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PRESS-RELEASE

Three-Day Workshop on Seismic Modelling and Migration using SeisRTM Concludes at IIT (ISM) Dhanbad

The three-day workshop on “Seismic Modelling and Migration using SeisRTM,” held at IIT (ISM), Dhanbad from February 8 to 10, concluded successfully today with a valedictory function. The event was graced by Prof. MK Singh, Dean Academics, IIT (ISM), as the Chief Guest, who handed over certificates to the participants.

Addressing the attendees, Prof. Singh highlighted the significance of such workshops in fostering practical exposure among students. He emphasized the role of Indigenous powerful software, developed under the National Supercomputing Mission, in enhancing technical expertise and research in seismic imaging.

The valedictory function was also attended by Prof. Sajit Kumar Pal, Head of the Department of Applied Geophysics, IIT (ISM), and Richa Rastogi, Scientist F, C-DAC Pune. Prof. Pal expressed his heartfelt gratitude to Prof. Sukumar Mishra, Director, IIT (ISM); Prof. Dheeraj Kumar, Deputy Director; and Prof. Mritunjay Kumar, Dean (Academics), for their continuous support. He also commended the organizing team for their efforts in ensuring the seamless execution of the workshop.

Jointly organized by Seismic Data Processing (SDP), C-DAC Pune; the Department of Applied Geophysics, IIT (ISM) Dhanbad; and the Department of Earth Sciences, IIT Roorkee, the workshop aimed to enhance outreach for SeisRTM software, facilitating its further development and advancing research in seismic imaging.

Prof. S Datta Gupta from the Department of Applied Geophysics, IIT (ISM) Dhanbad, who played a pivotal role in organizing the workshop, remarked, “SeisRTM is an advanced and highly customizable Reverse Time Migration (RTM) software designed for efficient seismic imaging. It has been developed by C-DAC Pune in collaboration with IIT Roorkee and ONGC as part of India’s National Supercomputing Mission (NSM) under MeitY.”

The workshop witnessed participation from more than 140 students and was conducted at Lab 3, New Lecture Hall Complex (NLHC), IIT (ISM) Dhanbad. Over three days, participants gained hands-on experience and theoretical insights into seismic imaging techniques.

The first day of the workshop introduced fundamental topics, including basic LINUX and PBS commands, 2D model and geometry creation, and generating seismic data using 2D isotropic modeling. Notable presentations included an expert talk on seismic modeling by Richa Rastogi, Scientist F, C-DAC Pune. Hands-on sessions were led by Ms. Neetu Mangalath, Senior Project Engineer; Ms. Sneha Bidve, Project Engineer; and Mr. Bharath Krishnan, Project Engineer from C-DAC Pune, who guided participants through the functionalities of SeisRTM Software.

On the second day, Prof. Anand Joshi, Head, Department of Earth Sciences, IIT Roorkee, delivered an insightful lecture on the theoretical aspects of RTM. The hands-on session continued with the seismic migration of previously generated seismic data, followed by post-RTM utilities.

The final day provided participants with SEG Y data to execute RTM applications, facilitating application-focused discussions and further reinforcing the learnings from the workshop.

The successful completion of the workshop underscores IIT (ISM) Dhanbad’s commitment to advancing geophysical research and fostering collaboration among academic institutions and research organizations. The event marked another milestone in the development and dissemination of seismic imaging technologies in India.

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