Workshop on Statistical Physics and Material Science
21 – 23 July, 2016 (sponsored by TEQIP - II)
Organized by
Department of Physics
NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI (www.nitt.edu)

THE INSTITUTE
National Institute of Technology (formerly known as Regional Engineering College) Tiruchirappalli, was started as a joint and cooperative venture of the Government of India and the Government of Tamil Nadu in 1964 with a view to catering to the needs of manpower in technology. The college has been conferred with autonomy in financial and administrative matters to achieve rapid development. Due to the vast and rich experience, the institute was granted Deemed University Status with the approval of the UGC/AICTE and Govt. of India in the year 2003 and renamed as National Institute of Technology. The institute offers Under Graduate programmes in ten branches and Post Graduate programmes in twenty-one disciplines of Science, Engineering & Technology, Management and Architecture, besides M.S. (by Research) and Ph.D. in all the departments. The institute is an example of cultural unity among students from all parts of the country. The hallmark of the campus is the excellent facilities which cater to the academic and extra curricular activities of the students.

THE DEPARTMENT
Department of Physics is strengthened with 13 faculty members working in diversified areas of research and collaborating with national/international laboratories of high repute. Sponsored research projects funded by DST, CSIR, DRDO, BRNS, NRB etc. are being carried out here. Besides, the department is sponsored by DST under FIST programme. The Department is offering M.Sc. (Physics), M.Tech. (NDT) and Ph.D. programmes.

THE WORKSHOP
Statistical physics develops methods to understand the bulk (measurable) properties of matter in terms of statistical description of the constituents namely, atoms, molecules, ions, electrons etc. Such a description immensely facilitates to uncover thermal, chemical, optical, electrical and magnetic properties of various materials. In the last few decades, this led to all the visible benefits around us through the advancements in solid state engineering and technology. The objective of the workshop is to emphasize the foundations of statistical descriptions matter to unravel the intriguing connection between microscopic and macroscopic scales of material. Simple models will be introduced to understand the complex phenomena like magnetism, phase transition etc. Future challenges in material science at nanoscale will be outlined.

TOPICS
- Boltzmann Gas
- Quantum Gas
- Phase Transition
- Magnetism
- Nanostructures

INVITED SPEAKERS
- Prof. K.P.N. Murthy (UH, Hyderabad)
- Dr. S. Sivakumar (IGCAR, Kalpakkam)
- Dr. S.V.M. Sathyanarayana (PU, Pondicherry)
- Prof. K. Jayakumar (GRU, Gandhigram)

HOW TO APPLY?
The workshop is aimed for maximum of 40 participants who may be young researchers/teaching faculty at college level. Registration fee is Rs. 330/- which includes kit, food and accommodation. The fee will be accepted in the form of demand draft (DD) drawn in favour of The Director, NIT, Tiruchirappalli payable at Tiruchirappalli. Name and address of the participant should be mentioned on the back side of DD. Duly filled registration form along with DD shall be sent to:
The Coordinator, Workshop on Statistical Physics and Material Science, Department of Physics, National Institute of Technology, Tiruchirappalli - 620015, Tamilnadu.

Confirmation of registration will be communicated to the participants by email on 15 July, 2016. Spot registration will not be accepted.

FORMAT OF REGISTRATION FORM

| Name : | ............................................ |
| Designation : | ............................................ |
| Organization : | ............................................ |
| Address : | ............................................ |
| Mobile/Telephone : | ............................................ |
| Email : | ............................................ |
| Accommodation Required: Yes / No |  |
| D.D. No. | ............................................ |
| Date : | ............................................ |
| Signature : | ............................................ |

Last date for receiving the registration form along with DD : 12 July, 2016