For Immediate Release: December 30, 2024

Press-Release

Fourth Centenary Lecture at IIT (ISM) Explores Gas Behavior in Liquids and Geological Applications

The Department of Applied Geology, IIT (ISM) Dhanbad, organized the **Fourth Centenary Lecture** today at the Golden Jubilee Lecture Theatre (GJLT). The lecture was delivered by **Prof. Pulak Sengupta, AvH Fellow, F.N.A., F.A.Sc., Department of Geological Sciences, Jadavpur University**, on the topic *"Solution and Exsolution of Gases in Liquid: Principle and Some Geological Applications."*

Prof. Sengupta, an eminent geologist and academician, discussed the fundamental principles governing the dissolution and exsolution of gases in aqueous and quasi-aqueous fluids, which play a crucial role in controlling several natural and biological processes. He highlighted the significance of **Henry's Law** in predicting and explaining the behavior of gases in dilute aqueous solutions and elaborated on its wide-ranging geological implications.

During the lecture, Prof. Sengupta also combined Henry's Law with the **Laplace Pressure Equation** to explain the mechanisms behind the violent expulsion of gases from liquids and fluids, drawing connections with both geological and biological systems. His insights provided the audience with a deeper understanding of natural phenomena shaped by gas-liquid interactions.

The event was attended by **Prof. S. Sarangi, Professor & Head, Department of Applied Geology**, along with other faculty members, research scholars, and students of the department. The lecture witnessed active participation and an engaging interaction between the audience and the speaker.

The Department of Applied Geology expressed gratitude to Prof. Sengupta for delivering such an engaging and thought-provoking lecture as part of the Centenary Lecture series.

Rajni Singh
Dean (Corporate Communications)