



# News Magazine of The Institution of Engineers(India), Kerala State Centre

## Voice of Kerala Engineers

Vol. XIII No. 6

June 2017

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### CHAIRMAN'S MESSAGE

Er. N. Rajkumar FIE



In the last issue also I had stressed on the importance of increasing Membership and Institutional Membership in the State. World Telecommunication and Information Society Day was celebrated in 17th May 2017. State Level inauguration of Electrical Safety Week Celebrations was inaugurated at IEI, Hall, Thiruvananthapuram. The celebrations were jointly sponsored by IEI, KSEB, EMC & ANERT. The Hon'ble Minister for Power Sri.M.M.Moni inaugurated the function. Our Summer classes for high school students concluded on May 10th. In the valedictory function, Er.K.S.Sabarathan M.L.A. was the Chief Guest. In the previous issues of VOKE I have been requesting for suggestions from senior members for taking up new areas where the IEI has to contribute. Skill Development and Entrepreneurship is one area which requires our attention and we have formed a committee for working out skill development programmes for young engineers. Proposal for conducting a training programme for fresh engineers has already been submitted to Hon'ble Minister for PWD Shri.G.Sudhakaran by me along with Honorary Secretary and Er.P.A.Prabhakaran, Convenor, Skill Development Committee. Chairman, Honorary Secretary and Eminent Engineer in our Committee Dr.Jayakumar, CEO, Vizhinjam International Seaport Ltd. participated in the inauguration of Civil Engineering Student Chapter at Mohandas College of Engineering and Technology, Anad. A hot summer is to end by May and let us hope for a favourable monsoon in June which will solve the water scarcity of State.

### HONORARY SECRETARY'S DESK

Er. K. S. Udaya Kumar MIE

#### Kerala State Centre Diary



**05-06-2017** World Environment Day 2017 Celebrations. Lecture on 'Connecting People to Nature' by Dr.J. Jayakumar, Principal, College of Architecture, Trivandrum, Mulayara, Thiruvananthapuram.

**07-06-2017** Talk on 'Weaponization of the Code' by Er. M. Harikumar, Retired Scientist, VSSC, ISRO.

**14-06-2017** Talk on 'Systems Approach towards Maintenance of Buildings and Allied Services' by Er. P.A. Prabhakaran, Retd. Chief Engineer, ISRO.

**21-06-2017** will be announced later.

**28-06-2017** Talk on 'Developing Airships' by Dr. B. Sivasubramonian, Retd. Group Director, ISRO.

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For registration contact our Office  
Telephone : 0471 2322991 or 2982102, Mobile : 9447450870, 9446004363

## The Institution of Engineers (India)

Kerala State Centre

### Two Day All India Seminar

**'Recent Development in Mechanical Engineering in Computational heat transfer and fluid flow and Energy Systems'**  
14th & 15th July 2017

Organised by

The Institution of Engineers (India), Kerala State Centre, Under the aegis of Mechanical Engineering Division Board, IEI, In association with Department of Mechanical Engineering, Sree Chitra Thirunal College of Engineering

Venue:

**Auditorium of Sree Chitra Thirunal College of Engineering, Pappanamcode, Thiruvananthapuram**

**Contact person for the seminar:** Er. Udaya Kumar K.S., MIE, Honorary Secretary, (Organising Secretary)

The Institution of Engineers (India) Kerala State Centre,

Visvesvaraya Bhavan, Opposite Kanakakunnu Palace, Thiruvananthapuram-695033

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years of relentless journey towards engineering advancement for nation building

## World Telecommunication and Information Society Day (WTISD 2017)



*Er. P.M.Sasi speaks*

The Institution of Engineers (India), Kerala State Centre observed World Telecommunication and Information Society Day on May 17, 2017 at Visvesvaraya Bhavan, Thiruvananthapuram. Er. P.M.Sasi, Associate Director, CDAC

Thiruvananthapuram delivered a talk on the theme, 'Big Data for Big Impact'. Er.N.Rajkumar, Chairman, IEI KSC welcomed and introduced the speaker.

The talk focused on the power of Big Data for development and how to make complex data into simple information. According to Er. Sasi compilation of data started 10,000 years ago. Now data sets are so large or complex that traditional data processing is inadequate to deal with them. The different categories of data are Structured data, Semi-structured data and Unstructured data. 70% to 80% of current data is Unstructured data.

The function concluded with vote of thanks by Er.K.S.Udaya Kumar, Hon. Secretary IEI KSC.



