

Dr Amit Bansiwal participated as a Speaker and Panelist in the panel discussion “From Pilot to Scale: Making CCUS Work in the Indian Industrial Context” during the 3rd International Bioenergy Tech Expo 2026 & International Conference on Bioenergy, held at Noida, Uttar Pradesh, with the overarching theme “Advancing Bioenergy Solutions for a Low Carbon World.”

The panel, chaired by Dr. Sangita Kasture, Scientist G & Head, Biomanufacturing Directorate, Department of Biotechnology, and moderated by Prof. Vikram Vishal, IIT Bombay, brought together experts and leaders from research institutions and industry to deliberate on pathways for accelerating Carbon Capture, Utilization and Storage (CCUS) deployment in India.

Dr. Bansiwal shared perspectives on transitioning CCUS from pilot-scale demonstrations to commercially viable, scalable solutions, with a focus on integrating CCUS with India’s growing bioenergy ecosystem. He highlighted the potential of Bioenergy with Carbon Capture and Storage (BECCS) to enable carbon removal and potentially net-negative emissions.

He emphasized the need to develop the complete carbon-management value chain—from sustainable biomass sourcing and bioenergy conversion to CO₂ capture, purification, compression, transport, utilization/permanent storage, lifecycle assessment and robust MRV—while reducing capture energy penalties through advanced materials, process intensification, waste-heat integration and modular

systems.



