Head-GS, GE T&D Limited
- Shri T Baskaran, General Manager, BHEL
- Shri Pareen Dashottar, Site Head, Glenmark Pharmaceuticals Limted

### Session-IV

### Theme : "Safety in Construction Sector"

The session was chaired by Shri Abhai Sinha, Former DG, CPWD with Shri K B Rajoria, Past Chairman, Delhi State Centre-IEI. Shri R K Yadav, Member, Delhi State Centre Committee as coordinator. Session covered presentations, as per following details:

- Shri Shailendra Sharma, Engineer Member, DDA delivered his address on "Safety in Housing Construction"
- Shri Amit Sharma, Assistant Executive Engineer, PWD Delhi spoke on "Safety in Urban Construction of Urban Infrastrucutre"
- Shri K M Soni, Former ADG (Trg), CPWD made his presentation on "Safety in Public Works"
- Shri Shailesh Kumar, AD (SE), SAIL, IISCO Steel Plant made a presentation on "Job Safety Analysis in Steel Manufacturing Unit and Recommendations to Improve the Work Safety"
- Gr Capt (Retd) Praveen Khanna, VSM, Formerly Principle Director, Air HQ, Ministry of Defence delivered his address on "Air Safety"





### Valedictory Session & Panel Discussion

Shri Dinesh Kumar, Chairman, Delhi State Centre-IEI delivered welcome address. Shri J K Mehta Secretary General South Asia Forum for Energy Efficiency, briefly explained the key taken away from the Safety Convention saying that most accidents occur due to ignorance or over confidence and we need the will, skill and right environment to implement safety which should be every ones responsibility. He presented the key take aways from the presentations made during the convention as follows:

- A good Safety Policy should be able to predict and prevent any mishap during execution, and in case of accident to be able to contain the damage to men and material.
- While most organizations have a very well drafted Safety Policy and guidelines, the real challenge is in the process ,and implementation of laid down policy and procedures .There is a strong need to create awareness amongst stakeholders and workers on need and relevance of safety policy and procedures, and develop a safety culture within the organization.
- Various case studies discussed during the Convention, brought to fore the following salient points responsible for accidents:
  - a) Non conformance to specifications and laid down procedures

without understanding the short and long term implications of decision)

Shri R N Rajpoot, Chairman, Safety & Quality Forum, IEI had announced that Safety and Quality Forum, IEI will be organizing 1st Quality Convention in the month of February/March 2020. He also announced that the 17th Safety Convention will be organizing on the theme "Safety in Mobility" during September 2020. Shri O P Goel, Past President, IEI also shared his views.

Shri Pradeep Chatruvedi, Council Member, IEI & Convention Chairman saying that he is overwhelmed with the extensive participation and contribution of President, Past President of IEI and senior council Members who have been present most of the time during the past two days sharing their experience and contributing to knowledge sharing at the convention. He also informed the participants that all presentation and case studies are already uploaded on the portal of Safety & Quality Forum.

Shri Narendra Singh, Council Member, IEI and Chief Guest of the Valedictory Session shared his experience on Safety. He congratulate the Delhi State Centre and Safety & Quality Forum for successfully organization is this mega event.

To conclude the Convention a vote of thanks was proposed by Shri Jitendra Kr Sharma, Honorary Secretary, Delhi State Centre-IEI & Director, SQF

**Site Visit :** A Program of Site Visit was conducted on 3rd Day. Visit to ITPO Proejct was conducted. Nearly 40 participants took part in the site visit.

- Edited by :

Pradeep Chaturvedi Safety Convention Chairman & Council Member-IEI

and

Shri J K Mehta Secretary General, South Asia Forum for Energy Efficiency

