

Dr. N. Kalaiselvi, Director General, CSIR and Secretary, DSIR, inaugurated the Bio-CCUS Innovation Hub at CSIR-NEERI on the occasion of its 68th Foundation Day. The hub showcases advanced research by CSIR-NEERI scientists focused on carbon capture, utilization, and sustainable biotechnologies.

Dr. Kalaiselvi was briefed on efforts to improve cyanobacterial strains for enhanced photoautotrophic CO₂ capture and conversion into value-added fine chemicals. She also reviewed the concept of a smart biorefinery, where AI-optimized microalgal systems are used for CO₂ capture and production of peptide-based nutraceuticals. The design and optimization of photobioreactors using super mutant thermo-tolerant algal strains, along with the use of silk fiber-derived amino acids for CO₂ capture, were also presented.





