

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

## Voice of Kerala Engineers

Vol. XIV No.4

April 2023

Price Rs 2/-

### Happy Vishu

#### CHAIRMAN SPEAKS

Prof. (Dr.) M. Jayaraju FIE



With the environment getting polluted day by day, I request all Members to become Eco-Warriors, at the earliest stand fight for the environment.

IEI KSC observed World Water Day on 22 March, 2023. The theme of World Water Day, 2023 was 'Accelerating the change to solve the Water and Sanitation Crisis'. The focus of the theme underlined the vital importance of taking decisive action to address the global water crisis. To make available clean drinking water to all living beings is the greatest challenge facing the Earth.

The fuel crisis is nothing when compared to the water crisis. We can switch on to newer fuels but there is nothing to replace water.

Rather than conducting Seminars let us ourselves conserve water by not constructing mansions and swimming pools wherever possible even on the top of skyscrapers.

The theme of World Water Day, 2023 was presented by Dr. V. Subash Chandra Bose, Former Director, Communications and Capacity Development Unit (CCDU), Government of Kerala.

The Summer Vacation Classes for High School students will commence on April 17, 2023 and the GATE Coaching Classes will commence in May - June 2023. The Internship programme for B. Tech students was initiated.

Chartered Engineers in all branches of Engineering, especially, Structural Engineering are requested to register with IEI KSC for consultancy work, undertaken by IEI KSC.

The 720th IEI Council Meeting was held during 25 - 27 March, 2023 at ESCI, Hyderabad.

It is proposed to conduct a National Seminar at Thiruvananthapuram on 'Recent Trends in Design and Application in Energy Development Programme' on 10 and 11 May, 2023 under the aegis of Mechanical Engineering Division Board of IEI.

An exhibition of Electric Vehicles will also be conducted.

The venue is IEI Kerala State Centre, Visvesvaraya Bhavan, Vellayambalam, Thiruvananthapuram.

All Members are requested to participate in the Seminar.

#### HONORARY SECRETARY'S DESK

Er.Roy Mathew, MIE



**12-04-2023** Talk on "Reusable Launch Vehicles – An Overview" by Dr Krishnadasan C. K, Dy. Director, VSSC, Structures Entity (Rtd).

**19-04-2023** Talk on "Chat GPT: A Paradigm Shift in AI" by Mr. Satish Babu, Co-Founder & President, InApp, Techno park, Thiruvananthapuram.

**26-04-2023** Talk on "Quality - in the Medical Device Domain" by Mrs. Sarada Jayakrishnan, General Manager (Operations), Terumo Penpol Limited, Thiruvananthapuram.

**03-05-2023** Talk on 'Hidden Messages of Water' by Prof. (Dr.) Rajendra Babu, Retd Professor, Department of Civil Engineering, College of Engineering, Trivandrum.

**17<sup>th</sup> April 2023** Inauguration of Summer Vacation Class for High School Students at 9.30 a. m. at Visvesvaraya Bhavan.

**10<sup>th</sup> & 11<sup>th</sup> May 2023** - National Conference on Recent Trends in Design and Application in Energy Development Programme Organized by the Institution of Engineers (India) Kerala State Centre Under the aegis of Mechanical Engineering Division Board, IEI

#### WORLD WATER DAY CELEBRATIONS 2023



On 22nd March 2023 Wednesday Celebrated World Water Day at Visvesvaraya Bhavan, the Institution of Engineers (India) Kerala State Centre, Thiruvananthapuram. Prof (Dr) M Jayaraju, FIE, Chairman, IEI Kerala State Centre welcomed Speaker and the gathering. He also narrated about the theme and introduced the speaker.

Dr. V. Subhash Chandra Bose, Former Director, CCDU (Communications and Capacity Development Unit), Government of Kerala, delivered the lecture on the theme 'Accelerating Change' Global Campaign theme: Be the change you want to see in the world. Er. Roy Mathew, MIE proposed vote of thanks.

