

## भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद Indian Institute of Technology (Indian School of Mines), Dhanbad

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## PRESS-RELEASE

Two Weeks Refresher Course on X Ray Crystallography and X Ray Photoelectron Spectroscopy with Density Functional Theory begins at IIT (ISM); 45 faculty members from across the country participate in course being organized under Malaviya Mission Teacher Training Programme.

A two weeks Refresher Course on X Ray Crystallography and X Ray Photoelectron Spectroscopy with Density Functional Theory began at OCEP Centre of IIT (ISM) Dhanbad today with the inaugural talk of Prof. GP Das, a Condensed Matter Physicist at Research Institute for Sustainable Energy (RISE) TCG Crest Kolkata who spoke on Characterization Techniques of Material Research and Industry applications.

He later during the day also delivered a lecture on Introduction to DST Theory and Fundamental of XRD and XPS Techniques.

The day also witnessed the Lecture of Prof Manodipan Sahoo of Electronics and Communications Engineering on Semiconducting Materials and Devices.

Prof Sahoo during the second session of his lecture spoke on Hands on Electronic Band Structure Calculation (Quantum Espresso).

The course of 12 working days being organized under Malaviya Mission Teacher Training Programme (MMTTP) during which altogether 48 hours of lecture will be delivered by eminent experts is being participated by 45 faculty members of Material Sciences from various institutes across the country.

Dr R Thagavel, Associate Professor, Department of Physics, IIT (ISM), who is also one of coordinator of the course said, "The course focusses on X Ray diffraction (XRD), X Ray Photoelectron Spectroscopy (XPS) measurements, essential tools for understanding the structural and compositional properties of Materials" and added that participants will get hands on experience with DFT calculations, enhancing their ability to theoretically predict material properties and perform detailed data analysis.

The resource persons for the course, included Prof. A Srinivasan, Director, CIT Kokrajhar; Prof. V Mahalingam, IISER Kolkata; Prof. A Kumar Singh, IIT (BHU); Prof. Debabrata Pradhan, IIT Kharagpur; Dr. Dilip Kumar Singh, BIT Mesra; Dr. Jai Singh, GGU Bilaspur; Prof. Parthik Kumbhakar of NIT Durgapur.

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