

## Summary

There is growing recognition that a new energy paradigm is needed to curb the build-up of anthropogenic  $CO_2$  emissions in the atmosphere and the corresponding global warming-related impacts. Many countries and companies are embarking on ambitious programs to reduce their carbon footprint and switch from carbon-intensive fossil fuels to sustainable greener energy feedstock and carriers.

This symposium is designed to inform professionals in energy industries and students about the impending energy transition and help them gain an understanding of the relevant concepts/technologies, opportunities, and challenges. Specifically, the symposium will examine:

- New energy economy: energy-climate nexus, decarbonization pathways (including usage of hydrogen) to decelerate the pace of global warming from CO<sub>2</sub> emissions.
- Decarbonization Pathways: Solar, wind, biomass, green hydrogen, green ammonia, hydropower, pumped storage.
- Carbon Capture and Sequestration (CCS): the capture of CO<sub>2</sub> from large stationary sources combined with geological storage, that has emerged as an attractive option for emissions reduction.
- Hydrogen underground storage (HUS): viewed as an effective strategy for storing large volumes of surplus electrical energy from renewable sources.
- Environmental, social and governance (ESG) reporting: evaluation of a company's performance across a holistic and sustainable set of non-financial measures.

## Schedule

	<b>12:15 – 13:00</b> Geological CO <sub>2</sub> storage
09:00 – 09:15 Inauguration of Symposium	(Dr. Srikanta Mishra, Battelle, USA)
09:15 – 10:00 Energy climate nexus	13:00 – 14:00 Lunch
(Dr. Srikanta Mishra, Battelle, USA )	14:00 – 14:45 Hydrogen underground storage
10:00 – 10:45 Decarbonization pathways	(Dr. Srikanta Mishra, Battelle, USA )
(Mr. Baroruchi Mishra, Shell India )	14:45 – 15:30 Environmental, social & governance
10:45 – 11:30 Break	(ESG) issues with Energy Transition
11:30 – 12:15 India's chosen Low-Carbon	(Dr. Farrukh Khalid, IIT Guwahati)
pathways	15:30 – 16:00 Break
(Dr. Rafiq Awal, Yosef Geo Energy Pvt. Ltd.)	16:00 – 16:45 Panel discussion
	16:45 – 17:00 Vote of thanks

Visit: https://event.iitg.ac.in/asmda/for more details