*A Century of Service to be Nation*

## Palghat Local Centre

IEI Palghat Local Centre celebrated the World Engineering Day for sustainable development in a befitting manner on 04-03-2023 at Hotel Gazala, Palakkad at 6.00 p. m. Dr C.V. Veena Venudharan, Asst. Professor, Civil Engg Dept., Indian Institute of Technology, Palakkad was the guest speaker who delivered a talk on the theme of the Day "ENGINEERING INNOVATION FOR A MORE RESILIENT



WORLD". Er K. Madhana Mohan, Chairman chaired the meeting and delivered the welcome address. After welcoming the speaker and audience, he mentioned that the theme of "engineering innovations for a more resilient world" assumes lot of significance in the present scenario especially against the back drop of the recent earthquakes in Turkey and Syria. It had devastating effects on the country claiming thousands of lives, many thousands were rendered homeless and many skyscrapers and multistory buildings were crushed to earth. Most of the country's infrastructure got collapsed and the impact of the earth quake was so severe that we realized the importance of more resilient infrastructure and how significant these infrastructures are. Had these infrastructures were more resilient, most of infrastructure would have survived the impact and shock of the earth quake. So it is very essential that engineering fraternity should innovate proper technologies to make the structures more resilient and sustainable. As there is no dearth of technology in our country only we have to apply right technology at the right place at the right time so that all other things fall in place automatically. Let's all work towards building a more resilient world by innovative technologies.

In the presentation Dr. Veena Venudharan explained about COP27 – United Nations' Climate Change Conference.2022 (COPs, which stands for "Conference of the Parties and COP27 is the 27th annual UN meeting on climate held in 2022) The world is warming because of emissions produced by humans, mostly from burning fossil fuels like oil, gas and coal. Global temperatures have risen 1.1C and are heading towards 1.5C, according to the UN's climate scientists, the Intergovernmental Panel on Climate Change (IPCC). If temperatures rise 1.7 to 1.8C above 1850s levels, the IPCC estimates that half the world's population could be exposed to life-threatening heat and humidity. To prevent this, 194 countries signed the Paris Agreement in 2015, pledging to "pursue efforts" to limit global temperature rises to 1.5C. COP27 that reaffirmed their commitment to limit global temperature rise to 1.5 degrees Celsius above pre-industrial levels

She also explained the 6Rs of sustainability:

Rethink - Be mindful of what you buy. Ask yourself if you really need something

Refuse - Don't buy something you don't need. Refuse to buy products that cannot be recycled or reused

Reduce - Cut down on the amount of products and services you use

Re-use - Take a product / item and repurpose it for a different item

Repair - Fix, don't replace your products

Recycle - Recycle what you cannot reduce, re-use or repair.

Prof. C. Somasekharan, Former Principal, NSS College of Engineering asked Dr. Veena to explain about sustainability in road construction, especially in Kerala where many of the roads in the state have become unfit for travel owing to the change in the weather pattern and other reasons. She answered that to achieve sustainability in road construction the use of virgin aggregates to be reduced, use of recycled materials can be promoted, additives, granular and subgrade pavement materials should meet the desired performance standards. Apart from this, she said, good planning, good designing and good supervising are needed to build a long-lasting road.

She also shared the details of studies conducted by IIT Palakkad under her leadership along with other technical organizations.

The programme concluded at 8.15 p.m. with a vote of thanks by Dr C. Pradip, Honorary Secretary



IEI Palghat Local Centre organized a Health awareness Session on "Heart, Health and Lifestyle" on 17-02-2023 at Hotel Gazala , Palakkad at 6.p.m. Dr. Manu Bhasker. MD, DM, Interventional cardiologist, Thangam Hospital, Palakkad was the guest speaker who delivered a talk on the topic "Heart, Health and Lifestyle". Er K. Madhana Mohan, Chairman chaired the meeting and delivered the welcome address. Chairman welcomed all the members and guest speaker Dr. Manu Bhaskar for the general talk on the topic heart health and lifestyle.

In the presentation Dr. Manu Bhasker said that conditions in modern life lead to lifestyle diseases and life-threatening conditions like heart disease. He explained the things with the Japanese epic movie "The seven samurai" by Akira Kurosava in which a village of peasants, who have information about an imminent attack by bandits and decided to hire the services of samurai warriors. He said here 'the bandits' are Lack of exercise, Junk food, Tobacco, Diabetes, High cholesterol levels, Hypertension, Obesity, Emotional stress, Genetic predisposition etc. He said Many



risk factors begin accumulating at a young age, when the individual is asymptomatic. He explained the dangers of smoking, effect of untreated high BP etc. further He added that at least 30 min of daily exercise goes a long way in preventing heart attacks. He also explained Healthy emotional states, healthy food etc. .

