

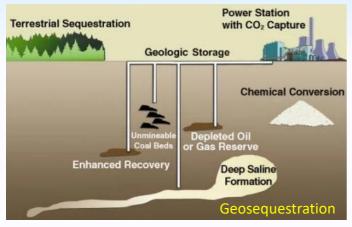
## One Day Symposium on Geothermal Energy and Geosequestration

Indian Institute of Technology Guwahati SPE Student Chapter

### Organized by Guwahati SPE Student Chapter in col

IIT Guwahati SPE Student Chapter in collaboration with Dept. of Chemical Engineering, IIT Guwahati





#### ABOUT THE EVENT

at the forefront us energy transformation at our interdisciplinary engineering expertise symposium, where converges with emerging sustainable technologies. This forum will examine how foundational engineering disciplines, such Engineering, Chemical Engineering & Civil Engineering Geoscience are being strategically adapted to address critical challenges in geothermal energy extraction and geologic carbon & Hydrogen sequestration. Explore cuttingadvancements enhanced edge in geothermal systems (EGS), where innovations & delve into the geochemical and geomechanical complexities of geologic carbon storage, including pore-scale CO2brine-rock interactions, plume migration long-term containment modeling, and assurance.

#### About IIT Guwahati SPE Student Chapter

The IIT Guwahati SPE Student Chapter is established with the goal of achieving SPE International's mission, "To gather, share, and exchange technical knowledge about the exploration, development, and production of oil and gas resources, and related technologies for the benefit of the public, and to give students and preprofessional the chance to improve their technical and professional expertise."





Date: 5th May 2025



**Hybrid Mode of Delivery** 



Seminar Hall, Department of Chemical Engineering, IIT Guwahati, Assam, India



### **Key Themes**

- CO<sub>2</sub> EOR and sequestration
- Hydrogen storage
- Geothermal exploration and exploitation
- Synergistic integration of hydrocarbon production with (CCUS) workflows
- Role of Chemical, petroleum & Civil engineering and geoscience skill for Geothermal and Geosequestration application.

#### **Who Should Attend**

- The symposium is for students, geoscientists, engineers, policymakers, and energy transition stakeholders in the field of Geothermal energy and CO<sub>2</sub> /Hydrogen Geosequestration.
- This symposium offers a rigorous technical discourse on scalable solutions for decarbonizing energy systems. Participants will gain actionable insights into regulatory frameworks, economic feasibility analyses, and the role of subsurface engineering in achieving net-zero emissions targets.

#### Registration

- Scan the QR or use link to registered
- Team Link for joining the symposium will be shared to the registered candidates





https://forms.cloud.microsoft/r/1bCDmRUXqR

#### **Contact Information**

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Sl. No.	Time	Talk
1.	9:00 - 9:15	Inauguration
2.	9:15 - 10:15	Dr. Raj Kiran, Petroleum Engineering, IIT(ISM) Dhanbad on "Tapping Earth's Heat: A Technical Dive into Geothermal Energy Fundamentals and Applications"
3.	10:15 - 11:15	Prof. Rajeev Upadhyay, Petroleum Engineering, IIT(ISM) Dhanbad on "CO <sub>2</sub> Sequestration in Coal/CBM Reservoirs: Key Challenges and Possible Solutions"
4.	11:15 - 11:30	Tea Break
5.	11:30 - 12:30	Dr. Saurabh Datta Gupta, Dept. of Department of Applied Geophysics IIT(ISM) Dhanbad on "Potential opportunities for geosequestration in the Precambrian basement: a geoscientific study from the Jaisalmer Basin, Rajasthan".
6.	12:30 - 14:00	Lunch Break
7.	14:00 - 14:45	Prof. Anugrah Singh, Chemical Engineering, IITG on "Pore-Scale Transport in Geosequestration and Geothermal Energy Extraction"
8.	14:45 - 15:30	Archana M Nair, Civil Engineering, IITG on "Geosequestration potential of Golaghat field in Assam".
9.	15:30 - 16:15	Dr. Sumit Kumar, Chemical Engineering, IITG on "Fluid- Fluid and Rock-Fluid Interaction Study for Geosequestration and Geothermal Energy Extraction".
10.	16:00 - 16:15	Valedictory



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