



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)
CATEGORY - 1 UNIVERSITY BY UGC



Resource Persons



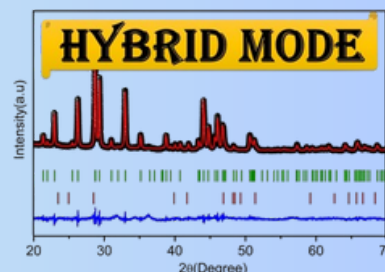
Dr. P. Kuppusami
Professor (Research)
Centre of Excellence for Energy Research, Centre for Nano Science and Nanotechnology, Sathyabama Institute of Science and Technology, Chennai-600119.



Dr. Adigilli Harish Kumar
Research Engineer
Saint Gobain Research India, IIT Madras, Research Park, Chennai -600119.



Dr. Pradeep Reddy Vanga
Assistant Professor
Department of Physics
Vel Tech Rangarajan Dr Shakunthala R&D Institute of Science and Technology, Avadi, Chennai-600062.



A Two-Day Workshop on Qualitative and Quantitative X-Ray Diffraction Data Analysis using Rietveld Refinement

ORGANIZED BY

SEPTEMBER

25th & 26th
2024

Centre of Excellence for Energy Research
&
Centre for Nanoscience and Nanotechnology

Highlights & key benefits of the workshop

- The course covers a brief overview of the theory of XRD, instrumentation and methods for qualitative and quantitative phase analysis of simple to complex crystal systems.
- The course provides a glimpse of fundamental crystallographic topics on the classification of crystal systems and determining the structural parameters for the diffraction data.
- Dedicated sessions focused on practical training which includes, phase identification, introduction to the method, working principles, influence of important refinement parameters, strategies utilizing the FullProf Suite and MATCH software.
- Imparts you with a strong foundation for comprehending and applying the Rietveld Refinement technique.
- Learn effective and reliable data analysis to elevate your research work and publications.
- Participants are requested to bring their laptop for the workshop training sessions.

About the centre

The Centre for Nanoscience and Nanotechnology (CNSNT) was established in January 2006 to perform cutting-edge multidisciplinary research with a focus on nanoscale systems. The Centre of Excellence for Energy Research (CEER) under CNSNT, funded by the MHRD, Govt. of India, is dedicated to significantly developing sustainable, economical, and efficient technologies to address the country's energy demands. The current research topics encompass various fields but are not limited to nanomaterials engineering, nanoelectronics, solid oxide fuel cells, solar photovoltaics, supercapacitors, materials for energy storage, biofuels and biosensors and thermal barrier coatings. The Centers manage several R&D projects and initiatives supported by both public and private funding agencies. Apart from the research activities, the Centers offer advisory and consultancy services to research institutions, academia and industries in India and outside. The state-of-the-art nano and thin film fabrication facility and several other sophisticated analytical characterization facilities at our Centres cater to multidisciplinary research domains. For more details visit our website at <https://www.centrefor nanotechnology.com/>.



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Dr. B. Vigneshwaran

Assistant Professor (Research)

Organizing Committee

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Assistant Professor (Research)

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Assistant Professor (Research)

Dr. T. Dharini

Assistant Professor (Research)

Registration Fee

	Offline	Online
UG/PG/PhD/PDF :	Rs.1000/-	Rs.750/-
Faculties :	Rs.1500/-	Rs.1000/-
Others :	Rs.2000/-	Rs.1500/-

Registration Link

<https://forms.gle/w8pXe3dUDmrDmdE1A>

Registration kit, refreshments, lunch and certificates (e-Certificates for online participants) will be provided for the participants.

Program schedule

Day 1 : 25.09.2024

09.00 am : Registration

10.00 am : Inauguration

10.15 am : Refreshments

10.30 am : **Theory and Instrumentation of XRD for Structural Analysis** by **Dr. P. Kuppusami**

12.00 pm : Lunch

01.00 pm : **Qualitative and Quantitative Phase Analysis using Rietveld Refinement & Training** by **Dr. Adigilli Harish Kumar**

03.15 pm : Refreshments

Day 2 : 26.09.2024

10.00 am : Refreshments

10.15 am : **XRD Analysis using FullProf Suite & Training** by **Dr. Pradeep Reddy Vanga**

12.00 pm : Lunch

01.00 pm : Visit to XRD Facility

02.00 pm : Valedictory & Certificate Distribution

Contact details



Dr. B. Vigneshwaran

97894 46048



vigneshwaran.b.irc@sathyabama.ac.in



International Research Centre, Sathyabama Institute of Science and Technology, Jeppiaar Nagar, Rajeev Gandhi Express Highway, Chennai - 600119.

About the Institute

Sathyabama Institute of Science and Technology (SIST) is a prestigious Institution that has excelled in Engineering, Science, and Technology for over three successful decades. It is established under Sec. 3 of the UGC Act, 1956, and has been accredited with an 'A++' Grade by the National Accreditation and Assessment Council. The Institution has been Graded as a Category 'I' University by UGC under the UGC (Categorization of Universities (only) for Grant of Graded Autonomy) Regulations, 2018. Sathyabama Institute of Science & Technology has alliances with leading Universities and research establishments at the National and International Levels. Sathyabama has a good presence in rankings and ratings at the National and International level. The Institution has been ranked in 51st position by the National Institutional Ranking Framework (NIRF), Government of India among the Universities in India for the year 2023 and ranked one among the top 100 Universities for eight consecutive years. Sathyabama is ranked among the Top 5 Institutions in the Country for Innovation by ATAL ranking of Institution for Innovation Achievements, Govt. of India and Times Higher Education and QS have ranked Sathyabama among the top Institutions worldwide.

Account Details

Account Name : Dean (Publications & Conferences), Sathyabama Institute of Science and Technology

Account Number : 891734627

IFSC CODE : IDIB000T020

SWIFT CODE : IDIBINBBTLT

BRANCH CODE: 098

Bank, Branch & Address : Indian Bank, Thousand Lights Branch, Chennai-600006, India