A Refresher Course in ‘Quantum Mechanics’ for College/University teachers/research scholars will be held at the Post-Graduate and Research Department of Physics, Loyola College, Chennai, Tamil Nadu, during 11–23 May 2015. The Course is primarily aimed at teachers involved in teaching quantum mechanics at the UG/PG level although a few seats will be available for research scholars in physics. The Course will cover the basic and advanced topics of quantum mechanics, through lectures and tutorials. College/University teachers having at least a Master’s degree in physics are particularly encouraged to apply.

**Topics:** Most of the topics in a standard UG/PG level course syllabus will be covered. There will be four modules:

- **Module 1:** History and Physical basis, Schrödinger equation, Free particles, Harmonic oscillator, H-atom;
- **Module 2:** Angular momentum theory and identical particles and spin;
- **Module 3:** Perturbation theory (degenerate and non-degenerate) and scattering theory;
- **Module 4:** Quantum theory of radiation and Relativistic quantum mechanics – Klein–Gordon equation and Dirac equation.

**Resource persons:**

Professors H. S. Mani (Chennai Mathematical Institute), G. Rajasekaran (The Institute of Mathematical Sciences and Chennai Mathematical Institute), Govind Krishnaswami (Chennai Mathematical Institute), S. V. M. Satyanarayana (Pondicherry Central University).

**Course Director:** Professor H. S. Mani

**Course Coordinator:** Mr C. Joseph Prabagar, Loyola College

Teachers/research scholars who wish to participate should send their applications online using the following link.

[http://web-japps.ias.ac.in:8080/Refreshcourse/RCQL.jsp](http://web-japps.ias.ac.in:8080/Refreshcourse/RCQL.jsp)

A printed copy of the application approved by the Head of the institution should be sent by speed post to: Prof. H. S. Mani, CMI, H1 SIPCOT IT Park, Siruseri, Kelambakkam, Chennai 603 103, Tamil Nadu.

For any further query, please e-mail to: qmrc2015@gmail.com. Please note that participants have to attend the full duration of the Course. **Arrival – 10 May and Departure – 24 May 2015.**

Last date for receipt of applications: **15 March 2015.**