

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

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## PRESS-RELEASE

IIT (ISM) Dhanbad Hosts Research Talk by NTU Scholar on Ocean Microseisms and Indo-Taiwan Collaboration

The Department of Applied Geophysics, IIT (ISM) Dhanbad, organized a research talk and interactive session by **Mr. Lalit Arya**, PhD scholar, Department of Geoscience, National Taiwan University (NTU), in the department's Conference Room.

Mr. Arya delivered an insightful lecture on "Listening to the Ocean's Pulse: Microseism Observations from Mid-Pacific and Northern Ryukyu OBS Arrays, and Early Detection of Superstorms in the Western Pacific and Bay of Bengal". He explained how microseisms—low amplitude signals generated by ocean waves interacting with coastlines and the seafloor—can play a crucial role in early storm detection.

He elaborated that microseismic noise is broadly classified into two categories:

- **Secondary Microseism (Double-Frequency Microseism, 2–10s)** subdivided into short-period (2–6s) and long-period (6–10s).
- **Primary Microseism (Single-Frequency Microseism, 11–20s)** having the same frequency as the ocean waves that generate them.

In his second session, Mr. Arya discussed **exploring collaboration opportunities between NTU** and IIT (ISM) Geoscience researchers under the Indo-Taiwan DST-NSTC Program, emphasizing the potential for joint research in the field of oceanic and seismic studies.

The event was attended by faculty members, research scholars, and students. **Prof. Saumen Maiti, Associate Professor & Head, Department of Applied Geophysics**, graced the session, while **Prof. Niptika Jana, Assistant Professor**, welcomed the guest speaker and introduced him to the gathering.

The session concluded with an engaging interaction, where participants explored future possibilities of Indo–Taiwan scientific collaboration and its implications for advancing geoscientific research.

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