### PROPOSED 'SMART CITY' FOR THIRUVANANTHAPURAM -Some suggestions towards its planning

Er. P. A. Prabhakaran  
(Former Chief Engineer and Advisor ISRO/Dept.of Space)

There is a crying need for controlling and restricting the indiscriminate growth in flat construction intended for meeting housing needs. It is said that the actual occupancy level of some of the flat systems are very low and many of them are owned as an investment. Can we afford this considering the fact that precious natural resources like granite, sand, wood, hills etc. are getting depleted fast on account of these constructions? Besides, many of the water bearing low lying areas are getting filled up and natural water courses are getting obstructed, due to some of these large scale constructions. It can result in ecological damage and lead to natural disasters.

Considering the above, while planning for the Smart City, the following aspects need to be addressed:

Census should be undertaken to arrive at the occupancy level in all the existing flat systems.

Buildable areas within the city limit should be identified for both individual housing clusters and flat systems separately, the latter only if the projected population growth demand vertical growth. In this context if the growth projection

demands, satellite Township also may be considered as an alternative to vertical growth.

As it is, the city lacks adequate open space for sports and other physical recreation activities, particularly for youth and children. This has a direct bearing on the ever-increasing life style health hazards. The situation is going to worsen on account of more and more youth and children getting addicted to mobile phones and other electronic gadgets. This calls for a concerted effort to improve the situation, involving local resident's Associations. In respect of all future housing systems, need for having adequate open space for the purpose should be made mandatory.

Upkeep and maintenance of the services like roads, water supply, sewage disposal and electric supply warrants accountability of those charged with the respective functions. Some institutional arrangement for social auditing in these matters can be considered, associating local Residents Associations.

The procedure for approval of building plans for construction should be stream-lined and made stringent to ensure the Municipal Building rules thus revised and strictly implemented/ followed by all concerned.

### Valedictory function of Summer Vacation Training Programme for School Students

The valedictory function of the Summer Vacation Training Programme for School Students organized by The Institution of Engineers (India), Kerala State Centre jointly with Kerala State Centre for Science, Technology and Environment and Energy Management Centre-Kerala was held on May 10, 2017

at The Institution of Engineers (India), Kerala State Centre, Visvesvaraya Bhavan, Thiruvananthapuram.

Er.K.S.Sabarathnan, Hon. Member, Kerala Legislative Assembly was the Chief Guest. In his address, Er.Sabarathnan stressed the need for quality in Engineering education, which was lacking



Er.K.S.Sabarinathan speaks

now. He called upon the students to grow up with a sense of social responsibility.

Er.N.Rajkumar, Chairman, IEI KSC presided over the function. In his presidential address, Er. Rajkumar noted that it was fortunate to have an Engineer MLA as the Chief Guest.



Er.N.Rajkumar

Earlier, Er.K.S.Udaya Kumar, Hon. Secretary, IEI KSC, made the welcome address underlining the importance of including varied topics in the classes. Er. V.Vijayakumar, Past Chairman,



Er.K.S.Udaya Kumar

IEI KSC, presented a summarization of the classes. Classes were conducted on energy conservation, electrical safety, road safety, environment protection, agriculture, personality development, etc. Assembly and testing of an electronic device- Panic Alarm, which the students could take home, was also held.



Er.V.Vijayakumar

Er.K.M.Dharsan Unnithan, Director, Energy Management Centre-Kerala felicitated the function.



Er.K.M.D. Unnithan

Feedback was received from the students and parents. The programme was well appreciated. Suggestions for bettering the training were also received.



Er.S.Radhakrishnan

The function concluded with vote of thanks by Er.S.Radhakrishnan, Hon. Director, CERCON, promising to make further improvements in future training programmes.

## Electrical Safety Week

Electrical Safety Week was observed between 1-7 May 2017 by Electrical Inspectorate Department- Government of Kerala jointly with Department of Factories and Boilers; Kerala State Electricity Board Ltd., Energy Management Centre-Kerala ; Agency for Non-conventional Energy and Rural Technology(ANERT) and The Institution of Engineers (India), Kerala State Centre.

The inauguration was held on May 2,2017 at IEI Hall,VisvesvarayaBhavan, Thiruvananthapuram by Sri. M.M.Mani, Hon. Minister for Electricity, Kerala making a call to develop safety as a work culture. Sri. Paul Antony,IAS, Addl. Chief Secretary, Industries and Power Dept. presided over the function. In his address, stress was made to reduce electrical accidents. Earlier, Er. V.C.Anil Kumar, Chief Electrical Inspector made the welcome address pointing out the efforts made by Electrical Inspectorate in creating awareness on electrical safety.

