

From the Chairman's Desk



I am delighted to address our esteemed members through this newsletter which is being brought out at a stage when we are entering a very exciting period of technical activities of National Stature. I invite your attention to last page where our forthcoming events are listed. National Conventions, Safety Conventions and other technical events shall provide excellent opportunity for the professionals of the field as well as our members to sharpen their skills in these specialised fields. I am confident that we will receive encouraging response from our distinguished members and these events will get over subscribed.

Our efforts of last more than One and a half years have shown tremendous result in bringing back our corporate members which has resulted in their active participation in State Centre's activities. Recognising alumni having long association with State Centre has been appreciated by all and we intend to carry forward the initiative. Centre has been providing ample opportunities to student members to interact with experts of the field and get useful guidance. Improved infrastructure and conduct of guidance classes have created a conducive environment for learning and knowledge enhancement. We are committed to carry this forward and further improve.

I am also very happy to report that we shall be complying to all headquarters' norms in respect of financial regulations as well as statutory compliances. Our members shall come forward to strengthen this position and take Delhi State Centre to further greater heights. I await your feedback of our performance with an aim to improve further and effectively discharge our responsibility during remaining four months of our tenure.

Jai Hind.



Devendra Gill

From the Honorary Secretary's Desk



Dear Esteemed Members of IEI

At the outset, I extend my heartiest thanks to all the Corporate Members, Student Members and Staff of Delhi State Centre-IEI for their unwavering support extended during the course of last twenty months. We were successful in organising numerous activities in unprecedented pace. Now, We are Entering the most crucial phase of our tenure when activities have to peak and reflect the cumulative impact of our efforts of two years. In a large organisation this result is always a reflection of team work and not individual effort. I fully appreciate the whole hearted cooperation of fellow Committee Members.

I am indeed privileged to be part of an Institution that started 98 years back as a dream of our mentors and was guided and nurtured by the vision of many great and noble stalwarts. For me it is a very special privilege to be its Honorary Secretary, having served the association in various capacities also being officer (Admn) at All India Cadre.

The Newsletter is packed with details of activities conducted during the last quarter and one article. You get a glimpse of vibrancy of the Centre, though not every minute detail can be included.

One of the key event has been World Environment Day, which we celebrated in splendid manner. Notwithstanding the fact this year's World Environment Day was special in two aspects. First, India was the Global Host of 2018 World Environment Day. Second, unlike previous years this year, The Institution of Engineers (India), in association with the Ministry of Environment, Forest and Climate Change, Government of India, has actively celebrated this event in a befitting manner as a statutory day. IEI exhibited a stall at the Exhibition organised on the occasion of the World Environment Day 2018 at VigyanBhawan. Dr Harsh Vardhan, Minister for Environment, Forest & Climate Change inaugurated the stall which was a very impressive show and effectively projected IEI's brand. This was the largest

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World Environment Day 2018 on “Beat Plastic Pollution”

June 5, 2018 • New Delhi

Delhi State Centre of The Institution of Engineers (India) jointly with South Asia Forum for Energy Efficiency and Institution of Engineering & Technology (UK), Delhi Local Network celebrated World Environment Day 2018 on theme “Beat Plastic Pollution” on June 5, 2018 at Institutions' Premises. Lt Gen J S Ahluwalia PVSM (Retd), President, Institute of Directors was the Chief Guest of the function.

Shri Praveen Kr Singh, Hony Secretary, Delhi State Centre-IEI welcoming the guests, projected photographs of inauguration of IEI Stall at the Exhibition organized on the occasion of the World Environment Day 2018 at Vigyan Bhawan of MoGF. He informed that Dr Harsh Vardhan, Minister for Environment, Forest & Climate



Change inaugurated the stall which was a very impressive show and effectively projected IEI's brand.

Dr S K Singh, Member. (Env. Division), Delhi State Centre Committee, delivering his welcome address informed that “Beat Plastic Pollution”, the theme for World Environment Day 2018, is a call for action by all of us to come together to combat one of the greatest environmental challenges of our time. Chosen by this year's host, India, the theme of World Environment Day 2018 invites us all to consider how we can make changes in our everyday lives to reduce the heavy burden of plastic pollution on our natural places, our wildlife and our own health.

