

Technical Paper Presentation Forum at GSC-2025

Students Session : Green Sparks: Igniting Budding Mariners' innovations in maritime sustainability

Chair , Coordinator and Speakers

Keynote Address	Dr. Malini Shankar	VC, Indian Maritime University
Session Chair	Cmde (Dr.) Vivek Chawla (Retd.)	Director, IMU, MPC Campus
Coordinator	Shri Pradeep Sudhakar	DG Shipping
	Shri Sunil Kumar	IMEI
Speakers	Shri Mohd Emaad Khan	IMU Kolkata
	Shri Moosa Minhaj Vu & Yash Nagaonkar	IMU MPC
	Ms. Neha R, Shri. Siva P Prasad and Dr Jayaram S	Sree Narayana Gurukulam College of Engineering, Ernakulam, Kerala

Session summary

- Dr. Malini Shankar, Vice Chancellor, Indian Maritime University (IMU) inaugurated the student's session by delivering an encouraging keynote address.
- Mr. Mohd Emaad Khan from IMU Kolkata presented a paper on Enhancing Microbial Fuel Cell Efficiency for Sustainable Marine Wastewater Treatment and Energy Generation: A Path towards Carbon Neutral Shipping. The integration of Microbial Fuel Cells (MFCs) with shipboard Sewage Treatment Plants (STPs) presents a transformative opportunity for the maritime industry. Traditional STPs consume significant energy for aeration and sludge treatment, adding to operational costs and carbon emissions.
- Mr Moosa Minhaj Vu & Yash Nagaonkar from IMU MPC presented their views on Maritime Energy Transition Landscape. By synthesizing technical insights, economic considerations, and future outlooks, the presentation provided a framework for understanding the transformative potential of hydrogen fuel cells.

- This was followed by a presentation by Ms. Neha R from Sree Narayana Gurukulam College of Engineering on use of Sodium Based Batteries for Propulsion System.

