There will be a seminar tomorrow at IACS by Prof. Deshdeep Sahdev, Dept of Physics, IIT Kanpur at 4:00 AM in the Physics Seminar Room (C-406), 3rd Floor, Centenary Building, IACS.

The title and abstract can be found below.

Title: SOME FUN ASPECTS OF CONDENSED MATTER PHYSICS

Abstract:
I will take the audience through a fascinating journey which saw my team developing Variable Temperature Scanning Probe Microscopes, and Systems for Chemical Vapor Deposition as also for the measurement of the electric and magnetic properties of materials. I will share some insights into the challenge of making each of these instruments internationally competitive. I will then describe how the break-throughs, we have achieved, have opened out a completely novel and innovative approach to teaching and research in the fields of material science, condensed matter physics and nano-technology.

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ABOUT THE SPEAKER

Dr. Sahdev trained, as a particle theorist, in leading groups at Cornell University, Univ. of Pennsylvania, and the International Center for Theoretical Physics (Italy) among others. While at these centers, he worked and interacted with several Nobel laureates including Prof Salam, Ken Wilson, Steven Weinberg and Richard Feynman. He then joined IIT Kanpur, where over two decades of innovative teaching, he turned out some of the best physicists of the country. Many of his students have, by now, received the Bhatnagar, Infosys and other prizes. Prof. Sahdev has contributed to several branches of physics: He was a co-discoverer of radiation zeroes and of their use in determining the anomalous magnetic moment of the W-boson. He is one of the original pioneers of the field of higher-dimensional cosmologies. He has worked on the non-linear dynamics of Josephson-Junction arrays and has developed several algorithms for simulating them. Furthermore, he has made considerable progress in achieving the integration of theory, computation, experiment and instrumentation at QuazarTech --- a Research Lab, Educational Center and Company, all merged into a single entity --- which he set up. In particular, he and his group have developed several Scanning Probe Microscopes, Physical Properties Measurement, Chemical Vapor Deposition and Data-acquisition Systems, and used them not only for their own research and teaching, but also to facilitate teaching and research across the entire country. Prof Sahdev is part of the Expert Advisory Group of the Instrumentation/Device Development Program of the Department of Science. and a FormerMember of the Technology Development Board of the Government of India.

You are cordially invited to attend the seminar.

Dr. Devajyoti Mukherjee
Associate Professor
School of Physical Sciences
Indian Association for the Cultivation of Science
2A & 2B Raja S. C. Mullick Road, Kolkata, 700032, India