Dr V K Garg, Chairman, South Asia Forum for Energy Efficiency said that this year's World Environment Day provides an opportunity for each of us to embrace the many ways that we can help to combat plastic pollution around the world. And one need not have to wait until 5 June to act. There are so many things that we can do – from asking the restaurants you to stop using plastic straws, to bringing your own coffee mug to work, to pressuring your local authorities to improve how they manage your city's waste.

Panel Discussion was chaired by Shri Pradeep Chaturvedi, Council Member, The Institution of Engineers (India) on Topic: “Strategies to Prevent Plastic Pollution”. In his opening remarks Shri Chaturvedi said that engineering solutions have to be developed to reuse and recycle plastic waste.

Ms G. Kavya, a 9 year girl student from Mater Die Convent School made an appeal to save the planet earth for future generations.

Dr. Malti Goel, Former Adviser & Scientist “G” Ministry of Science & Technology focused on Government policies to ban plastics in India. She emphasized on the need for finding substitutes for plastics. The conventional technologies can be effectively utilized to develop alternatives.

Ms. Neera Arora, HOD, RKAK Shelter Home, YWCA of Delhi focused on non-use of plastic bottles. Plastic is bad for the environment. It is polluting our natural world due to poor recycling. Plastic product that has a huge impact on the environment and causes unnecessary ecological damage is the single use plastic water bottle. The whole process of producing plastic bottles has an adverse impact on the environment.

Dr. (Mrs.) T.G. Rupa, Asstt. Prof, Deptt of Resources Management and Design Application, Lady Irwin College presented an overview of the habitat and the threats it is facing. She narrated different kinds of adverse impacts of use of plastics. She cautioned that the use of plastics should be minimized.

Dr. P.B. Rastogi Dir.(Env) SAFEE, Former Adviser, MOEF, emphasised on the need of thorough environment impact studies before launching or allowing use of any material, especially plastics. He advised on developing engineering solutions to ensure plastic waste minimisation and management.

Chief Guest of the function, Lt Gen J S Ahluwalia, PVSM (Retd), President, Institute of Directors in his address



appreciated efforts of IEI-DSC and the other organisations to celebrate World Environment Day jointly. He presented an overview of the global situation and the urgent need to save our planet earth. He narrated case studies from his experiences of a number of countries. He also emphasised on promoting sustainability at all levels. The engineering fraternity needs to work towards attaining sustainable development goals.

Shri J.K. Mehta, Secretary General, South Asia Forum for Energy Efficiency in his address focused on Preventing Plastic Pollution. He stated that we, as responsible

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Engineering for Plastic Pollution

Pradeep Chaturvedi

Chairman, Strategic Plan Committee and Council Member, IEI

India was the global host of 2018 World Environment Day celebrated with the theme “Beat Plastic Pollution”. This theme urged governments, industry, communities and individuals to come together and explore sustainable alternatives and urgently reduce the production and excessive use of single-use plastic polluting our oceans, damaging marine life and threatening human health. India is emerging as a leader given it has one of the highest recycling rates in the world. It can be instrumental in combating plastic pollution.

A few plastic pollution facts include:

- Every year the world uses 500 billion plastic bags
- Each year, at least 8 million tones of plastic end up in the ocean, the equivalent of a gull garbage truck every minute.
- In the last decade, we produced more plastic than the whole last century
- 50% of plastic we use is single-use or disposable
- We buy one million plastic bottles every minute
- Plastic makes up ten percent of all of the waste we generate

As IPL T-20 tournament has just finished, someone picked an example to illustrate the immensity of the problem. It says “The time it takes Hardik Pandya to bowl an over in a cricket match, four garbage trucks worth of plastic get dumped into the ocean”.

Having defined the problem, the engineering fraternity, mainly under the leadership of the Institution of engineers has to think engineering solutions to this plastic waste problem. We are not the regulators and we are not the government to issue any ban or regulate use of plastics. But we are certainly the fraternity which is expected to find solutions for the emerging problems that will make life of billions of people much safer.

