



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

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## CHAIRMAN'S MESSAGE

Er. N. Rajkumar FIE



At the outset let me wish all our members a happy and prosperous New Year. One more year has elapsed without much changes in our professional body. The Institution has not been able to make much head way on the Engineers

Bill for the country.

The recognition / importance of our profession continues to be a neglected lot. In this context we should thank the personal efforts taken by Er.E.Sreedharan for raising Engineers' professional status. We assure him all our support as an organisation to strengthen his hands to follow up the matter.

During last month we had two major functions- the Two Day All India Seminar on the theme 'Recent Developments in Mechanical Engineering-Computational Heat Transfer Fluid Flow and Energy Systems' held on 19<sup>th</sup> & 20<sup>th</sup> January 2018 under Mechanical Engineering Division Board and the Agri Festival for School students under Agricultural Engineering Division Board.

## Padma Sri Lakshmikutty honoured

Smt. Lakshmikutty, an expert in traditional medicine who was awarded Padma Sri, was honoured by Agri Friends, an organisation dedicated to agricultural innovation for the common man, at a function on January 30<sup>th</sup>, 2018 at Press Club, Thiruvananthapuram. Er.V.Vimal Prakash, MIE, Former Council Member, IEI, Kolkata presented a Ponnada to Smt. Lakshmikutty on behalf of The Institution of Engineers (India), Kerala State Centre.



## HONORARY SECRETARY'S DESK

Er. K. S. Udaya Kumar MIE



### Kerala State Centre - Forthcoming Events

**07-02-2018** Technical talk on 'Scandinavian Model and the Danish Culture' by Mr. Jinu Jayapalan, Freelance Cross Cultural Consultant, India/Europe, Integrate APS Copenhagen.

**14-02-2018** 21<sup>st</sup> Er.C.S.Padmanabha Iyer Memorial Lecture on the topic 'A Tale of Two Magical Incubators' by Er.M.Harikumar, Former Head, IT Systems and Computer Networking, VSSC, ISRO, Thiruvananthapuram.

**21-02-2018** will be announced later

**28-02-2018** Technical talk on 'Sustainable Energy - Efficient Design' by Er.Sankar N. Menon, Director, SEED Engineering Consultants & Academy.

## 69<sup>th</sup> Republic Day



The Institution of Engineers (India), Kerala State Centre celebrated the 69<sup>th</sup> Republic Day on 26<sup>th</sup> January 2018. Er. N. Rajkumar, Chairman, IEI, KSC hoisted the National Flag at Visvesvaraya Bhavan, Thiruvananthapuram in the presence of Er.Udaya Kumar K.S, Honorary Secretary, IEI KSC, Committee Members, IEI, KSC, Corporate Members and staff.

## Summer Vacation Classes for School Students

Summer Vacation Classes in Electronics, Energy Conservation, Road Safety, Fire Safety, Electrical Safety, High Tech Agriculture, etc. from April 4th to May 7th, 2018. For Registration Contact: CERCON, The Institution of Engineers (India), Kerala State Centre, Visvesvaraya Bhavan, Opposite Kanakakunnu Palace, Thiruvananthapuram-695033. Phone: 0471- 2322991, 2982102 Mobile: 9447450870

## Fourth Children's Agricultural Festival

The Institution of Engineers (India), Kerala State Centre in association with Agri Friends and Rohini Cultural Forum organized a Two-day Children's Agricultural Festival on 17<sup>th</sup> and 18<sup>th</sup> January, 2018 at Visvesvaraya Bhavan, Thiruvananthapuram.

This was the fourth Annual Festival with the theme, " Kaadu, Naadu, Veedu, Nanma " aiming to educate school children on forest, agriculture, dairying and traditional medicine. Farmers,

agricultural scientists, technologists, engineers, artists, teachers and students played key roles in the festival which included competitions



Inauguration

in 31 items like folk music, folk dance, farm songs etc. and an exhibition on traditional household articles, agricultural



Sri. V.S. Sunil Kumar

implements and agricultural products like fruits and vegetables.

The festival was inaugurated on 17-1-2018 by Sri. V.S. Sunil Kumar, Honourable Minister for Agriculture, Govt. of Kerala. The exhibition on agricultural science and technology was inaugurated by Sri. K. Raju, Honourable Minister for Forests, Govt. of Kerala.



Sri. K. Raju

Earlier, Sri. M.P. Lokanath, Patron, Agri Friends presented the theme of the Agricultural Festival and Sri. P. Vijayan Nair, Convenor, Agricultural Festival delivered the welcome address, in which he underlined the importance of children's involvement in agriculture. The inauguration was presided over by



The Performers



Recital of farm songs



Exhibition



The winners

Er. N. Rajkumar, Chairman, The Institution of Engineers (India), Kerala State Centre. In his presidential address, Er. Rajkumar opined that engineering should be made use of in agriculture so as to increase production and profit for the farmers.



Valedictory Function

Er. K.S. Udaya Kumar, Hon. Secretary, IEI KSC, presented an overview of the festival.

