### ADVISORY COMMITTEE

Prof. Takeo Yamaguchi, Tokyo Institute of Technology, Japan

Dr. KGK Warrier (Retd.). CSIR-NIIST. Thiruvananthapuram. India

Dr. Gopinathan M. Anilkumar, Noritake Co., Ltd., Japan

Prof. Suresh C Pillai, Institute of Technology, Sligo, Ireland

Dr. Hareesh U. S., CSIR-NIIST, Thiruvananthapuram, India

Dr. Balagopal N. Nair. Noritake Co., Ltd., Japan

Prof. Rajan Jose, Universiti Malaysia Pahang, Malaysia

Dr. Takanori Tamaki, Tokyo Institute of Technology, Japan

Dr. S. Ananthakumar, CSIR-NIIST, Thiruvananthapuram, India

Dr. Min Jae Ko, Hanyang University, South Korea

Dr. Tiezheng Tong, Colarado State University, USA

Dr. Joshy Joseph, CSIR-NIIST, Thiruvananthapuram, India

Dr. Mangalaraja R Viswanathan, *University of Concepcion*, *Chile* 

Dr. Sindhuja Sankaran, Washington State University, USA

Prof. Mohd Hasbi Ab Rahim, *Universiti Malaysia Pahang*, *Malaysia* Dr. Surendran K. P., CSIR-NIIST, Thiruvananthapuram, India

Dr. Paresh L. Dhepe, NCL, Pune, India

Dr. Mahesh Hariharan, IISER, Thiruvananthapuram, India

Dr. Shajesh P., Jain University, Bangalore, India

Dr. Nandini Devi. R., NCL. Pune, India

Dr. Jipeng Cheng, Zhejiang University, China

Dr. Dalia Vishnudasan, Amritha Vishwa Vidyapeetham, Kollam, India

Prof. Youssef Belmabkhout, Mohamed VI Polytechnic University, Morocco

### CONFERENCE SPONSOR AND EXHIBITOR OPPORTUNITIES

The conference offers opportunity to become a sponsor and/ or exhibitor. The conference chair may be contacted for obtaining further information.

### PAPER PUBLISHING

All conference papers duly submitted will be blind peer reviewed by competent reviewers. The selected papers will be published through renowned national and international publishers and get indexed in databases including Web of Sciences and Scopus. Publishing criteria of each publisher will differ.

### BEST PAPER AND BEST POSTER AWARDS

Certificates of Excellence will be awarded for the best poster and oral presentation.

### ACCOMMODATION

Delegates are required to make their own arrangements for stay. However, the organizing committee will assist to find nearby hotels. Delegates who are in need of accommodation may contact organizers in advance and book their rooms.

### **REGISTRATION FEES**

Туре	Category	Before 15 <sup>th</sup> November, 2019	After 15 <sup>th</sup> November, 2019
Indian (INR)	Research Scholars	2000	2500
	Faculty	2500	3000
	Industry Delegate	3000	4000
	Academic Groups (4 People)	7000	10000
Foreign (INR)	Research Scholars	7000	8000
	Faculty	8000	9000
	Industry Delegate	10000	11000

For registration and abstract / full paper submission, please log on to our website, www.icee2k19.org. The articles submitted as full paper will be reviewed (blind peer review) and the selected papers will be published by renowned national and international publishers (indexed in databases, including Web of Science and Scopus).

### PAYMENT DETAILS

Account Holder: The Principal : Mumthas Complex, Karicode, Kollam Address

Account No. : 67382785938 IFSC Code : SBIN0070870 : State Bank of India. SWIFT Code : SBININBB : Karicode, Kollam Branch Code: 70870

### POST CONFERENCE TOUR

Post conference tours to nearby tourist places such as Kovalam beach, Ponmudi, Palaruvi Waterfalls, Ashtamudi Lake, Jatavu Earth Centre, Thenmala Ecotourism Spot, Backwaters in Kollam and Alleppey. Kumarakom Bird Sanctuary and other may be arranged after the event for interested delegates on request. However, travel, boarding, and lodging expenses are to be borne by the delegates joining the tour.

