

## **REPORT ON THREE DAY NATIONAL CONFERENCE**

### **NATIONAL CONFERENCE ON EMERGING RESEARCH TRENDS IN CHEMISTRY (NCERTC-16)**

Three days national conference on “Emerging Research Trends in Chemistry” was organized by Postgraduate department of chemistry, Payyanur College, Payyanur by utilizing the financial support from the University Grants Commission on 6<sup>th</sup> to 8<sup>th</sup> January 2016. The main objective of the conference was to update the scientific and teaching community, researchers and students on the current developments in the field of spectroscopy, nanotechnology, smart materials and computational chemistry.

Inaugural function was started by 9.30 am on 6<sup>th</sup> January 2016 by seeking the blessings from the almighty. Prof. P. V. Premavalli, Principal, Payyanur College, Payyanur gave the presidential address. The seminar was inaugurated by Dr. Balakrishna Kalluraya, Professor of Organic Chemistry, Mangalore University followed by the felicitations from Sri. K. Ramachandran, President, Board of management and Dr. Muralidharan, Co-ordinator, IQAC, Payyanur College, Smt P. Sona, Secretary, PTA, Payyanur College, Mr. K. Harikrishnan, Chairman, Payyannur college union extended their support and wishes for the conference. Dr. K. V. Sujith, Co-ordinator, NCERTC-2016 conveyed about the conference to the packed out audience.

First seminar session was started at 10.30 am on the topic ‘A review on IR and mass spectroscopy’ by Dr. Balakrishna Kalluraya. He explained in a very simple manner about the spectroscopic techniques such as IR, NMR and UV spectroscopy and recent developments such as FT-IR, 2D, 3D NMR, GCMS, LCMS, HRMS etc. There was a fruitful discussion between the students and the speaker. After the lunch Dr. S. Sugunan, Emeritus Professor, Department of Applied Chemistry, CUSAT, Kochi handled the second and third seminar session about the NMR Spectroscopy. The seminar session became more effective as the participants interacted with the speaker in efficient manner. Poster presentation by the young researchers were made as the last session.

Second day of the workshop was started at 9.30 am with the informative talk by Dr. Padmesh A, Adhoc faculty, Department of Chemistry, NITK Surathkal on the topic 'Computational Chemistry'. He explained the basic theory and aspects of computational chemistry such as Ab-initio methods and molecular dynamics method. Due to some serious inevitable reasons, other two sessions of the day were cancelled.

Third day Dr. Mahesh Hariharan, Associate Professor, IISER-Trivandrum, handled the topic on 'Femtoseconds spectroscopy' at 9.00 am. The topic was new to students and found very interesting as the method is used to study bio relevant reactions. Next session started at 11.00 am by Dr. U. S. Hareesh, principal Scientist, Material science and tech division, CSIR- NIIST on the topic ' Chemistry of Materials'. He explained about materials of future such as advanced ceramics and their chemical processing. After the lunch Dr. Pradeepan Periyat, Assistant Professor, Department of Chemistry, University of Calicut delivered a lecturer on 'Nanomaterials and its Functional Applications'. The topic involved the need of alternative reliable energy sources such as solar energy and the materials involved. This was followed by the presentations of young researchers on their innovative findings.

Nearly 250 people assembled for these three days national conference including 160 participants made it a memorable event in the history of Chemistry department and Payyanur College. Local media and news paper gave wide publicity and coverage for this three days educational seminar. The entire Payyanur College and organizing committee are so grateful to University Grants Commission, New Delhi.

Dr. Sujith K. V.

Convener