The programme concluded at 8.15 p.m. with a vote of thanks by Dr C. Pradip, Honorary Secretary



IEI Palghat Local Centre observed the World Water Day 2023 on 23-03-2023 at Hotel Gazala, Palakkad at 6.p.m. Dr. Keerthy M. Simon, Asst. Professor, Civil Engg. Dept NSS College of Engineering, Palakkad was the guest speaker who delivered a talk on the theme of the Day “Accelerating Change for Water Sustainable Future”. Er K. Madhana Mohan, Chairman chaired the meeting and delivered the welcome address. After welcoming the speaker and audience he said that World Water Day raises awareness and inspires action to tackle the water and sanitation crisis. He spoke on the relevance of this year’s theme also.

In the presentation Dr Keerthy M. Simon explained that water scarcity, poor water quality, and inadequate sanitation

are ongoing issues that impact the health, well-being, and livelihoods of the world's people. Individuals are at risk of contracting waterborne illnesses, malnutrition, and economic hardship if they do not have access to safe and reliable sources of water. Sustainable water management is a critical area of focus, which entails implementing measures to conserve and protect water resources while also ensuring equitable access for all. Additionally, we must prioritize efforts to improve sanitation and hygiene in order to prevent the spread of waterborne diseases and infections. This includes the construction and maintenance of sanitation facilities, the promotion of hygiene education, and the expansion of access to affordable and effective sanitation products. To achieve these objectives, we must foster collaboration and partnerships among various stakeholders and sectors. This includes utilizing the private sector's resources and expertise to develop and implement innovative solutions, as well as collaborating with communities and civil society organizations to ensure that their voices and perspectives are heard in decision-making processes. We can help promote the health, well-being, and economic prosperity of individuals and communities around the world by accelerating change towards a water-sustainable future, while also protecting our most valuable resource for future generations.

The programme concluded at 8.15 p.m. with a vote of thanks by Dr C. Pradip, Honorary Secretary

**Kollam Local centre**



**06-03-2023** The Institution of Engineers (India), Kollam Local Centre observed “WORLD ENGINEERING DAY 2023” on 06/03/2023 at Baselios Mathews II College of Engineering , Sasthamcotta, Kollam .The program was jointly organized by IEI Kollam Local Centre and IEI Mechanical Student chapter, Baselios Mathews II College of Engineering.

The Inaugural Function was started with a silent Prayer .The Welcome address was proposed by Prof. Abraham Sam Thomas, Academic Coordinator, Baselios Mathews II College of Engineering. The presidential address was delivered by Dr. L. Padma Suresh (Principal, Baselios Mathews II College of Engineering Sasthamcotta, Kollam) and thereafter the function of World Engineering day celebration was inaugurated by Dr. Premlet (Former HOD and Professor of Physics, TKM College of Engineering, Kollam), Fr. Thomas Varghese, (Director of the Institution), Dr. Madhusoodanan Pillai (HOD and Vice principal, Baselios Mathews II College of Engineering and also the Executive Committee member of IEI KLC). During the inaugural session Dr. Sheeba R (Hon. Secretary, IEI Kollam Local Centre) delivered a general talk regarding IEI and its establishment. Also she mentioned the importance of IEI among engineering students. Prof.

Sreekumar R (Executive committee member of IEI KLC, Coordinator of the event and IEI faculty advisor of student chapter, BMCE) delivered Facilitation address.

Prof. Shehna Salim (APME of Mechanical department of BMCE) proposed vote of thanks. The second session was the Lecture by Dr. Premlet on “Sustainability its future and Challenges” and later a “Quiz competition” was conducted by Dr. Premlet based on the theme of world engineering day 2023 and also the basics of Engineering. The program was attended by about 100 students of various branches Faculties of various branches.

Day-1 (Forenoon)

Inaugural Session

Inaugural programme, Two invite d lectures

Welcome address by: Prof. Abraham Sam Thoms (Academic Coordinator, Baselios MathesII College of Engineering, Kollam)

L Padma Suresh (Principal, Baselios Mathews II College of Engineering, Sasthamcotta, Kollam)

Topic: Presidential address

Lectured by Dr. Sheeba R, (Hon. Secretary IEI Kollam Local Centre) Topic: General talk on Engineers Day celebration and IEI

Lecture by Dr Madhusoodanan Pillai (Executive Committee Member, IEI Kollam Local Centre)

Topic: General talk on World Engineers Day

Day-1

Technical Session I

Two invited lectures / presentations

Keynote address Dr. Premlet (Former HOD and Professor of Physics, TKM College of Engineering, Kollam)

Topic: Sustainability its future and Challenges

Topic: World Engineers Day and basics of Engineering.