In his inaugural speech, Sri. V.S. Sunil Kumar stressed the need to provide all facilities to

farmers, since agricultural production is the most important yardstick for development.

Sri. K. Raju, who inaugurated the exhibition, pointed out that agriculture production would improve if the right technology is applied.

A dance performance by Ms. Malavika (First Prize winner in

Bharatnatyam in Kerala State School Festival) and Band by Holy Angels' School Team marked the inauguration.

Felicitations were offered by Sri. A.M. Sunil Kumar, Director, Agriculture Dept. Er. S. Radhakrishnan, Director, CERCON, IEI KSC, Dr. Jose James, Managing Director, KLDB, Sri. Kollam Panickar, Patron, Agri Friends and Sri. D.R. Jose, President, Agri Friends.

On 18-01-2018, Er. P. Vijayachandran delivered a talk on 'Agriculture and Technology', followed by the valedictory function. Er. N. Rajkumar, Chairman, IEI KSC presided over. The welcome address was delivered by Sri. R. Jose, President, Agri Friends and inauguration was by Dr. George Onakkur.

The prizes for various competitions were distributed by the famous novelist, Dr. George Onakkoor, Er. N. Rajkumar and Er. K.S. Udaya Kumar. The overall First Prize was won by Jawahar Public School, Edava, Second Prize by Holy Angels' Girls High

School, Thiruvananthapuram and Third Prize by Government Higher Secondary School, Thonakkal.

Felicitations were offered by Sri. Rohini Vijayan Nair, Sri. M.P. Lokanath, Patron, Agri Friends, Sri. D.R. Jose, President, Sri. A.R. Baiju, Secretary, famous film artist, Sri. Kollam Thulasi among others. Later the students took the Agriculture Pledge and the two-day festival came to a close with vote of thanks by Er. K.S. Udaya Kumar, Hon. Secretary, IEI KSC.



### Two Day All India Seminar

#### 'Recent Developments in Mechanical Engineering : Computational Heat Transfer, Fluid Flow and Energy Systems'

The Institution of Engineers (India), Kerala State Centre organised a Two-Day All India Seminar on "Recent Development in Mechanical Engineering: Computational Heat Transfer, Fluid Flow and Energy Systems under the aegis of Mechanical Engineering Division Board IEI from January 19-20, 2018. The seminar was conducted in association with Sree Chitra Thirunal College of Engineering (SCT CE), Pappanamcode, Thiruvananthapuram at the Auditorium of SCT.

The function was inaugurated on 19.1.2018 by Shri. M.C. Dathan, Former Director, VSSC and Scientific Advisor to

Chief Minister of Kerala. In his inaugural address, Shri. Dathan went in depth on the development in Mechanical Engineering and in Space Sciences in particular.

The keynote address was delivered by Dr. M.P. Sukumaran Nair, Chairman, RIAB and Council member, IEI. Dr. Nair, called upon the students to have a scientific bend and to keep abreast with the modern developments.



Inauguration





*Inaugural Function*

Earlier, Dr. S.H. Anil Kumar, Principal, SCTCE delivered the welcome address and Dr. R. Ajith, HOD, Mech. Dept. the opening address. The inaugural function was presided over by Er.N.Rajkumar, Chairman, The Institution of Engineers (India), Kerala State Centre. Er.Rajkumar pointed out that taking membership of IEI is essential for young engineers for professional growth. Felicitations were offered by Dr.R.Harikumar, Director, ANERT and Dr. G. Anil, Joint Director, Energy Management Centre – Kerala.

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

After the inaugural session, there were two technical sessions on Computational Heat Transfer and Applied Thermal Engineering. A technical talk by Prof.M.Jose Prakash, HoD, Mechanical



*Valedictory Function*

Engineering Department, TKM College of Engineering, Kollam was also held.

On 20-01-2018, the seminar commenced with a Technical Talk by Dr. A.K. Ashraf, LPSC, ISRO, Thiruvananthapuram followed by a session on Sustainable Engineering Design.

The seminar concluded with a panel discussion on the technical sessions followed by valedictory function.

Dr.G.Mohan, Professor, Department of Mechanical Engineering, SCTCE delivered the welcome address. Er.S.Radhakrishnan, Past Chairman, IEI KSC and Director, CERCON presided over the function. The delegates were presented certificates by Dr.S.H. Anil Kumar, Principal, SCTCE, Dr. R. Ajith, HOD and Dr.Saratchandradas, Professor & Dean, PG Studies, SCTCE. Er.K.Sarat Kumar, Immediate Past Honorary Secretary, IEI, KSC proposed vote of thanks.

## NEWS FROM LOCAL CENTRES

### Kozhikkode Local Centre

### Technical Visit to Kannur International Airport

A Technical trip was organized by IE(I) Kozhikkode Local Centre to Kannur International Airport site, an upcoming International Airport under construction at Mattanur in Kannur district of Kerala State. The site is located about 25 kilometres away from Kannur city.

