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अमृतं तु विद्या

Bharatiya Vidya Bhavan's

Sardar Patel College of Engineering

(Government-Aided Autonomous Institute)

MUNSHI NAGAR, ANDHERI (WEST), MUMBAI - 400 058.

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CIVIL ENGINEERING DEPARTMENT

Thrilled to announce that Civil Engineering Department students **Gayatri Rathod, Harsh Srivastava, Shah Sachin, Shravani Kolekar, and Samyak Kamble (IVth Year)**, under the mentorship of **Dr. Hansa Jeswani**, have had their project — **“CO₂ Sequestration Using Algae”** — selected for **initial funding in the La Trobe University Innovation Challenge!**

Their solution focuses on using **microalgae in a controlled photobioreactor environment** to capture atmospheric carbon dioxide — providing a sustainable, bio-based method to combat climate change. This approach not only reduces greenhouse gases but also yields biomass with potential applications in **biofuels, fertilizers, and eco-friendly products.**

This project, which started in the **Civil Engineering Department (CED) of Sardar Patel College of Engineering (SPCE), Mumbai**, reflects the department's strong commitment to **climate-conscious engineering and innovation.**

The project aligns with multiple United Nations Sustainable Development Goals (SDGs):

- **SDG 7: Affordable & Clean Energy** – Biomass from algae for sustainable biofuels.
- **SDG 9: Industry, Innovation & Infrastructure** – Promoting innovative carbon capture technologies.
- **SDG 11: Sustainable Cities & Communities** – Supporting eco-friendly urban development.
- **SDG 12: Responsible Consumption & Production** – Utilizing algae for fertilizers and green products.
- **SDG 13: Climate Action** – Directly addressing carbon capture and climate change mitigation.
- **SDG 15: Life on Land** – Reducing CO₂ emissions to protect ecosystems and biodiversity.

Congratulations to the brilliant student team and mentor Dr. Hansa Jeswani behind this impactful idea — your passion and research are truly commendable.



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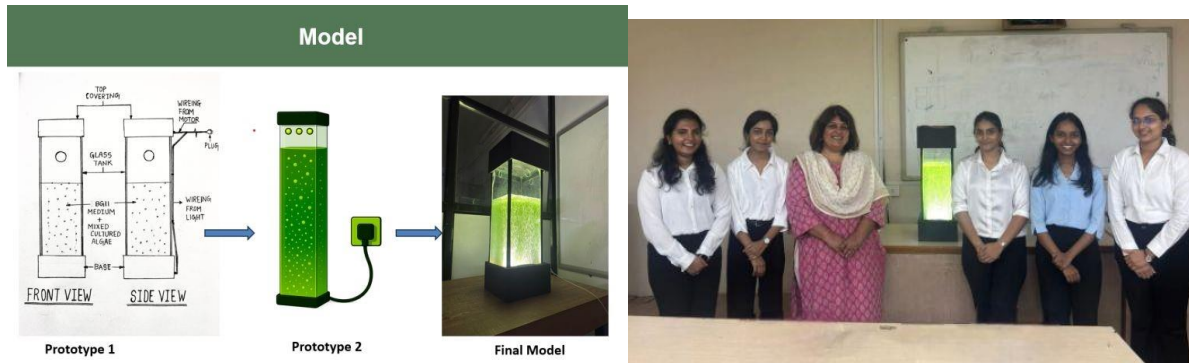
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Watch the initial video here.

<https://youtube.com/watch?v=IWjFCE7ttjQ&feature=youtu.be>



The working model and the initial team that worked on the project to take it forward **Ga-**
yatri Sawant, Gayatri Rathod, Sejal Khade, Pooja Kangane and **Sanika Bidkar** with
Mentor Dr. Hansa Jeswani