22-03-2023

World water day was observed by IEI Kollam Local Centre at TKM Institute of Technology, Kollam on March 22, 2023 in association with TKM Institute of Technology, Kollam. The Inaugural session started at 10am with a silent prayer followed by welcome address by Ms. Sree Devi, Faculty Advisor, Civil Engineering division. She also introduced the guest speakers of the Workshop. Dr. Jose Prakash, Principal, TKM Institute of Technology, Kollam elaborated the importance of the day in his presidential address. Chairman



of IEI Kollam, Local Centre, Er. Rajan. K. inaugurated the world water day celebrations. He discussed about the urged the student participants to actively participate and utilize the assistance provided by the local centre. Dr. Madhusoodanan Pillai, Joint secretary, IEI Kollam Local centre offered felicitations for the program. Dr. Sudhi Mary Kurian, I dinator, TKMIT (Executive committee member, IEI, Kollam local Centre) proposed vote of thanks. Executive

committee members, corporate members of IEI Kollam Local Centre also attended the program. Inaugural session ended by 10.45 a. m. Technical sessions followed.

First session was handled by Er. Sunil Raj D., Superintending Engineer the urgency of water conservation and steps taken by the department for the same in Kerala. Ms. Amjadha offered thanks to the speaker. Second session was handled by Mr. Madhavanunni, Operations Manager, Va Tech Wabag, Chennai. He discussed about the water scarcity in Chennai, basics of desalination and gave us an overview of Sea water Desalination plants, procedures from his vast experiences in India and abroad. Ms. Nivedita proposed thanks to the speaker. Participants interacted with the speakers and their queries were answered by the speakers. The workshop came to an end by 12.15 pm. Around 200 participants were there including participants from other colleges. Feedback was collected from the participants and refreshments were provided at the end of session.

Day-1 (Forenoon)

Inaugural Session

Inaugural programme, Two invited lectures

Inaugural address: Er. Rajan K, (Chairman, IEI Kollam Local Centre).

felicitations for the program: Dr. Madhusoodanan Pillai, Joint secretary, IEI Kollam Local centre of

Day-1

Technical Session I

Minimum 3 papers or two invited lectures / presentations

First session was handled by Er. Sunil Raj D., Superintending Engineer Topic: urgency of water conservation and steps taken by the department for the same in Kerala.

Second session was handled by Mr. Madhavanunni, Operations Manager, Va Tech Wabag, Chennai.

Topic: water scarcity, basics of desalination and Sea water Desalination plants and procedures of vast experiences in India and abroad.

#### Trichur Local centre



22.03.2023 "Water Scarcity in Kerala: Notion, truth & action" in connection with World Water Day 2023 (Statutory Day Celebration). Dr. N. Saji Kumar, Principal Consultant HOD, Dept. of Civil Engineering, Govt. Engineering College, Thrissur. Dr. N. Saji Kumar has underlined that

our wrong perception that water resources are available in plenty is the basic reason for all problems related to resources, especially water. Water scarcity prevails in Kerala even though the State has an average rainfall of 3000 mm against the national average of 1150 mm. He discussed the

reasons for this paradox which are grouped into natural and man-made reasons. Further he pointed out the actions to be taken for enhancing the ground water storage, illustrating with examples. Dr. Saji Kumar also gave tips for reducing the water usage.

04-03-2023 World Engineering Day celebrated in Webinar mode. Dr. Muruganantham Ponnusamy, Deputy Registrar at the Indian Institute of Information Technology, Kalyani, West Bengal presented the topic "Engineering Innovation for a more Resilient World-Technology Adoption in Core Engineering Branches"



Technology adoption in all core branches of engineering is inevitable for sustainable development. Core engineering branches can survive only with adoption of new technology. Technology advancement in the form of Artificial intelligence, Internet of Things and Deep learning need

to be introduced in all core branches. These technologies should be interlinked to attain production in the new world. Machine learning is a type of artificial intelligence that provides computers with ability to learn without explicitly programmed.