The keynote address was presented by Dr. K.Elangovan, Chairman and Managing Director, KSEB Ltd. Dr. Elangovan made it clear that all steps have to be taken to avoid electrical accidents.



Sri. M.M.Mani, Hon. Minister for Electricity inaugurates

During the felicitations that followed, Er.K.M.Dharsan Unnithan, Director, Energy Management Centre-Kerala, Mr.E.B.Prasad, Director(Technical), Fire and Rescue Services Dept. and Er.N.Rajkumar, Chairman, IEI KSC stressed the importance of safety.

Also there was a play on Electrical Safety created by the staff of Electrical Inspectorate Department.

The function concluded with vote of thanks by Er.K.P.Raghavan, Addl.Chief Electrical Inspector.

*Follow Electrical Safety Rules and Avoid Accidents.*

## NEWS FROM LOCAL CENTRES

### Kozhikode Local Centre

Dr. K A Abdul Nazeer, Associate Professor & Former HoD, Dept. of Computer Science and Engineering, National Institute of Technology, Calicut delivered a lecture on the theme "BIG DATA BIG IMPACT". He described in detail the challenges and problems associated with large volume of data, generated at high velocity (speed) from a variety of sources where the reliability of the data itself may be poor.

### World Telecommunication and Information Society Day-2017

Hon.Secretary Er.C.Jithesh,MIE welcomed the chief guest and. The function concluded with vote of thanks of Er. C.V Sudheendran ,MIE, Member Kozhikode local centre.



## “Renewable Energy (Solar /Wind) in India”.



Dr.S.Kumaravel,Asst. Professor, National Institute of Technology, Kozhikode delivered a lecture on “Renewable Energy (Solar /Wind) in India”.

Er. C.Jithesh, Hon.Secretary Kozhikode Centre welcomed the Chief Guest and other members of the audience. Prof (Dr)K P Mohandas, FIE, Chairman, introduced the speaker.

While massive projects are underway to improve the generation from solar energy, he stated that better exploitation of excess solar energy from domestic installations is required to fully utilize this source. The need for integrating small solar installations into microgrid for better interfacing and power flow considerations and development of smart grids will be essential.The function concluded with vote of thanks of Er.C.Jayaram,MIE Committee Member Kozhikode Local Centre.

## IEI Alumni Association

It is proposed to form IEI Alumni Association at IEI Kerala State Centre, Thiruvananthapuram. Persons who have passed Section-A / B examinations are eligible for membership. Eligible persons may please submit the following details to the State Centre by e-mail: ieitvm@gmail.com or phone 0471-2322991, 2322992 , 2982102 at the earliest.

- 1) Name :
- 2) Date of birth:
- 3) Date of passing Section A/B Examinations:
- 4) Present IEI Membership and Number :
- 5) Address for Communication :
- 6) Phone No. :
- 7) Mob No. :
- 8) Present position :

For any clarification contact Mr.U.Balagopalan 9447211666.

## Voice of Kerala Engineers

### Notice-Please respond urgently

During the Third Committee Meeting of IEI Kerala State Centre for the Session 2016-2018 held on April 2, 2017, while many Members suggested to send this News Magazine by e-mail, some wanted to continue the present method of sending by Post. It is also to limit printing cost. Hence, Members desirous of receiving this News Magazine by Post may inform State Centre, positively, before 15 June 2017 through e-mail, Phone or SMS. The News Magazine is available at [www.ietvm.org](http://www.ietvm.org)

## Kerala State Centre- WEDNESDAY TALKS - Glimpses

**03-05-2017** Talkon ‘VedicMathematics’ by Prof. (Adv).N.Hariharan, Former Head of Information Systems, Indian Oil Corporation.



**10-05-2017** Talk on ‘Missile Technology’ by Er.Jayakishore S.R., Deputy Manager, Planning, BrahMos Aerospace, Thiruvananthapuram.



**24-05-2017** Talk on ‘Recent Trends in Food and Biomedical Applications’ by Dr.N.Moorthy,



**31-05-2017** Talk on ‘History of Fracture Mechanics’ by Shri A.K. Asraf, Group Director, Structural Dynamics & Analysis Group, LPSC, ISRO.



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If undelivered please return to:

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