Science Academies’ Refresher Course in Quantum Mechanics

at Physics Department, Indian Institute of Technology, Roorkee, Uttarkhand

28 November – December 12, 2013

Sponsored by
Indian Academy of Sciences, Bangalore,
Indian National Science Academy, New Delhi
The National Academy of Sciences, India, Allahabad

in collaboration with
Department of Physics, Indian Institute of Technology Roorkee, Roorkee

A Refresher Course in ‘Quantum Mechanics’ for college/university teachers will be held at the Physics Department of IIT Roorkee, Uttarakhand, from 28 November to 12 December, 2013. The Course is aimed for college teachers engaged in teaching at the UG/PG level as well as those who use and need Quantum Mechanics in their research work. The Course will cover the basic and advanced topics of Quantum Mechanics, through lectures and tutorials.

Course: About two thirds of the Course will cover the basic quantum mechanics at the level of standard M.Sc. Course. This will include: Postulates of quantum mechanics, Schroedinger equation and its solutions for some simple problems, Role of symmetry, Perturbation theory, Scattering theory, Identical Particles. In addition there will be three short modules on: Quantum technologies, Quantum computation and the Density functional theory.

Resource persons

Prof. Arvind (IISER, Mohali), Dr. Rajdeep Chatterji (IITR), Prof. Debjyoti Choudhary (Delhi University), Dr. Saikat Ghosh (IIT Kanpur), Prof. D.G. Kanhere (Poona University), Prof. Deepak Kumar (RR Fellow, JNU), Dr. B. K. Patra, (IITR), Prof. Ishwar S. Tyagi (Emeritus Fellow, IITR)

Course Director: Prof. Deepak Kumar
Course Convenor: Prof. Ishwar Singh Tyagi

College/university teachers having at least a Master’s degree in Physics are encouraged to apply. In order to participate, please send a short letter explaining your motivation to participate along with a brief curriculum vitae (including name, date of birth, gender, educational qualifications with marks obtained, teaching experience, typical courses taught, positions held, postal and e-mail addresses, phone numbers, etc.).

The applications should be sent (preferably by e-mail) before 15 September, 2013: Email: ishwarsingh1@gmail.com or by speed post to: Prof. I S Tyagi, Department of Physics, IIT Roorkee, Uttarakhand.