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citizen of India, should care for environment, and do hereby pledge, to take all possible actions to prevent plastic pollution. We shall refuse disposable plastic whenever and wherever possible. We shall choose items that are not packaged in plastic, and shall carry our own bags, containers and utensils, to the extent possible. We shall reduce our plastic footprints, by cutting down on consumption of goods, that contain plastic packaging or parts. All the participants took oath along with him.

Further Shri Mehta focused on avoiding single use plastic products and reuse, durable, non-toxic, biodegradable bottles, bags, containers, cutlery and everyday use items. Whatever we can't refuse, reduce, or reuse, shall be recycled, keeping in view the entire life cycle from source of manufacturing to disposal.

One of the solutions that the engineers are focusing is conversion of the plastic waste into other useable forms or else recycling it to make some other building materials or production materials. A novel product in the form of modules has been developed by using mixed waste plastics. The product presents evidence of the capability of the novel process to accommodate all kinds of non-segregated mixed waste plastics, except non plastic materials. Depending on the size of the modules, up to 20 tonnes of waste plastic per kilometer can be utilized. BPCL has carried out a lab scale demonstration where mixed waste plastics generated by a paper mill from Gujarat has been used for the purpose of demonstration. The initial results are very promising.



Another example is use of waste materials as fillers in plastic bottles, which can then be used as an alternative to the conventional bricks. This novel construction material is low cost and environment-friendly. Laboratory experimentation with different filler materials, including power plant fly ash, crushed recycled aggregates, sewage sludge and brick kiln fly ash has shown comparable and better compressive strength as compared to conventional red clay bricks and flay ash bricks. These are just two simple examples where engineering fraternity has demonstrated that they are taking steps to combat the problem of plastic wastes pollution.

IEI has discussed this issue at national level and will discuss further at the National Convention of Environmental Engineers during August 10-11, 2018 at New Delhi to be hosted by Delhi State Centre, IEI.



Shri Praveen Kr Singh, Honorary Secretary, Delhi State Centre of IEI, coordinated the programme and proposed

The Institution of Engineers (India)

DELHI STATE CENTRE

NOTICE

FOR COMMITTEE ELECTION

FOR THE SESSIONS 2018-19 & 2019-20

To

All Corporate Members
Attached to Delhi State Centre

The members of the Committee of Delhi State Centre of The Institution of Engineers (India) shall retire at the ensuing Annual General Meeting of the Delhi State Centre. It has become necessary for the Corporate Members on the Roll as on 31.03.2018 attached to the Delhi State Centre and the various Divisions duly established to elect from amongst themselves Corporate Members to the Committee for the sessions 2018-19 & 2019-20 to fill the vacancies in each Division as follows:

Aerospace Engg. Division	: 1	Environmental Engg. Division	: 1
Agricultural Engg. Division	: 1	Marine Engg. Division	: 1
Architectural Engg. Division	: 1	Mechanical Engg. Division	: 3
Chemical Engg. Division	: 1	Metallurgical & Materials Engg. Division	: 1
Civil Engg. Division	: 3	Mining Engg. Division	: 1
Computer Engg. Division	: 1	Production Engg. Division	: 1
Electrical Engg. Division	: 2	Textile Engg. Division	: 1
Elect. & Telecom Engg. Division	: 2		

I, on behalf of the Board of Scrutineers duly constituted by the Committee of the Delhi State Centre, call upon you to propose name(s) of Corporate Members from the same Division and submit your proposals to the Convenor, Board of Scrutineers, at the Office of the Delhi State Centre, Engineers Bhawan, 2, Bahadur Shah Zafar Marg, New Delhi - 110 002, not later than 5.00 p.m. on 14th July, 2018.

