#### **Resource person**



Dr. Sandeep Nagar, Ph.D. Application Specialist – XRD

Dr. Sandeep Nagar is an Application Specialist-XRD based in Malvern Panalytical's Gurgaon office. He specializes in XRD systems. With over of experience vears 18 in characterizing materials with wide range of characterization techniques. He is working towards providing customers about support to optimizing XRD measurements and analysis for various industries and academic research institutes.

# Highlights of the Workshop

- Theory on X-Ray diffraction
- Instrumentation and Data analysis
- Hands on training on Data analysis and Rietveld refinement using Highscore plus software (participants should come with their laptop)
- Trail version of the software will be provided to the participants in their laptop.

**Chief Patron** Dr. G. Viswanathan Chancellor

**Patrons** Mr. Sankar Viswanathan Vice President

Dr. Sekar Viswanathan Vice President Dr. G.V. Selvam Vice President

**Co-Patrons** Dr. Rambabu Kodali *Vice Chancellor* Dr. Partha Sharathi Mallick

Pro-Vice Chancellor

Dr. T. Jayabharathi Registrar

Chair Person Dr. R. Ezhil Vizhi Professor & Director

**Convener** Dr. S. Kaleemulla

**Co-Convenor** Dr. W. Madhuri

# Organizing members

Prof. N. Palanisami

Prof. Ramesh M Thamankar

Prof. S. Madeswaran

Prof. Ankur Rastogi

Prof. Atul Thakre



Two days National Workshop on X-Ray Diffraction & Rietveld Refinement (NWXRD-2023) 10-11<sup>th</sup> August 2023





Organized by Centre for Functional Materials VIT, Vellore-632014, India & Malvern Panalytical, a division Spectris Technologies Pvt Ltd, Gurgaon- 122001, India

## **Objectives of NWXRD-2023**

Centre for Functional Materials, Vellore Institute of Technology is organizing a two day National Workshop on X-ray diffraction and Rietveld Refinement (NWXRD-2023) during 10-11<sup>th</sup> August 2023. The main aim of Two day training program on 10 and 11<sup>th</sup> August 2023 at CFM, Vellore Institute of Technology (VIT) is bring awareness and enrich the to understanding about material characterization using X-Ray Diffraction and efficient analysis of The Program comprises of an data. Introduction to XRD instrument, Phase identification using Highscore Plus software, basics of XRD based quantification methods and clarification of doubts.

## **About VIT**

Vellore Institute of Technology (VIT) was founded in 1984 as Vellore Engineering College by the honorable Chancellor Dr. G. Viswanathan. The institution has grown steadily since its humble beginning. VIT attracts students from all over India and more than 50 countries because of its excellence. VIT has emerged as one of India's best institutes and aspires to become a global leader in education. Quality in teachinglearning, research and innovation make VIT a unique place to learn. The credentials in academics and research have placed VIT in the 12<sup>th</sup> position among the engineering institutions in India by NIRF, Govt. of India. VIT is Ranked within the top 200 in Asia (QS - Asia University Rankings, 2022). VIT achieved NAAC Accreditation from the Government of India with A<sup>++</sup> grade in the 4<sup>th</sup> cycle.

**Centre for Functional Materials** The Centre for Functional Materials (CFM) at VIT, Vellore was established in November 2020. The centre prioritizes the research of national interest bv highlighting new findings and discussing current trends in technologically reverent topics. Here, we explore different classes of functional materials ranging from semiconductors to polymers and molecular crystals to nanoparticles. CFM is accomplished with various state-of-the-art characterization facilities like optical lithography, micro-hardness, gas sensing, electrical studies, computational tools, etc. The center has gained attention due to its immense publications in the diverse fields of research in functional materials. CFM is offering a platform to connect a broad range of materials with focused research groups and support multidisciplinary research necessary for technology transfer. The centre implements its mission via activities in research and education.

## **Facilities at CFM**

Electrochemical workstation Thermal Evaporation Electron Beam Evaporation PE Loop Tracer Piezoelectric Test Meter UV Lithography Vicker's Mirco-Hardness Abbe Refractometer Gas Sensor Testing Unit Magnetron Sputtering Battery Tester For more details please visit: https://vit.ac.in/centers/cfm

### **Registration details**

#### Link for registration

https://docs.google.com/forms/d/e/1FAIpQLScMDSYs0nsKc4bUUeWx5rGRrEcKjTGz1YOa0L0krjq\_YBR4w/viewform?usp=sf\_link

#### Link for payment: <a href="http://events.vit.ac.in/">http://events.vit.ac.in/</a>

Registration starts on:	24-07-2023
Last date for registration:	09-08-2023
Last date for payment:	09-08-2023

Registration will be on the first come first serve basis as the number of seats are limited.

## **Registration fee (including GST)**

Research Scholar	:	Rs.800/-
Faculty	:	Rs.1000/-
Industry	:	Rs.1200/-

# Accommodation

Only dormitory rooms can be provided in hostels based on request. The tariff for the dormitory are as given below

Gents Hostel: Rs. 441 (per day per person) Ladies Hostel: Rs.389 (per day per person)

## **Contact Information**

Dr. S. Kaleemulla Convener Dr. W. Madhuri Co-convener Centre For Functional Materials Vellore Institute of Technology Vellore – 632 014. TamiInadu Mobile: +91-9003386732/8754548779 Email:nwxrd2023@gmail.com

