International Winter School 2022
On
Frontiers In Materials Science

JNCASR

December 05 - 09, 2022 at Conference Hall, JNCASR, Bengaluru

Directors: C N R Rao, FRS and **Sir A K Cheetham,** FRS

Conveners: Umesh V Waghmare and **M Eswaramoorthy,** SAMat, JNCASR, Bengaluru

The International Winter School-2022, "Frontiers in Materials Science", is aimed at introducing frontier areas of research in materials science to graduate students, young researchers, and scientists with background in physics, chemistry and engineering.

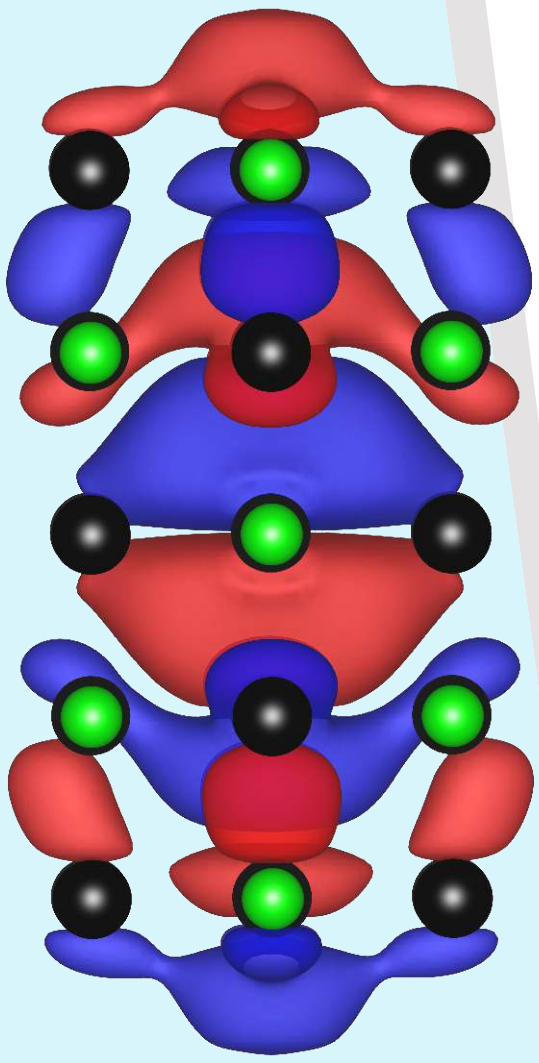
The topics to be covered in this Winter School include chemistry and physics of transition-metal oxides and their functional properties, methods of high pressure, chemical and topo-chemical synthesis of materials, spin ordering in crystals and magnetism, functional and quantum materials, microstructures, nano-scale heterostructures, energy storage, conversion and transport, corrosion, electrochemistry of materials for energy storage in batteries, ion transport, catalysis, porous solids, metal organic frameworks, magnetoresistance, 2-dimensional materials, femto-scale processes, spectroscopy and various techniques of material characterization, quantum dots, molecular magnets, molecular electronics, structural and computational biology, soft materials, theoretical and computational quantum chemistry and materials science and computer simulations.

One-hour lectures given by leading scientists will provide a pedagogic view of the background and emerging ideas in a given area of materials science, and also cover research at the cutting edge through examples from their works.

Active participation from students and young participants is strongly encouraged through poster and a few oral presentations, in addition to frequent interactions with the speakers.

Speakers

Ruchi Anand, IIT, Mumbai
J Paul Attfield, University of Edinburgh
Aninda J Bhattacharyya, IISc, Bengaluru
Kanishka Biswas, JNCASR, Bengaluru
A K Cheetham, UC Santa Barbara and NUS, Singapore
Tanusri Saha-Dasgupta, S N Bose, Kolkata
Vinayak P Dravid, Northwestern University
Timothy S Fisher, UC, Los Angeles
Rajesh Ganapathy, JNCASR, Bengaluru
Arindam Ghosh, IISc, Bengaluru
Michael L Klein, Temple University
Bettina V Lotsch, Max Planck Institute, Stuttgart
R Murugavel, IIT, Mumbai
Geetha G Nair, CeNS, Bengaluru
U Ramamurty, NTU, Singapore
Richard Remsing, Rutgers University
Bivas Saha, JNCASR, Bengaluru
S Sampath, IISc, Bengaluru
Premkumar Senguttuvan, JNCASR, Bengaluru
Mas Subramanian, Oregon State University
A Sundaresan, JNCASR, Bengaluru
A K Tyagi, BARC, Mumbai
R Vaidhyanathan, IISER, Pune
Pratap Vishnoi, JNCASR, Bengaluru
Ranjani Viswanatha, JNCASR, Bengaluru
John Wang, National University of Singapore



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SAMat

JNCASR

RAKCAM for Advanced Materials
Sheikh Saqr Laboratory

School of Advanced Materials (SAMat)
International Centre for Materials Science (ICMS)
Sheikh Saqr Laboratory
at the Jawaharlal Nehru Centre for Advanced Scientific Research

Apply online: log on to http://www.jncasr.ac.in/winterschool

Application Deadline: October 31, 2022

A list of selected applicants will be announced by November 04, 2022 on website

Contact: Winter school-2022, Jawaharlal Neharu Centre for Advanced Scientific Research, Jakkur, Bengaluru 560 064, INDIA
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