### ORGANIZING TEAM

### **Chief Patron**

Bank

Branch

Dr. T.K. Shahal Hassan Musaliar President, TKM College Trust

#### Patron

Jb. T.K. Jalaluddin Musaliar Treasurer, TKM College Trust Jb. T.K. Jamaluddin Musaliar Member, TKM College Trust

Dr. M. Haroon Member, TKM College Trust

### Chairperson

Dr. Smitha. P.G Principal

### **Conference Advisor**

Prof. Hashimudeen. A Former Principal & Liaison Officer

# ADDRESS FOR CORRESPONDENCE

Dr. Anas. S (Contact No. 9447926654) Dr. P.K. Manoj (Contact No. 9495902021)

### **Conference Chair**

Dr. S. Anas Head, Dept. of Chemistry

### **Co-Chairs**

Prof. Narayana Prasad. M Head, Dept. of Mathematics Prof. N.K. Saina Head, Dept. of Physics

### **Conveners**

Dr. P.K. Manoj Dr. Sumalekshmv. S Prof. Adersh V.K Prof. Aparna L.R Dr. Mohamed Musthafa, K





# T.K.M. COLLEGE OF ARTS & SCIENCE

Kollam, Kerala - INDIA, PIN - 691005.

Ph: 0474 - 2712240, 2711817, Fax: 0474 - 2711817 Website: www.icee2k19.org | www.tkmcas.ac.in Email: icee2k19@gmail.com | tkmarts@gmail.com





# International Conference on EE International Collies 2K19 Energy and **Environment**

www.icee2k19.org 12-14 December, 2019







# T.K.M. COLLEGE OF ARTS & SCIENCE, KOLLAM

## **SUPPORTED BY:**





# **PUBLISHING PARTNERS:**



















Chairman
Dr. T.K. Shahal Hassan Musaliar

### **ABOUT THE INSTITUTION**

T.K.M. College of Arts and Science, established in 1965 by Janab A. Thangal Kunju Musaliar, is an acclaimed citadel of learning in the city of Kollam. Affiliated to the University of Kerala, the institution is accredited by NAAC. It is ranked 80<sup>th</sup> by the National Institutional Ranking Framework (NIRF) in 2019, which bears testimony to its potential for excellence and the unparallelled prestige it commands in the academic community. The institution, with its ten undergraduate, six post graduate programmes, three research centres and state-of-the art infrastructural facilities, aims at the creation of a community of students empowered and equipped with knowledge, skills and values, who would contribute effectively to nation building. Many renowned scientists, both from India and abroad, including the Nobel Laureate in Chemistry in 2010, Prof. Ei-ichi Negishi, have visitied the college.

### ABOUT THE CONFERENCE

The most crucial issues in the contemporary world are energy and environment. T.K.M. College of Arts and Science aims to attain more awareness on these issues by proudly hosting an International Conference on Energy and Environment from December 12<sup>th</sup> to 14<sup>th</sup>, 2019. This international event is jointly organized by the Departments of Chemistry, Physics and Mathematics. The theme of the conference is **'ENERGY AND ENVIRONMENT'**. The aim of iCEE 2K19 is to provide a platform for researchers, faculties, engineers, academicians, technologists, scientists, industrialists, environmentalists, and experts to showcase their novel research in the field of Energy and Environment. The conference has special thematic sessions on the recent advances in interdisciplinary research on the generation, storage, conversion and efficient utilization of energy.

iCEE 2K19 will provide an excellent platform to exchange ideas with the leading experts across the globe. The scientific sessions of this conference have specific plenary and invited lectures, overviews, state of the art lectures and interactive education sessions, featured symposia, breakout sessions, and oral and poster presentation sessions for abstracts. It gives opportunities for the delegates to exchange new ideas and experiences, to create an environment for collaborative endeavours in emerging frontier interdisciplinary areas, to establish research relations and to find global partners for future collaboration.

