A Brief-Report on the Lecture Workshop on ‘Recent trends in Chemical Sciences’

The Department of Chemistry, School of Arts and Sciences, Amrita Viswa Vidyapeetham, Amritapur, Kollam-690525, Kerala organized a Lecture Workshop on “Recent Trends in Chemical Sciences” during August 26-27, 2011. The workshop was sponsored by the Joint Science Education Programme of the three Academies- Indian Academy of Sciences, Bangalore, The National Academy of Sciences, Allahabad and Indian National Science Academy, New Delhi. Professor R. Ramaraj, Director, Centre for Photoelectrochemistry, Madurai Kamaraj University was the Convener of the event. Dr Zeena S Pillai, Chairperson, Department of Chemistry was the course co-ordinator. There were around 120 participants including faculty members and students from different educational institutions of nearby districts and also from Tamil Nadu.

List of Resource Persons

1. Dr. D. Ramaiiah- Scientist G & Head, Chemical Sciences&Technology Division
2. Dr. M. L. P. Reddy- Scientist G, Chemical Sciences&Technology Division
3. Dr Thilagar, Assistant Professor, IISc. Bangalore
4. Dr C.T.Arvindakumar, Dean, School of Environmental Sciences, Mahatma Gandhi University

The first day started with an introductory function which included a Welcome speech by Dr. Zeena S Pillai, Introductory speech by Professor R. Ramaraj, Inaugural address by Professor G. J. Nair and felicitations by Dr. Balakrishnan Sankar, Associate Dean of the campus and Dr Sujatha, Asst Prof, Department of Physics.

In his introductory speech Prof. Ramaraj mentioned “I am happy that we could organize the workshop this year itself as this is the International Year of Chemistry” The first technical session began at 10.30 am with a talk by Dr D Ramaiah, Scientist G and Head, Chemical Sciences&Technology, NIIST, Trivandrum on Photodynamic therapy. Dr Ramaiah explained the importance of photochemistry in cancer chemotherapy with special reference to porphyrins and squaraine dye systems.
The second lecture of the first session was by Dr M. L. P Reddy, Scientist G, Inorganic Chemistry division, NIIST, Trivandrum. He spoke on the importance of Lanthanide Coordination complexes as promising light emitting materials for organic light emitting diodes. In the afternoon session there were two talks by Dr Ramaiah on biomolecular recognition and Dr M L P Reddy on environmentally benign NIR reflecting rare earth based inorganic pigments as energy saving materials. The session concluded at 4 PM.

The second day session started with the talk by Dr Thilagar, IISc Bangalore. He spoke on the proteosome as a therapeutic target in cancer. His talk spread light into boron chemistry and boronopeptides. This was followed by a talk by Dr C. T Aravindakumar, Mahatma Gandhi University titled “From millisecond to Femtosecond Molecular Mechanism in DNA radical chemistry.” He explained the importance of Femtosecond spectroscopy in studying fast reactions.

In the afternoon session, Dr C T Aravindakumar enlightened the audience with his talk on green chemistry – the principles and importance in the present scenario of global environment related problems.

In the concluding session many of the participants gave their feedback. “The talks were all interesting and very informative and we would like to participate in more of such events”, commented one participant from Kalasalingam University, Tamil Nadu. “The event was well organized and the hospitality is highly appreciated. However we would like more detailed discussions in the forthcoming similar workshops” quoted Dr Rema Devi, Faculty S.N. College, Chenganur. All our students and faculty members including Professor Padmanabhan, our visiting faculty worked in full spirits in organizing this grand event with the full fledged support of the facilities and ICTS team. The workshop concluded at 4.00 p.m. on August 26, 2011.
Indian Academies of Sciences Sponsored Lecture Workshop
‘Emerging Trends in Chemical Sciences’
Department of Chemistry, Amrita Viswa Vidyapeetham, Kollam
August 26-27, 2011

Friday, Aug 26, 2011

8:30 AM - 9:15 AM: Registration

9:30 AM - 10:15 AM: Inaugural Session

Prayer : Ms. Maya
Welcome Speech : Dr. Zeena S. Pillai
Introductory Speech : Prof. R. Ramaraj, Director,
School of Chemistry,
Madurai Kamaraj University
Presidential Address : Dr. Balakrishnan Sankar,
Associate Dean

Inaugural Address : Prof.(Dr.) G.Jayachandran Nair
Felicitation : Dr.Sujatha N.V.
Vote of Thanks : Ms. Saritha A.
Friday, Aug 26, 2011

(10:15-10:30 AM: Tea Break)

Session I 10:30 AM - 1:00 PM

Lecture 1: 10:30 AM - 11:45 AM
L1: Dr. D. Ramaiah, Photodynamic Therapy

Lecture 2: 11:45 -1:00 PM

L2: Dr. M. L. P. Reddy, Lanthanide Coordination Compounds as Promising Light Emitting Materials for Organic Light Emitting Diodes

(1:00 PM - 1:30 PM: Lunch Break)

Session II 1:30 PM - 4:30 PM

Lecture 3: 1:30-2:45 PM
L3: Dr. D. Ramaiah, Biomolecular Recognition

Lecture 4: 2:45 - 4:00 PM

L4: Dr. M. L. P. Reddy, Environmentally Benign NIR Reflecting Rare Earth Based Inorganic Pigments: Energy Saving Materials

(4:00-4:15PM: Tea Break)

Saturday, Aug 27, 2011

Session III 9:00 AM - 1.00 PM

Lecture 5: 9:00-10:15 AM

L5: Dr Thilagar, The Proteasome as a Therapeutic Target in Cancer
Lecture 6: 10:15 -11:30 AM

L6: Dr C.T. Aravindakumar, From Millisecond to Femtosecond: Molecular Mechanism in DNA Radical Chemistry

(11:30-11:45 AM: Tea Break)

Lecture 7: 11:45-1:00 PM

L7: Dr Thilagar, Frustrated Lewis Pairs: Metal Free Activation of Molecular H₂

(1:00 PM -1:30 PM: Lunch Break)

Session IV 1.30 PM - 3.30 PM

Lecture 8: 1.30 PM - 2.45 PM

L8: Dr C.T. Aravindakumar, Chemistry: The Green Way

2.45-3:30 PM: Session V (Concluding Session)

(3:30: 3:45 PM Tea Break)