The proposal, to be valid, must contain the names, membership grades and numbers of both the proposer and the proposed Corporate Member together with the written consent of the proposed Corporate Member to serve on the Committee, if elected. The Proposer shall also submit, an acceptable proof of his identity, viz PAN Card or Driving License or Photo ID Card issued by State/Central Government bearing his signature or Photo ID Card of The Institution bearing his signature or first page of his Passport duly self attested. The format of the nomination is enclosed.

Members retiring from the Committee after completion of three full tenure at the stretch shall not be eligible for re-election. However, they shall be eligible for re-election after a break of one term.

As decided by the council at its 691th Meeting held on 24-25 September 2016 at Haridwar, candidate desire to contest in the elections of the IEI shall deposit Rs. 5,000/- as non-refundable earnest money by demand draft drawn in favour of the "The Institution of Engineers (India), payable at Kolkata.

Sd/-

Convenor

Board of Scrutineers for Election to the Committee of
Delhi State Centre for the Sessions 2018-19 & 2019-20

Date : June 28, 2018

FORMAT OF NOMINATION

To,

The Convenor
Board of Scrutineers
The Institution of Engineers (India)
Delhi State Centre

Dear Sir,

Sub : Election for the Committee of Delhi State Centre for the Sessions 2018-19 and 2019-20

I hereby propose the name of Dr / Prof / Mr / Ms*.....,
Membership No. F/M/AM*..... from Engineering Division for
the above mentioned election of the Delhi State Centre Committee for the Sessions 2018-19 and 2019-20.

I submit herewith photocopy, duly self-attested of my PAN Card / Driving Licence / Photo ID Card issued by State/
Central Government bearing my signature or Photo ID Card of the Institution bearing my signature/first page of my
Passport as proof of my identity.

Thanking you,

Yours faithfully,

Signature :

Name :

Division :

Membership No: F/M/AM*

Date:

*I do hereby agree to serve the Committee, if elected. I declare that there are no proceedings by the Council or the
Ethics Control Board against me.

OR

*I do hereby agree to serve the Committee, if elected. I declare that there are proceedings by the Council and/or the
Ethics Control Board pending against me, the details of which are as attached.

I enclosed herewith a Demand Draft of Rs. 5,000/- vide DD No. dated issued in
favour of "The Institution of Engineers (India), payable at Kolkata."

Signature :

Name :

Division :

Membership No: F/M/AM*

Date:

*Strike out whichever is not applicable.

World Telecommunication & Information Society Day 2018 on “Enabling the positive use of Artificial Intelligence for All”

May 17, 2018 • New Delhi

Delhi State Centre of IEI jointly with Institution of Engineering & Technology (UK), Delhi Local Network celebrated World Telecommunication & Information Society Day 2018 on theme “Enabling the positive use of Artificial Intelligence for All” on May 17, 2018 at Institutions' Premises. On this occasion, Shri S N Zindal, Former Director General, Software Technology Parks of India & Director, NCIT, DEITY was the Chief Guest and delivered the address.

Shri Devendra Gill, Chairman, Delhi State Centre - IEI delivering his welcome address informed that Delhi State Centre - IEI jointly with likeminded professional bodies like IET (UK) etc has been regularly celebrating the World Telecommunication & Information Society Day nationwide through all its Centres in line with UN resolution to mark the foundation of the International Telecommunication Union and signing of first International Telegraph Convention. Shri Gill further apprised audience that in recent years there has been significant progress in AI technology, made possible by tremendous advances in contributing fields, such as Big Data, machine learning, computing power, storage capacity and cloud computing, among others. AI technologies are already emerging as a key component of proactive tools and applications being used to help people lead better lives by improving healthcare, education, finance, agriculture, transportation, and a wide range of other services.

Shri R N Rajpoot, Chairman, Institution of Engineering & Technology (UK), Delhi Local Network in his address apprised audience about the background of IET (UK). He stated that “The Institution of Engineering and Technology (IET)-UK” is one of the oldest institutions of the world. Its heritage dates back to 1871. IET is working to engineer a better world by inspiring, informing and influencing its members, engineers and technicians, and all those who are touched by the work of engineers. Its mission is to inspire, inform and influence the global engineering community, supporting technology innovation to meet the needs of society.

