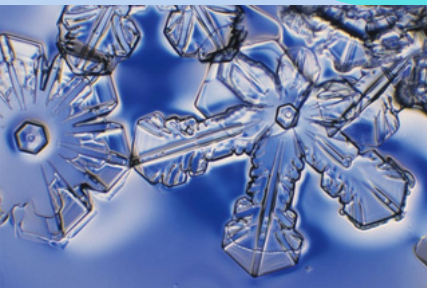
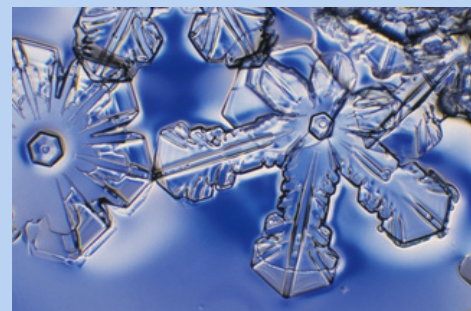




Skill Development and Hands-on Training on Crystal Growth Techniques on 1-3 Sep, 2026



Organized by
SCHOOL OF PHYSICS
MADURAI KAMARAJ UNIVERSITY
MADURAI- 625 021
(SPONSORED BY RUSA-MKU)



ABOUT COURSE

The **Hands-on Training on Crystal Growth Techniques** is designed to equip participants with fundamental knowledge and practical experience in crystal growth methods widely used in materials science, electronics, energy, and sensor applications. The program provides an integrated understanding of various crystal growth techniques such as slow evaporation solution growth technique (SEST), SR method, rotating SR method, and high temperature crystal growth methods such as Bridgman and Czochralski (CZ) techniques along with characterization of crystals. The training combines **theoretical sessions** with **practical demonstrations** to help participants understand critical parameters affecting crystal growth, phase purity and symmetry. This program is particularly relevant for those working on device fabrication, sensor development and drug delivery.

EXPECTED OUTCOMES

- Acquire **working knowledge of crystal growth techniques**.
- Learn **parameters of optimization** for defect free crystals.
- Gain **hands-on training in equipment operation**, including slow evaporation solution growth technique (SEST), SR method, rotating SR method, and high temperature crystal growth.
- Understand **characterization techniques** (XRD, UV-Vis, PL, Photoconductivity, Dielectric and Z-scan).
- Develop the capability to **grow crystals for sensors, optoelectronic devices, solar cells and drug development**.

FOR WHOM

- Final year B.Sc. and M.Sc. Students
- Research Scholars
- Faculty Members

COURSE DETAILS

- Registration fee- **Rs. 100/-**
- The **last date for registration** : 25.08.2026,
- The date of intimation on selection: **31.08.2026**.
- Only **50 seats** are available
- During the program, **working lunch will be provided**, while participants are expected to **arrange their own accommodation**. Upon successful completion of the training, all the participants will be awarded a **Certificate of Participation**.

FOR REGISTRATION:

Form link:

<https://forms.gle/5WNKWmZFRZ1idW839>

Payment details:

A/c No: 40793475393

IFSC code: SBIN0002235

Bank: State Bank of India

A/c Name: RUSA Madurai Kamaraj University

Branch Name: Madurai Kamaraj University Branch

For further information please contact:

Dr. K. ANITHA

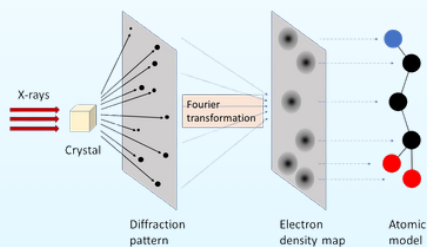
Course Co-ordinator, School of Physics
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Email: singlecrystalxrd@gmail.com &
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Contact: +91-9965956516; 6369730350

Dr. M. JEYANTHINATH

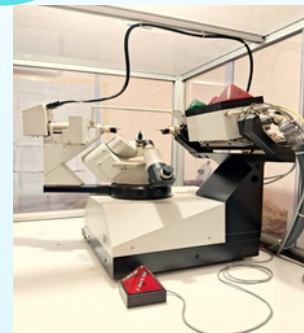
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Skill Development and Hands-on Training on X-ray Crystallography on 8-10 Sep, 2026



Organized by
SCHOOL OF PHYSICS
MADURAI KAMARAJ UNIVERSITY
MADURAI- 625 021
(SPONSORED BY RUSA-MKU)



ABOUT COURSE

The **Hands-on Training on X-ray Crystallography** aims to endow the local and regional scientific communities with technical skills that will allow them to use X-ray techniques as tools for solving various problems in their specific fields. This program primarily focused on determining the three-dimensional atomic and molecular structures of crystalline materials. It is widely used in chemistry, biology, material science and other fields to understand the properties and functions of various substances. This program provides training on crystal structure solution, refinement, visualization and analysis using software such as WINGX, Olex2, MERCURY, ORTEP and CrystalExplorer. The particularity of this training lies in the association in equal parts between theory and practice and useful for those working on device fabrication, sensor development and drug development.

EXPECTED OUTCOMES

- Explain the importance of X-ray crystallography in modern science.
- Describe the phenomenon of X-ray diffraction by crystals.
- Recognize a good quality crystal.
- Identify the suitable crystallization technique for a given study.
- Describe the operation of a single crystal diffractometer.
- Solve and refine small-molecule single-crystal structure.
- Analyse the structure using various software.
- Understand the 3-D arrangements of atoms in a crystal.
- Visualize and explore crystal structure
- Deposit structural data in CCDC.

FOR WHOM

- Final year B.Sc. and M.Sc. Students
- Research Scholars
- Faculty Members / Technical Staffs

COURSE DETAILS

- Registration fee- **Rs.100/-**
- The **last date for registration** : 01.09.2026,
- The date of intimation on selection: 03.09.2026.
- Only **50 seats** are available
- During the program, **working lunch will be provided**, while participants are expected to **arrange their own accommodation**. Upon successful completion of the training, all the participants will be awarded a **Certificate of Participation**.

FOR REGISTRATION:

Form link:

<https://forms.gle/tHsafTViBSnb62cr7>

Payment details:

A/c No: 40793475393

IFSC code: SBIN0002235

Bank: State Bank of India

A/c Name: RUSA Madurai Kamaraj University

Branch Name: Madurai Kamaraj University Branch

For further information please contact:

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Course Co-ordinator, School of Physics

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