

60th DAE Solid State Physics Symposium-2015 (Diamond Jubilee Year)

The 60th DAE Solid State Physics Symposium-2015 was held at Amity University UP, Noida, Uttar Pradesh during December 21-25, 2015. The symposium was fully sponsored by the *Board of Research in Nuclear Sciences (BRNS)*, Department of Atomic Energy (DAE). Over several decades the symposium has been organized successfully with the symposium entered into its 60th, the diamond jubilee year in 2015. In this Diamond Jubilee Year, Dr. N.K. Sahoo was the convener and the roles of secretaries were discharged by Dr. (Mrs.) R. Chitra and Dr. Shovit Bhattacharyya. This year 763 contributory papers were selected out of 1307 papers that were extensively reviewed by expert scientists from all over the country. Besides, there were 41 thesis and 10 young achiever award presentations and three awards were given in each category.

The symposium was inaugurated by Dr. S.M. Sharma, the then Director, Physics Group, BARC. The keynote address was delivered by Dr. S.K. Sikka. The Scientific sessions were held in time and the plenary talk and invited talks covered diverse topics which are of importance to concurrent scientific, technological, bio-medical, energy, nuclear and advanced material research. There was a plenary talk on first day with titled, "*Condensed Matter Phenomena under High Pressure: Some Insights*" by Dr. S.M. Sharma. There were two evening talks on first as well as second day of this memorable event, titled (i) "*Importance of Materials in a Knowledge Economy*" by Dr. R. Chidambaram and (ii) "*Material Science: a Mythological Perspective*" by Dr. Devdutt Pattanaik respectively, to add extra dimensions to the scientific deliberations.

The topics covered in this symposium through 49 invited talks, 24 oral presentations and over 800 poster presentations

were (a) Phase Transitions, (b) Soft Condensed Matter including biological systems, (c) Nano-materials, (d) Experimental Techniques & Devices, (e) Glasses & Amorphous Systems, (f) Surfaces, Interfaces & Thin Films, (g) Electronic Structure & Phonons, (h) Single Crystals, (i) Transport Properties, (j) Semiconductor Physics, (k) Superconductivity, Magnetism and Spintronics and (l) Novel Materials. The 11 thematic seminars of potential interests to solid state and condensed matter scientific communities included were in the areas of (i) Applied materials, (ii) Thin Films/polymers, (iii) Ion beam Processing/ Accelerator Based Solid State Physics, (iv) Topological Insulator & Nano-Magnetics, (v) Carbon Based materials, (vi) Nano & novel materials, Photonics & Meta materials and Physics Under



Inaugural address by Dr. S.M. Sharma, Director, Physics Group, BARC

extremes and Theoretical Solid State. Apart from these there were two panel discussions I) Neutron Science Researches and II) Synchrotron Science Researches. The symposium as a whole provided a very interactive scientific platform for interaction, discussion and reviewing of the scientific works by students, young and senior research scientists.

The valedictory session was chaired by Dr. S.K. Gupta, the then Associate Director, Physics group who in his concluding address summarized the five-day events. In this symposium 26 awards were given which included 20 best poster presentation awards, 3 Young Achiever's Awards, 3 Best Thesis Awards. On this occasion, a special souvenir was brought out in collaboration with the Indian Physics Association (IPA). Overall this Diamond Jubilee event was memorable on several scientific as well as organizational fronts.



Dr. S.K. Sikka and Dr. R. Chidambaram during the special evening talk session