### Kozhikode Local Centre

9.03.2023 Technical talk on “World Engineering Day for Sustainable Development” at Hotel Canoe, Kannur, A Technical Presentation was held on 09th March 2023, by The Institution of Engineers (India) Kozhikode Local Centre, in connection with the World Engineering Day for Sustainable Development 2023, from 6.30 p. m. to 8.30 p.m. at Hotel Canoe, Kannur, jointly with GRACE, (Graduates Association of Civil Engineers) and ICI Calicut Centre (Indian Concrete Institute, Calicut Centre).

Er. Ismail O.V. (Grace State Vice President & Chartered Engineer), welcomed the gathering and Er Sasi K V MIE, Committee member introduced the speaker. Er Surendranathan K FIE, Chairman IE(I), Kozhikode Local Centre, presided over the function and gave a brief introduction about the importance of the day and the theme.



Er. JEESH VENMARATH (Founder and Mentor of C-DISC Technologies LLP) made a detailed presentation on the topic “ENGINEERING INNOVATION FOR A MORE RESILIENT WORLD” and delivered a detailed lecture.

The talk was much informative and useful and was followed by active discussion. The speaker cleared the doubts raised by the participants.

The function concluded with vote of thanks by Er K Shaju MIE, Hon. Secretary, IE(I) Kozhikode Local centre.

### Kochi Local Centre

The seminar started with a welcome address by Er K S Babu Hon. Secretary, IEI, Kochi Local Centre. He welcomed the speaker Er SHYJU NAIR, CEO of DH Academy and Treasurer of Indian Concrete Institute, Kochi & DRELSON JOHN, Professor Civil Engineering MA College of Engineering, Kothamangalam, Er P A. Salahudheen, Chairman, Kochi Local Centre who joins the seminar from Bangkok through online, Prof (Dr) G Madhu and Dr Anil Joseph IEI Council Members and Narayana Poti Convener student chapter.

Hon secretary also welcome all the participants' students from various Engineering Colleges from various locations of Ernakulam and Alleppey districts, Hon secretary during



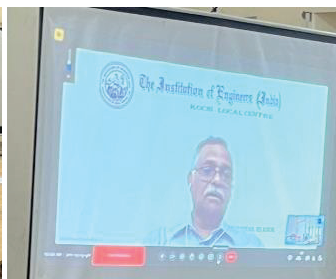
his special thanks to the efforts taken by the Civil Engineering department of Carmel College of Engineering and Technology, Alleppey.

Er. P A Salahudheen, Chairman of Kochi Local Centre delivered the Inaugural address, Dr Anil Joseph, Council Member delivered Felicitation speech and Er. Narayan Potty, Executive Committee Member expressed vote thanks during the Inaugural session.

Seminar proceedings were initiated with the introduction of speakers by Prof (Dr.) G. Madhu, Council Member.

The subject presentation in the Seminar started with a lecture class by Dr. Elson John he started with the historical background of Concrete and its evolution. He described various types of concrete and their various use. He detailed about present concrete and it applies not only to the static structure but even to Dynamic simple machinery. The concrete. After the first session, Er. Shyju Nair talked about the core topic Durability of Concrete its technical details was explained very nicely.

After brief discussion among the delegates Er K S Babu Hon Secretary, Er. ACK Nair, Executive Committee member IEI Kochi, Prof. (Dr) Susan Jacob HOD Civil Department Carmel College of Engineering and Technology spoke and sumup the seminar subject in the valedictory function. Students Chapter Convener Mr. Akshay of Carmel College of Engineering and Technology expressed a Vote of Thanks and the Seminar ended at about 4.00 p. m.





04.03.2023

FOR AMORE RESILIENT WORLD



The webinar started with a welcome address by P A Salahudheen Chairman of IEI Kochi Local Center. He welcomed Prof ( Dr) N Anantharaman FIE Former Professor (HAG) and dean ( Academic) NIT Trichy to the webinar. Chairman also welcomed all senior members and other dignitaries to the webinar. He mentioned the importance of world

Engineers day and its importance in the present contest with brief history and evolution of the engineering profession.

Prof (Dr) G Madhu introduced the speaker with a description of details of the speaker's experience both in academic and research areas and his important achievement in the field of his expertise and expertise.

Speaker Prof ( Dr) N Anantharaman started his speech with a general description of the subject with the importance of World engineers day in general and sustainable development in particular. He started his speech with the definition of sustainable development with various examples from the practical field. During the course of his speech speaker elaborated on the subject of Innovation for sustainable development with sustainable development goal (SDG ) published by the UN. His speech was very much elaborative and informative in the field of innovation and development. He continued his speech for about 125 minutes. At the conclusion of his discussion speaker cleared all the doubts raised by the participants.