The airport is being built on public private partnership (PPP) model by Kannur International Airport Ltd. (KIAL), in which the Airports Authority of India has an equity stake of 10 percent, the State 35 percent, public sector units 25 percent and investors 30 percent. The airport will be built on 2,061 acres (834 ha) of land. The Cochin International Airport Limited (CIAL) submitted a detailed project report in May 2012 and subsequently Aecom Asia modified the master plan in August 2013. On November 2013, L&T was chosen to construct the

runway, passenger terminal buildings and ATC building. The construction work commenced in November 2013 and the completion

target date was 31 December 2017 with commercial operations expected to begin by mid 2018. The new airport would have a handling capacity of 4.67 million passengers and 60,758 tonnes of cargo per annum by 2026, in addition to being able to handle 39,638 aircraft movements yearly with peak aircraft movement at 18 per hour.

When completed, Kannur will be the fourth airport in India to have a runway length of 4000 m after Delhi, Hyderabad and Bangalore.



### Conservation of Temples with the help of Chambal dacoits

A Technical Presentation was held on 11th November 2017 at the Kozhikkode Local Centre of IE(I), Architect Muhammad K K, (Former Regional Director (North) Architectural Survey of India) delivered an expert lecture on "Conservation of temples with the help of Chambal dacoits"

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

Architect Muhammad K K gave a detailed presentation on how he proceeded with the renovation of Batewswar temple of Morena district in Madhya Pradesh state. This temple was in the middle of Chambal where dacoits were in full control. The temple was just a heap of rubbles from which

the restoration was done to perfection. Even the dacoits who were apprehensive about the work initially turned to be allies for the restoration



*Muhammad K K speaking*

work ultimately. He could lead the restoration work of nearly 80 temples in the surrounding areas with help from the local people. , Most of these temples were in the form of a heap of rubble scattered due to the natural calamities including earthquakes for a long time.

The function concluded with vote of thanks by Er.K Saleem AMIE, Member, Kozhikkode Local Centre.

The Institution of Engineers (India), Kochi Local Centre in association with Alumni Association of National Institute of Technology, Warangal (NITW) and Mar Baselios Institute of Technology and Science (MBITS), Nellimattom, Kothamangalam conducted a technical session on January 6, 2018.

There was a talk on "High Rise & Green Buildings" by Dr. N.V. Rama Rao, Director, NIT, Warangal.

Dr. N.V. Rama Rao in his speech, said that many of the buildings that have come up recently are inspired by nature. Lot of emphasis is being laid on designing Green Buildings in the recent years. Green building also known as sustainable or high

performance building, increases the efficiency with which buildings and their sites use and harvest energy, water, and materials with minimum impact

on environment. The speaker highlighted how nature can be integrated into design of building systems which uses less water, optimizes energy efficiency, conserves natural resources, generates less waste and provides healthier space to occupants as compared to conventional buildings.



### Kerala State Centre- WEDNESDAY TALKS - Glimpses

**03-01-2018** Talk on 'Complex Networks: A Networking Perspective' by Er. Abhishek Chakraborty, Senior Project Fellow, Dept. of Avionics, Indian Institute of Space Science and Technology, Thiruvananthapuram.



**10-01-2018** Talk on 'Medical Incubators' by Er. Rajkrishnan Rajan, Scientist -E, BMT Wing, Sree Chitra Tirunal Institute of Medical Sciences and Technology, Thiruvananthapuram



**24-01-2018** Talk on 'New Project Ideas' by Er. S Gautham Yogeewar, Asst. District Industries Officer, District Industries Centre, Thiruvananthapuram.



**31-01-2018** Talk on 'Movement Disorders and Modalities - An Engineering Approach' Er. Jithin Krishnan, Scientist/Engineer, BMT Wing, Sree Chitra Tirunal Institute of Medical Sciences and Technology, Thiruvananthapuram



### MEMBER IN THE NEWS

#### Prof. K.M. Bahauddin Award to Dr. G. Madhu FIE

Dr. G. Madhu FIE, Professor, School of Engineering, CUSAT (Past Chairman, IEI Kochi Local Centre and Former Council Member, IEI) has been awarded Prof. K.M. Bahauddin Award for Distinguished Engineering Teacher of Kerala 2018 in recognition of his meritorious career as an Engineer, Teacher and Research Worker.

The award has been instituted by NIT Calicut Alumni Association (NITCAA) – Kochi Chapter in honour of Prof. K.M. Bahauddin, a great engineering teacher and a visionary educationist. The award carries a cash prize of Rs. 1 lakh, citation and a memento.

The award was presented to Dr. Madhu (on right) by Prof. Sivaji Chakravarti, Director of NIT Calicut at NITCAA Day celebrations held at Kochi on 26<sup>th</sup> January 2018. Dr. G. Madhu returned back the amount of Rs. 1 lakh to NITCAA for instituting a biennial award for the best PhD thesis in Engineering and Technology from Kerala.



*Heartly Congratulations!*

### EDUCATION

Coaching classes for Section A, AMIE Examination will commence from February 17, 2018 For details contact: 9447450870.

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