### THEME AND SUB THEME

### **Renewable Energy (RE)**

Solar cell materials and solar cell technology Hybrid energy systems Solar thermal applications Nanotechnology applications to RE Hydroelectric, geothermal, tides and waves Integrated energy systems Renewable power generation

### Fuels and Combustion Hydrogen energy

Fuel cells
Batteries
Hybrid and electric vehicles
Bio-diesel fuels
Fuel additives
Alternative fuels
Industrial emissions and their control
Water splitting
Green energy
Energy resources

### **Advanced Technologies**

Low carbon transportation

Air-Liquid energies

Energy issues
Advances in sustainable energy
Energy efficient devices
Sensing and storage devices
Biomass conversions
Computational studies
Modelling and simulation
Electricity from waste
High voltage engineering
Non-renewable energy
Smart grids
Superconductors

### **Advanced Functional Materials**

Nanoscience and nanotechnology 0D, 1D, 2D and 3D nanomaterials Electronic and magnetic Materials Polymeric nanoparticles Biomaterials Characterization of nanomaterials Nanocomposites Electrocatalysis
Nanophotonics
Nanoelectronics nanofluids
Nano-porous materials
Nanomaterial toxicity
Nanodevices
Application of nanomaterials
Bio-nanocomposites
Organic-Inorganic hybrids
Supramolecules
Meta materials
Smart materials

**Photocatalysis** 

### **Thin Films**

Coatings
Thin film preparation
Functional surfaces
Surface engineering
Applied surface science
Surface science in energy conversion
and storage
Surface characterization tools
Applied materials and interfaces
Thin film Applications

### **Sustainable Environment**

**Environment impact assessment Environmentally-friendly materials** Ecology and biodiversity conservation **Environmental pollution & management** Climate change and global warming Remote sensing and environment Waste recycling/management Carbon emission and control Pollution control and management Sustainable agriculture Sustainable chemical processes Sustainable building materials Biotech for sustainability **Ecological sustainability** Artificial photosynthesis Green agricultural technology Environmental protection

### LIST OF SPEAKERS

Prof. Takeo Yamaguchi, Tokyo Institute of Technology, Japan

Dr. Gopinathan M. Anilkumar, Noritake Co., Ltd., Japan

Dr. Takanori Tamaki, Tokyo Institute of Technology, Japan

Prof. Suresh C Pillai, Institute of Technology, Sligo, Ireland

Dr. Sindhuja Sankaran, Washington State University, USA

Prof. Rajan Jose, *Universiti Malaysia Pahang*, *Malaysia* 

Dr. KGK Warrier (Retd.), CSIR-NIIST, Thiruvananthapuram, India

Dr. Sujatha Devi, CSIR-NIIST, Thiruvananthapuram, India

Dr. Paresh L. Dhepe, NCL, Pune, India

Dr. Mahesh Hariharan, IISER, Thiruvananthapuram, India

Dr. Sudarshan Kurmar. K, *IIT Guwahati, India* 

Dr. Shajesh P, Jain University, Bangalore, India

Dr. Nandini Devi. R, NCL, Pune, India

Dr. Pramod Pillai, IISER, Pune, India

Dr. Suraj Somon, CSIR-NIIST, Thiruvananthapuram, India

Dr. Bibin John, VSSC, Thiruvananthapuram, India

Prof. Youssef Belmabkhout, Mohamed VI Polytechnic University, Morocco

Dr. Praveen Sarojam, Gulf Bio Analytical LLC, UAE

Dr. Lav R. Khot, Washington State University, USA

### CALL FOR PAPERS

Researchers and authors are encouraged to contribute abstracts and full papers that address themes and topics of the conference.

High quality research contributions describing original and unpublished results of conceptual, constructive, empirical, experimental, or theoretical work in any one/ combined areas of the themes of the conference are cordially invited for consideration.

### **IMPORTANT DATES (EXTENDED)**

Abstract submission	Up to 1 <sup>st</sup> November, 2019	
Paper acceptance intimation	10 <sup>th</sup> November, 2019	
Full Paper submission	Up to 30 <sup>th</sup> November, 2019	
Early Bird registration	Up to 15 <sup>th</sup> November, 2019	
Conference Days	12 <sup>th</sup> to 14 <sup>th</sup> December, 2019	