Patron

- **Prof. Rajiv Jain, the Vice-Chancellor**

Organizing Committee

- **Prof. K.V.R. Rao, Director, CCT (Chairman)**
- Prof. V.K. Saxena, Addl. Director, CCT
- Prof. Vidya Patni, Addl. Director, CCT
- Prof. P.J. John, Addl. Director, CCT
- Prof. Neelima Gupta Addl. Director, CCT
- Prof. H.S. Palsania Addl. Director, CCT
- Dr. Sadhana Mathur, Project Director, DST, GoR
- Dr. Manu Sikarwar, Project Director, DST, GoR

Convenor

- Dr. Amanpal Singh Clair

Co-Convenors

- Dr. Mamraj Singh
- Dr. Satpal Singh Badsara
- Mr. Sanjeev Kumar

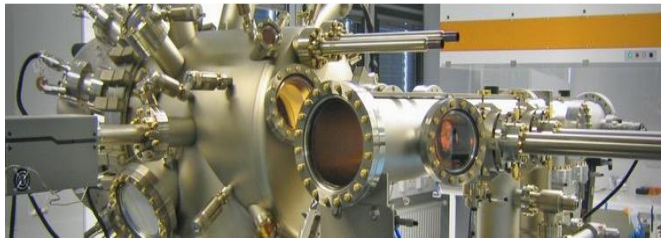
Secretaries

- Mr. Shubam Vyas
- Ms. Shruti Sharma

Registration details

- Students: 500 INR
- Others: 1000 INR
  - *Last date for form submission:* ***15th November 2021***
  - *Due to space constraints, participation of people is restricted to 20 in number.*
  - *Registration fee must be submitted as soon as you received the confirmation of the participation email.*

Click here for the registration



Tentative Inaugural Programme

Inauguration and Inauguration Talk by

Ms. Mugdha Sinha

Secretary, Department of Science and Technology
Government of Rajasthan, Jaipur

Molecular Beam Epitaxy Experts

Keynote Speaker

Prof. Venu Gopal Achanta

Director, CSIR-NPL, New Delhi

Eminent Speaker

Prof. Subhananda Chakrabarti

Professor, Department of Electrical Engineering,
IIT Mumbai

Technical Resource Persons

- **Dr. S. Srinivasa Rao,** *Ex-Mantis Deposition, London, U.K.*
- **Dr. Martyn Green,** *DCA Instruments, Finland*
- **Dr. Govind,** *NPL, New Delhi*
- **Mr. V.S. Karmarkar,** *Nanovid, Pune*
- **Mr. Darius Patel,** *Mack Intl., Mumbai*

User Workshop on Molecular Beam Epitaxy

17-18th of November 2021

Organized jointly by

Centre of Excellence in Nanotechnology,
Centre for Converging Technologies,
University of Rajasthan, Jaipur

in association with

Department of Science and Technology,
Government of Rajasthan, Jaipur

co-sponsored by

Mack International, Mumbai

Venue

Centre for Converging Technologies (CCT), University of Rajasthan, Jaipur.

Registration

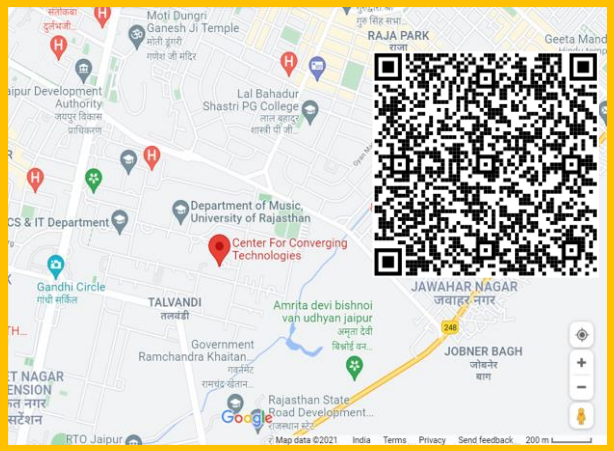
Registration is online through Google form as the link is provided in the details or as https://forms.gle/nddh8PZXaABNQk3z8

Accommodation & Travel

Accommodation can be arranged on request as per actuals in University Guest House. Kindly make your request before 15th November 2021.

How to reach at the Venue

Jaipur can be reached easily thanks to their geographical position and its proximity to New Delhi. The city is well connected by air, rail, and road.



The proposed workshop is intended for materials scientists, research fellows and young faculty members who wish to undertake research and acquaint with the MBE and its various facets of instrumentation.

Covering Topics

- Introduction to Process Engineering.
- Process Instrumentation
- Controllers
- Analysers &Control Valves
- Instrument Index
- Instrument Location Plan Details
- Process Data Sheets and Specifications
- Instruments Wiring Layout
- Instrument Air Routing Layout
- Loop Drawing
- Loop Wiring Diagram
- Cable Schedule
- Cable Tray Layout

Features

Certificate of Merit for all the workshop participants. At the end of this workshop, a small competition will be organized among the participating scientists and winners will be awarded with a 'Certificate of Excellence.

Communication

Any corresponds or query will be through email given as below:
mbew2021@gmail.com

Molecular Beam Epitaxy (MBE), known as one of the most advanced and controllable growth methods. Its ultra-high vacuum environment typically better than 10^{-10} torr, produces the highest achievable purity at relatively low substrate temperatures. MBE is an epitaxial technology suited for the preparation of advanced crystal structures with composition and doping profiles controlled on a nano-meter scale. The MBE growth mechanisms of both lowly (<2–3%) and highly lattice-mismatched structures allow the preparation of the 2D dimensional nanostructures with atomically smooth interfaces and three-dimensional nano-islands that completely confine carriers, respectively. Taking advantage of this feature, MBE has been used to demonstrate most of the novel semiconductor structures and devices of interest for the photonics and the electronics on the nanoscale.