After the discussion vote of Thanks was expressed by the Hon Secretary of Kochi LC Er K S Babu. The webinar ended at about 09.40 p. m.

20.03.2023

The webinar started with a welcome address by P A Salahudheen, IEI Kochi Local Center chairman. He welcomed Prof ( Dr) S. Shri Hari FIE Professor Department of Civil Engineering NIT Surathkal, Karnataka to the webinar.

Chairman also welcomed all senior members and other dignitaries to the webinar. He narrated the historical background of water day observance and current situation and the importance of th e water crisis in various locations.



Prof (Dr) G Madhu introduced the speaker with a description of details of the speaker's experience both in academic and research areas and his important achievement in the field of his expertise and experience in the various Government agencies involved in environmental issues by speaker Prof (Dr) S Shri Hari started his speech with a new year greetings to all participants in connection with Ugadi festival. Speaker started his speech with details of the situation demanded to observe such a world water day by the UN general assembly in 1993. And also correlated with various Sustainable development Goals established by the UN and its relation with World water day etc.

The speaker started explaining the subject by explaining the term sustainable Development from various perspectives to understand its importance in multiple Developments activities Then speech progressed to other areas of the subject. He detailed various sources of water and the qualitative and quantitative aspects of the importance of water purification and importance and its limitations of ROwater purification etc.

The speaker explained various water purification methods employed in various locations of the world and its Modern Technological innovations and developments. Speaker explained the details of various modern water purification methods such as Nanotechnology Various membrane technology such as Biomimetic membrane Technology, Acoustic methods etc. Speaker concluded his speech by summing up all the points he explained He also clarified various queries raised by the participants.

After the discussion vote of Thanks was expressed by the Hon Secretary of Kochi LC Er K S Babu. The webinar ended at about 07.00 p.m.

Kerala State Centre- WEDNESDAY TALKS - Glimpses

08.03.2023 Talk on "Green Hydrogen- fuel of the future" by Er. J. Sudhakaran Nair, Former Deputy Chief Engineer, Kerala State Electricity Board.



29.03.2023 Talk on 'Energy Conservation and Renewable Energy ' by Dr. R. Harikumar, Director, Energy Management Centre – Kerala, Government of Kerala.



15.03.2023 Talk on 'Universal Human Values and Ethics' by Dr. S. Ushakumari, Professor and Dean, Corporate Relations, Mar Baselios College of Engineering and Technology, Thiruvananthapuram.



05.04.2023 Talk on "Universal Human Values And Ethics' (Part-2) by Dr S Ushakumari, Professor and Dean, Corporate Relations, Mar Baselios College of Engineering and Technology, Thiruvananthapuram.





## The Institution of Engineers (India)

102 Years of Relentless Journey towards  
Engineering Advancement for Nation-building since 1920

### National Conference on Recent Trends in Design and Application in Energy Development Programme

10<sup>th</sup> and 11<sup>th</sup> May, 2023

Organised by  
**The Institution of Engineers (India)**  
Kerala State Centre

Under the aegis of  
**Mechanical Engineering Division Board, IEI**

## Celebrating 75<sup>th</sup> Year



Venue  
**The Institution of Engineers (India)**  
Kerala State Centre  
**Visvesvaraya Bhavan**  
Opposite Kanakakunnu Palace, Thiruvananthapuram

### Call for papers

All interested participants are requested to contribute technical/ research papers and case studies detailing concept, innovation, idea or practical experiences for oral as well a poster presentation. Each paper should begin with a synopsis of about 200 words and should be limited to 6 typed pages in A4 size papers including text, figures and tables etc. A brief bio-data (not more than half a page, affixing a photo) of the author(s) should accompany the paper.

### Submission of Full Text Paper

Last date for receipt of full paper with abstract and soft copy is

Last date for receipt of Abstract	25th April 2023
Notification for Acceptance of Abstract	30th April 2023
Last date for receipt of Full Text	03rd May 2023

The delegates may register by returning the Registration Forum duly completed along with delegate fee as indicated below

Prospective authors intending to present their papers are invited to submit full-length papers not exceeding six pages of A4 size with 'Abstract' of 250 words.

The paper shall be neatly typed in 12-point font size (Times New Roman) in double space, leaving 4cm space on top and 3 cm space for bottom, left and right of the page, shall be sent.

