



Science Academies' Refresher Course in Quantum Mechanics

at

DST FIST, KSCTE SARD Supported Post Graduate and Research Department of Physics,
Bishop Moore College, Mavelikara 690 110
1–14 May 2017

Sponsored by

Indian Academy of Sciences, Bengaluru
Indian National Science Academy, New Delhi
The National Academy of Sciences, India, Allahabad

A Refresher Course in 'Quantum Mechanics' for college/university teachers/research scholars will be held at the Post-Graduate and Research Department of Physics, Bishop Moore College, Mavelikara, Kerala, during 1–14 May 2017. 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. A brief outline of the Course is as follows:

There will be four modules:

Module 1: Physical basis of QM, Schrödinger Eq, H atom
Module 2: Principles, Linear Vector Space, Ang Momentum, Atoms and Molecules
Module 3: Perturbation theory (t -independant and t -dependant), Scattering theory
Module 4: Quantum Theory of Radiation, Relativistic Quantum Mechanics.

Resource Persons: Prof. G. Rajasekaran (The Institute of Mathematical Sciences and Chennai Mathematical Institute), Dr S. Sivakumar (Indira Gandhi Centre for Atomic Research, Kalpakkam), Dr S. V. M. Satyanarayana (Pondicherry Central University), Prof. H. S. Mani (Chennai Mathematical Institute).

Applications are invited from teachers with experience in teaching undergraduate and postgraduate courses in Physics. Maximum 40 applications will be considered and teachers who wish to participate in the Refresher Course may apply through proper channel with the following details: name, date of birth, gender, e-mail, official and residential addresses, telephone numbers, academic qualifications, courses taught, affiliation, positions held and tenure. It is also essential to submit a brief statement (between 250 and 500 words) as to why they think the Course will help to improve their classroom teaching of Quantum Mechanics. Applications should be submitted **ONLINE** by clicking the following link:

<http://web-japps.ias.ac.in:8080/Refreshcourse/RCMQM.jsp>

A printed copy of the application approved by the Head of the institution should be sent by speed post to: **Prof. G. Rajasekaran**, Institute of Mathematical Sciences, Taramani, Chennai 600 113. Last date for receipt of applications: **27 February 2017**. Outstation candidates will be provided local hospitality and round trip bus/train (three-tier AC) fare by the shortest route. Please note that participants must arrive on 30 April and leave on 14 May.

Course Director: Professor G. Rajasekaran, Institute of Mathematical Sciences, Taramani, Chennai 600 113.

Course Coordinator: Dr Lynnette Joseph and Dr D. Sajan, Assistant Professor, Department of Physics, Bishop Moore College, Mavelikara 690 110. e-mail: lynnettejohn@gmail.com, drsajanbmc@gmail.com, Mobile: 98471 03951, 94950 43765.