



Science Academies' Refresher Course in Advances in Chemical Sciences and Sustainable Development 12–25 January 2015

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 Chemistry, School of Chemical Sciences and Pharmacy,
Central University of Rajasthan, Ajmer

A Refresher Course in Advances in Chemical Sciences and Sustainable Development for College/University teachers and research scholars will be organized at the Department of Chemistry, School of Chemical Sciences and Pharmacy, Central University of Rajasthan, Bandarsindri 305 817, Rajasthan for two weeks from 12 to 25 January 2015. The Course is aimed at teachers teaching at UG/PG level and research scholars. The Course will cover both basic and advanced topics in Chemical Sciences with emphasis on its relevance to sustainable development. College/University teachers having at least a Master's degree in Chemistry/Chemical Engineering are eligible to apply.

Topics: Selected topics in a standard UG/PG level course syllabus will be covered. There will be four modules:

Module 1: Introduction to bioinorganic chemistry, chemical biology and its applications; chemistry of transition metals; organometallic chemistry and catalysis; organochalcogen chemistry; metallophilic interactions.

Module 2: Stereochemistry; organic synthesis and reaction mechanism; heterocyclic compounds; organic molecules and materials for energy.

Module 3: Quantum mechanics; molecular spectroscopy; group theory and its applications; nanomaterials.

Module 4: Introduction to NMR spectroscopy and MRI; mass spectrometry and its applications.

Confirmed Resource Persons: Professors H. B. Singh (IIT Bombay), M. Periasamy (University of Hyderabad), J. K. Bera (IIT Kanpur), G. U. Kulkarni (JNCASR, Bangalore), Subash Khushu (Institute of Nuclear Medicine and Allied Sciences, Delhi), R. T. Pardasani (Central University of Rajasthan), Sunil G. Naik (Central University of Rajasthan) and G. Mugesh (IISc, Bangalore).

Course Director: Prof. G. Mugesh (IISc, Bangalore)

Course Coordinators: Prof. R. T. Pardasani (Coordinator) and Dr Sunil G. Naik (Co-coordinator).

Teachers/Research Scholars who wish to participate in this Refresher Course should submit their completed application form online by clicking on the following link

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

A hard copy of the application through the Head of the institution should also be sent by speed post to: **Prof. R. T. Pardasani**, Course Coordinator, Department of Chemistry, School of Chemical Sciences and Pharmacy, Central University of Rajasthan, Bandarsindri 305 817, Ajmer–Jaipur Express way, Ajmer Dist., Rajasthan. In the case of teacher applicants, a print copy of the application should be forwarded by the Head of the Institution stating that leave will be sanctioned if the applicant is selected for the Course. For any other query, applicants can send an e-mail to: hod.chem@curaj.ac.in.

Last date for the receipt of online application: **15 October 2014**. Last date for the receipt of the printed copy of the online-submitted application form through proper channel: **30 October 2014**.

Selected participants will be intimated through e-mail by **31 October 2014**. The selected outstation participants will be provided with local hospitality and round-trip bus/train (3-tier AC) by the shortest route.