Report

Polygenesis – V

Event Name:

POLYGENESIS – V, The Fifth edition of flagship lecture series of IPI-DTU

Organizing department:

Indian Plastics Institute Student Chapter at Delhi Technological University.

Date & Time:

Wednesday, 27th August 2025 | 12:00 PM – 2:00 PM

Venue:

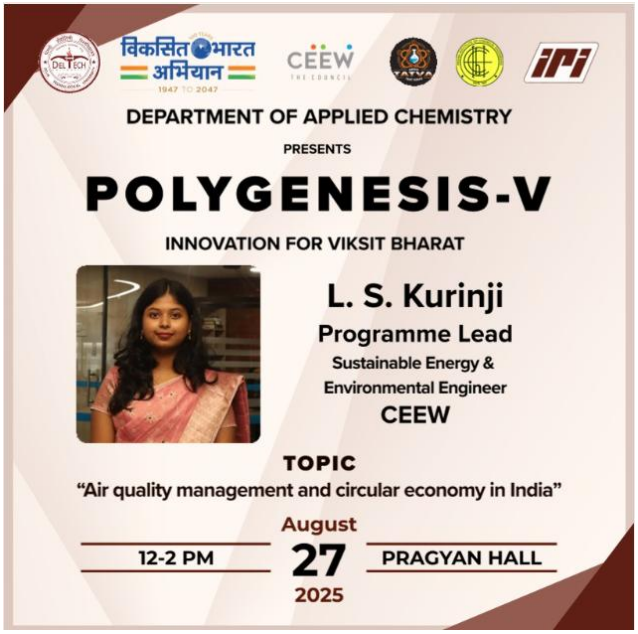
Pragyan Hall, DTU

Theme of the event:

Air Quality Management and Circular Economy in India

Distinguished Guest:

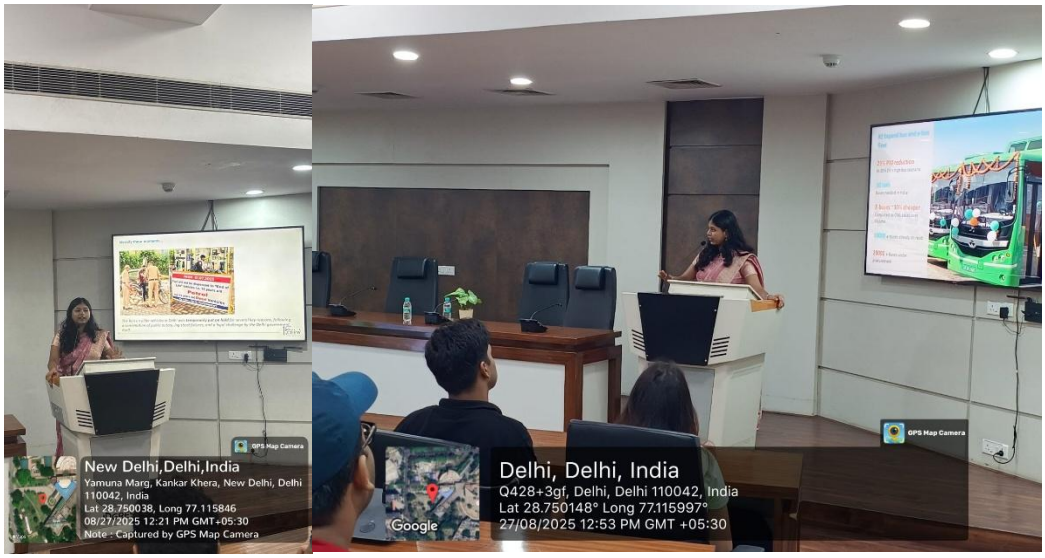
L. S. Kurinji - Programme Lead (Sustainable Energy & Environmental Engineer), CEEW



Event Report:

Polygenesis – V was the fifth edition of the flagship lecture series 'Polygenesis' organised by IPI-DTU on Wednesday, 27th of August 2025 in Pragyan Hall, 12 PM onwards.

We were honoured to invite our esteemed guest Ms. L.S. Kurinji, Programme Lead from the **Council on Energy, Environment and Water** (CEEW). She delivered her lecture on 'Air Quality Management and Circular Economy in India'. She discussed **India**'s **Clean air** journey and how CEEW is contributing to it through data, policy support, and strategic communication.



In her keynote, Ms. Kurinji emphasized the urgency of tackling India's air pollution crisis, noting that 70% of Indians breathe air worse than national standards. She highlighted the health burden of PM2.5 particles, describing them as the "silent killer" linked to over 1.5 million premature deaths annually. Using relatable comparisons and data-driven insights, she conveyed how pollutants from stubble burning, vehicular emissions, industrial activity, and construction dust collectively degrade air quality.

The talk also shed light on India's policy responses such as the National Clean Air Programme (NCAP) and the Commission for Air Quality Management (CAQM). Ms. Kurinji explained how NCAP has evolved from a city-centric to a regional and national framework, with performance-linked financing and state-level action plans driving progress.

The session was kept interactive by Ms. Kurinji as she asked the audience over their knowledge of government policies that are focussed on air quality management, elaborating over the implementation of Air Quality Index (AQI) as well as the Graded Response Action Plan (GRAP), it's different levels and methods of implementation. Great discussion was held over the possible reasons for pollution in the capital city and the regions surrounding it, narrowing it down to transportation, stubble burning and construction work. Moreover, she emphasised on the

importance of waste segregation and management to ensure proper recycling of waste as part of the action plan for a Circular Economy in India.

Key Highlights from the Lecture:

- Importance of data-driven air quality monitoring, including ground stations, mobile units, and satellite-based forecasting (SAFAR, CAMS).
- Role of CEEW in clean air action: plugging data gaps, supporting policy design, and using strategic communication to create citizen demand.
- The Circular Economy perspective, stressing waste segregation, recycling, and sustainable construction practices as enablers of long-term environmental resilience.
- Practical solutions: EV transition for 3-wheelers and buses, coal-to-gas transition in MSMEs, crop residue utilisation for biofuels, and digital monitoring tools for construction sites.

Conclusion:

The session successfully bridged the gap between academic understanding and policy application, leaving students with a clear sense of how technical knowledge and governance intersect in solving environmental challenges. Ms. Kurinji's interactive style made complex issues accessible, and her actionable roadmap underscored that cleaner air and a circular economy in India are not just policy goals but collective responsibilities.

Polygenesis – V reaffirmed IPI-DTU's vision of creating a platform where students engage with industry experts, policymakers, and researchers to drive meaningful discourse on sustainable development.