### Guidelines

1. Authors of accepted abstracts may submit their full paper for the National Conference as per the guidelines mentioned below:
2. Papers should be in MS-Word format, not exceeding 3000 words in length and should not carry more than 5 illustrations/ photographs in black and white.
3. The language of publication shall be English. The mode of presentation should be in third person.
4. SI units should be used wherever possible. Other units, if uses, should be given only in parentheses preceded by SI units.
5. Mathematical symbols should be typed and care should be taken to differentiate between similar characters (e.g., 1 and l), upper- and lower-case letters and superscripts and subscripts.
6. Lengthy mathematical proofs and derivations and extensive test data are discouraged. If absolutely essential, they should be given as an appendix.

# EDUCATIONAL COLUMN

## GUIDANCE CLASS FOR GATE 2024

Guidance Classes for GATE 2024 Examination for the following Engineering Branches

- Civil Engineering
- Electronics & Communication Engineering
- Electrical Engineering
- Computer Science & Information Technology
- Mechanical Engineering

Classes will commence from May 2023 (Course Duration: 9 months)

The registration fee has to be paid in one instalment by cash / Cheque / Demand Draft in favour of "The Institution of Engineers (India), Kerala State Centre" payable at Thiruvananthapuram along with the application.

## SUMMER VACATION TRAINING PROGRAMME FOR HIGH SCHOOL STUDENTS

The Institution of Engineers (India) Kerala State Centre is planning to conduct a summer vacation training programme for High School students from 17th April to 12th May 2023. The training programme includes both theory and practical. Theory classes Science education in simple and practical ways Alternate sources of include Management of Liquid Energy and Energy Management & Solid Waste including Rain Water Harvesting, plastic Sustainable Development. Practices including new trends in Agricultural & Dairy. Mechanization and Environmental Safety Practices, Fire Protection. & Rescue Operations, Industrial Safety, First Aid & Food Safety and Road Safety Life Saving, & Driving Personality Development and Personal hygiene manners & Environmental sanitization.

Duration: 21 Days (17th April to 12th May 2023)

Class Timings: 9.30 am to 1.00 pm (Monday to Saturday)

Registration: Rs 1200 /- (including GST) which has to be paid in one instalment by Cash / Cheque / Demand Draft drawn in favour of "The Institution of Engineers (India), Kerala State Centre" payable at "Thiruvananthapuram" along with the application.

Registration starts from the first week of April

Venue: The Institution of Engineers (India) Hall, Visvesvaraya Bhavan, Opposite Kanakakunnu Palace, Thiruvananthapuram 695033

For details contact:

The Institution of Engineers (India), Kerala State Centre, Visvesvaraya Bhavan,  
Opposite Kanakakunnu Palace, Thiruvananthapuram 695 033,  
Telephone: 04712322991, 2322992 Mobile: 9447696486, 8078027563  
Email: ieitvm@gmail.com, keralasc@ieindia.org, Web: www.ieitvm.org

# Voice of Kerala Engineers

April 2023

To

Date of Publication : 07-04-2023

If undelivered please return to:

*The Institution of Engineers (India)*  
Kerala State Centre  
Visvesvaraya Bhavan  
Opposite Kanakakunnu Palace  
Thiruvananthapuram - 695 033

Phone: 0471-2322991, Fax: 0471 - 2322992  
E-mail: ieitvm@gmail.com, keralasc@ieindia.org  
Web: www. ieitvm.org

Disclaimer: The Institution of Engineers (India) Kerala State Centre, as a body, accepts no responsibility for the statements made by individuals.

**Editorial Board** : Er.Sarat Kumar K, MIE, Editor, Er.Balakrishnan Nair P, FIE, Er.K.R.Suresh Kumar, MIE, Er. R.K.Subramoniam, MIE,  
Prof. (Dr.) M. Jayaraju, FIE, Chairman-KSC, Er.Roy Mathew, MIE, Honorary Secretary-KSC

Printed and published by Prof. (Dr.) M. Jayaraju, FIE, Chairman on behalf of The Institution of Engineers (India) Kerala State Centre. Printed at Akshara Offset, Kunnumpuram, Thiruvananthapuram (Ph: 0471-2471174). Published at IEL-KSC, Visvesvaraya Bhavan, Opposite Kanakakunnu Palace, Thiruvananthapuram. Editor: Er. Sarat Kumar K.