Chief Guest of the function, Shri S N Zindal, Former Director General, Software Technology Parks of India &



Director, NCIT, DEITY in his address spoke on “Artificial Intelligence”. His presentation started with introducing various examples of AI from evolution of AI, he explained the usefulness of AI in present era. He stated that AI is going to disrupt the way business is done and India, in particular, is uniquely poised in utilising AI to innovate for social and inclusive good. India is embracing future technologies such as machine learning and AI to augment its capacity in healthcare, improve outcomes in education, develop innovative governance systems for our citizens and improve overall economic productivity of the nation Laying a roadmap for AI for the country, government think-tank Niti Aayog said that it will be working with tech giant Google to develop AI-based solutions aimed at improving the overall economic productivity of the nation. The move is aimed at fostering growth for India's nascent AI and machine learning ecosystem.

He further added that Under the aegis of this program, Google will train and incubate Indian AI start-ups in an accelerator program. These start-ups will be mentored and coached by Google and its affiliates to enable them to better leverage AI in their respective business models.

Shri Ashish Shrivastava, Honorary Secretary, Institution of Engineering & Technology (UK), Delhi Local Network proposed the vote of thanks.

Event was attended by nearly 70 participants, mainly Corporate Members, professionals from industries Student Members & other invitees.

Fire Services Week 2018

April 14, 2018 • New Delhi

Delhi State Centre and Safety & Quality Forum of The Institution of Engineers (India), jointly organized a lecture on the occasion of Fire Services Week 2018 on theme: "Fire Loss is National Loss-Let us adopt Fire Safety Measures" on April 14, 2018 at Institution Premises, New Delhi.

Delivering the welcome address Shri Devendra Gill, Chairman, Delhi State Centre informed that on 14th April 1944, a major explosion took place on board ship S.S. Fort Stikline carrying explosives and other combustibles at Bombay Docks. The Explosion & subsequent fire resulted in massive destruction of ships, port facilities, and area in the neighborhood, claiming lives of over 68 fire service personnel, about 150 port personnel and unaccounted number of civilians. In commemoration of the precious lives lost in the event, April 14 is being observed as the Fire Service Day and the whole week as the Fire Service Week (FSW). The FSW is a grim reminder of the destructive potential of fire and need for fire prevention efforts. Every year fires take a heavy toll in terms of human lives and property loss. The estimates are about 25,000 deaths and Rs. 2,700 cores worth property is lost annually. It is expected that all sections of society, business and industry would review their fire safety needs, develop suitable strategies for fire prevention, fire control, rescue and rehabilitation and undertake a campaign for fire safety during the FSW.

Shri Pradeep Chaturvedi, Council Member, The Institution of Engineers (India) in his address stated that Delhi State Centre and Safety & Quality Forum have been contributing towards awareness generation on various aspects of life Safety and Property protection. He added that although fire is greatest benefactor to human civilization but is also a cruel devastator of life, property & Environment.

Dr G C Misra, Director, Delhi Fire Services Chief Guest of the function started his presentation by giving various statistics in respect of Delhi about number of fire calls,



vulnerable areas, average annual deaths etc. Dr Misra stated that Delhi Fire Services attends close to 30,000 fire calls in a year and on an average 75 people lose their life due to fire accidents. However, large numbers of people are saved during these fire responses. Although, some injuries do happen to the occupants of buildings. As stated by him, fire and life safety system comprises of thoughts, equipments, machine and men which are designed, installed and maintained to minimize the fire losses.

Further sub component of this system are technical regime, legal regime, professional regime and operational regime. In these regimes, issues like concept identification, research, performance modeling and code writing etc comes under technical aspect. Designing of fire system, evaluation, execution, testing and certification fall under professional regime and analyzing failure, their elimination, training, audit and drill fall under operational regime. He explained the SWISS CHEESE MODEL for preventing the fire accidents. Concluding his presentation Dr. Misra showed glimpses of various fires which have happened in India and abroad showing the challenges fire and emergency services have to face during the response.

