Brief report of science academies lecture workshop on “Recent advances in Electrochemistry”

SALWARE – 2015, Sponsored by Indian Academy of Sciences, Bangalore & Conducted by the PG-Department of Chemistry, NMKRV College for women, Jayanagara, 3rd Block, Bangalore-560011 on 28th & 29th October-2015, for the benefit of students and teachers of various institutions.

The workshop was inaugurated & the keynote address was delivered by Prof. S. Sampath, the fellow of Indian Science Academy, Bangalore and the Convener of the workshop between 10.00-10.30am as Chief Guest and presided by Chandrashekar Raju, Chairman of Governing Council, RSST.

The Technical Session was begin with Prof. S. Sampath’s talk on “Study of Electrified Surface Interface. He had briefed out the Electrified Surface Phenomena, Electro catalysis Hydrogen – fuel storage & transport related issues & electroplating using titanium nitrate”.

The Second session was continued by Prof. Samapth from 12.15pm after a tea break. In this second session, he elaborated the principle, applications & operations of dye – Synthesized solar cells.

The Afternoon session was started at 2.00 pm after lunch break. The session was on “Scanned probe microscopy an indispensable tool in nanotechnology” which was briefed out by Prof. V Lakshminarayan from RRI, Bangalore. The session was informative & interactive which covered the principle, instrumentation and broad applications of scanning probe microscopy in the field of nanotechnology. He also putted a view on scanning tunneling microscopy and its uses in the study of surfaces of atoms & atomic force microscopy (AFM).

The Fourth session was continued by Prof. Lakshminarayanan after a tea break. He spoke about the use of organic molecules & gold nanoparticles thin films in electrocatalysis & fuel cells under the title “Electrochemically prepared nanostructural thin films and their applications.” The First Day of workshop was conducted with an elaborated discussion with eminent speakers by delegates.

The First Technical session of day two was on “Electrochemical synthesis of Inorganic materials delivered by Prof. P. Vishnu Kamath, Bangalore University, Bangalore. The session was covered with a brief introduction on electrochemistry in the field of synthesis of inorganic materials such as oxides, layered materials & their applications in batteries. The session two of day two was continued by Prof. V. Vishnu Kamath after a tea break. His informative talk was on basics of studies of polymorphism, morphogenesis & oriented crystal growth by electrochemical synthesis.

The session was covered with crystallography of electrochemically syntherized inorganic compounds which also embedded the information’s on polymorphism and morphogenesis of various types of electrochemically syntherized inorganic compounds.
The afternoon session of day two was presented by Prof. Aninda J. Bhattacharya, Scientist, solid state structural chemistry unit, IISc, Bangalore. He delivered his talk on microbial fuel cells. He briefed out the usage of electrochemical techniques in producing electricity by bio-by products.