

*The Department of Physics and the Centre of Excellence in Advanced Materials in collaboration with SPIE and ECS Student Chapters, CUSAT*



**Organize a  
National Workshop On  
"Contemporary Advances in Materials for Energy"  
(CAME-17)**

*In honour of Prof. S. Jayalekshmi*

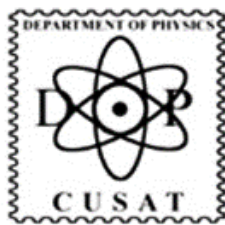


**On 3<sup>rd</sup> and 4<sup>th</sup> of February 2017**

**Venue: Auditorium  
Department of Physics**



**SPIE. STUDENT  
CHAPTER**  
COCHIN UNIVERSITY  
OF SCIENCE &  
TECHNOLOGY



The staff and students of the Department of Physics, the Centre of Excellence in Advanced Materials and the SPIE and ECS Student Chapters, CUSAT cordially invite you to the National Workshop on “Contemporary Advances in Materials for Energy” (CAME-17), organized in honour of Prof. S Jayalekshmi, on the 3<sup>rd</sup> and 4<sup>th</sup> of February at the auditorium of the Department of Physics .



*Prof. S. Jayalekshmi, an icon of unparalleled devotion for teaching and research, motivates her students to develop the right attitude to learning and pursue knowledge with passion and naïve curiosity. As a teacher and guide, she continues to enrich and illumine their minds with the power and glow of scientific spirit. In her career span of about three decades, she has stood high as a light house, extending unfathomable care, support, affection and guidance to her students, converting their mistakes into lessons, pressures into productivity and skills into strength. Her relentless efforts are always to bring out the best in her students and no doubt, her students continue to hold her close to their hearts as a committed teacher, a true mentor and above all a person with genuine human values.*

*Her research interests encompass multidisciplinary areas of Materials Science and Nanotechnology and significant contributions are in the development of energy storage devices including Li , Na and Mg ion cells and supercapacitors using a variety of eco - friendly electrode and electrolyte materials and LEDs based on polymers and small organic molecules. The research laboratory named “Division for Research in Advanced Materials” (DREAM Lab) under her supervision is a full fledged laboratory with all the facilities for assembling and characterizing prototype rechargeable cells and supercapacitors and assessing the luminescence characteristics of LEDs. The collaborative work of DREAM Lab with the Biotechnology Department of CUSAT, on the development of biocompatible semiconductor quantum dots for DNA visualization and finger print analysis has recently been considered for Indian patenting.*

# Programme

3<sup>rd</sup> February 2017

Registration 9:00 a.m. – 10:00 a.m.

**Inaugural session: 10 a.m. to 11:00 a.m.**

Prayer

Welcome address	Prof. M K Jayaraj, Honorary Director, Centre of Excellence in Advanced Materials
Presidential address	Prof. M Junaid Bushiri, Head, Department of Physics
Inaugural address	Prof. J Letha, Honorable Vice Chancellor, CUSAT
Felicitations	Prof. Ramesh Babu T Dr. Titus K Mathew Prof. Saritha .G.Bhat
Vote of thanks	Mr. Joseph John

11.00 a.m. to 11.15 a.m.	Tea Break
11.15 a.m. to 12.15 p.m. Invited Talk: "Organic light emitting diodes; routes to further improvements".	Dr. Narayanan Unni. Principal Scientist, CSIR-NIIST, Trivandrum
12.15 p.m. to 1.00 p.m. Invited Talk: "Excitonic Solar Cells".	Dr. Saji K J Assistant Professor, International School of Photonics, Cochin University of Science and Technology
1.00 p.m. to 2.00 p.m.	Lunch Break
2.00 p.m. to 3.00 p.m. Invited Talk: "Batteries on fire – Right combination of advanced materials resolve the challenges"	Dr. Prasanth Raghavan Associate Professor Dept. of Polymer Science and Rubber Technology, Cochin University of Science & Technology
3.00 p.m. to 4 p.m. Invited Talk: "Emerging trends in Nanomaterials for Medicine".	Prof. Manzoor Koyakkutty ACNSMM Kochi
4.00 p.m. to 4.30 p.m.	Tea Break

## Schedule of lectures

4<sup>th</sup> February 2017

10.00 a.m. to 11 a.m. Invited Talk: "Transparent and Flexible Lithium Superionic Conducting Solid Polymer Electrolyte".	Dr. Anand B. Puthirath Post -Doctoral Fellow TIFR, Hyderabad
11 a.m. to 11.30 a.m.	Tea Break
11.30 a.m. to 12.30 p.m.  Invited Talk: "Advanced materials for lithium ion cells".	Dr. Bibin John Scientist Vikram Sarabhai Space Centre Thiruvananthapuram
1.00 p.m to 2.00 p.m	Lunch Break
2.00 p.m to 3.00 p.m.  Invited Talk: "Electrochemical capacitors: The next generation energy storage devices for the power electronics".	Dr. Pramanik Scientist-E & Project Manager Aerogel Division Centre for Materials for Electronics Technology (C-MET)
3.00 p.m to 4.00 p.m  Invited Talk: " Si/C based anode materials for Li-ion storage applications"	Dr. Pradeep V S Inspire Faculty Department of Physics CUSAT
4.00 p.m. to 4.30 p.m	Tea Break
4.30 p.m.	Valedictory functions