Er P C Mishra, Immdt Past Honorary Secretary, coordinated the event and proposed the vote of thanks.

Nearly 150 members, guests and invitees attended the function.

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ever grand show. IEI-DSC reflected this effort to over 200 participants at Environment Day function on 5th June 2018 in our premises.

As we move towards completion, we are packed with organising events of National importance. Never in the history of IEI-DSC such events are done in four consecutive months. One Event Every Month. These include Life & Fire Safety Provisions in National Building Code 2016 (in July), National Convention of

Environment Engineers (in August), National Convention of Mechanical Engineers (in September) and Flagship event of Safety Convention 2018 (in October).

I take this opportunity to invite every Corporate Member to actively participate in these events.


Praveen Kumar Singh

34th Maj Gen Harkirat Singh Memorial Lecture

April 7, 2018 • New Delhi

Delhi State Centre of The Institution of Engineers (India) organized 34th Maj Gen Harkirat Singh Memorial Lecture on April 7, 2018 at Institutions' Premises. On this occasion Lt Gen (Retd) Suresh Sharma, PVSM, AVSM, Former Engineer-in-Chief, Indian Army and Director General, BRO was the Chief Guest & delivered Memorial Lecture. The function was also graced by Family members of late Maj Gen Harkirat Singh.

The Memorial function started with homage paying ceremony by garlanding of photograph of Maj Gen Harkirat Singh.

Mr Devendra Gill, Chairman, Delhi State Centre-IEI delivering his welcome address mentioned that greatest homage Engineering Fraternity can pay to Maj Gen Harkirat Singh is by adopting his principles & to work strenuously towards the betterment of The Institution of Engineers (India). Briefing about the contribution of Maj Gen Harkirat Singh, Mr Gill mentioned that Maj Gen Harkirat Singh was instrumental in conceptualizing, designing & construction of IEI's Head Quarters Seven Stories building. Later on, IEI HQs' building became land mark location in the city of Kolkata only due to vision of Maj Gen Harkirat Singh.

Chief Guest of the function Lt Gen (Retd) Suresh Sharma, PVSM, AVSM, Former Engineer-in-Chief, Indian Army and Director General, BRO delivering Memorial Address on topic "Strategising the Outcomes : Large - Scale Public Sector Infrastructure" spoke in details on the various factor of Public Sector Infrastructure. Chief



Guest in his address focused on various challenging issues relating to development of large scale infrastructure development.

Gen Sharma also highlighting significance of some key strategies, like 3rd party quality option, maintenance and operation of constructed building and handling contractual challenges to achieve better result.

While proposing the vote of thanks Mr Praveen Kumar Singh, Honorary Secretary, The Institution of Engineers (India), Delhi State Centre informed that Delhi State Centre-IEI started conducting Maj Gen Harkirat Singh Memorial Lecture since 1985. Over the years, this memorial lecture has grown in stature & importance due to persistent support of corporate members of the Institution of Engineers (India).

Event was attended by nearly 120 participants, mainly Committee & Corporate Members, Officers from Defence, Student Members & other invitees.

Proposed Events

- **One day Workshop on Fire and Life Safety Provisions in NBC-2016** on July 7, 2018.
- **25th Dr S P Luthra Memorial Lecture** on July 27, 2018.
- **34th National Convention of Environmental Engineers & National Seminar on "Environmental Pollution and Climate Change"** during August 10-11, 2018.
- **34th National Convention of Mechanical Engineers & National Seminar on "Mechanical Engineering and Emerging Challenges for Manufacturing"** during September 7-8, 2018.
- **Royal Charter Day** on September 9, 2018.
- **51st Engineers' Day** on Theme : Digital transformation : a New Industrial Revolution on September 15, 2018.
- **World Habitat Day** on October 1, 2018
- **Safety Convention 2018 on "Safety Challenges of MSME Sector"** during October 4-6, 2018 at Hotel Le-Meridien, New Delhi.
- **Annual General Meeting** during October, 2018

For further details, please contact :

Shri Praveen Kumar Singh, Honorary Secretary

The Institution of Engineers (India)

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