



AMRITA
VISHVA VIDYAPEETHAM
DEEMED TO BE UNIVERSITY UNDER SECTION 3 OF UGC ACT, 1956

SCHOOL OF
ENGINEERING
AMRITAPURI

AMRITA

ENERGY SWARAJ ENVIRONMENTAL

amESE

Club

Mentor/Incharge (Faculty)

Dr. Geena Prasad
Dr. S N Jyothi
Ms. Gayathri N P
Bri Vishnupriya



DEPARTMENTAL ACTIVITIES (2025)

AMRITA

ENERGY SWARAJ ENVIRONMENTAL

amESE

Club

MECHANICAL ENGINEERING DEPARTMENT

Jumpstart (January 1st to January 31st, 2025)

To promote health, fitness, and teamwork, "Jumpstart January"—a month-long fitness challenge—was held from January 1st to January 31st, 2025. This initiative aimed to inspire physical well-being and encourage collaboration among participants. Each team, consisting of up to two members (students or faculty), tracked their daily step count and submitted a screenshot at the end of each day. With 21 teams participating, the top three winners:

- 1st- The Legend's – The champions of the challenge!
- 2nd- Data Hawks – An incredible effort!
- 3rd- Red Flutes – A display of great perseverance!



All participants received e-certificates featuring their total step count as a token of appreciation for their dedication and commitment to fitness!

AMRITA AMRITAPURI CAMPUS

JUMP START JANUARY

Registration deadline :30th Dec 2024

Rs. 50 per team Open to students and staff

Registration Link

Maximum of 2 in a team

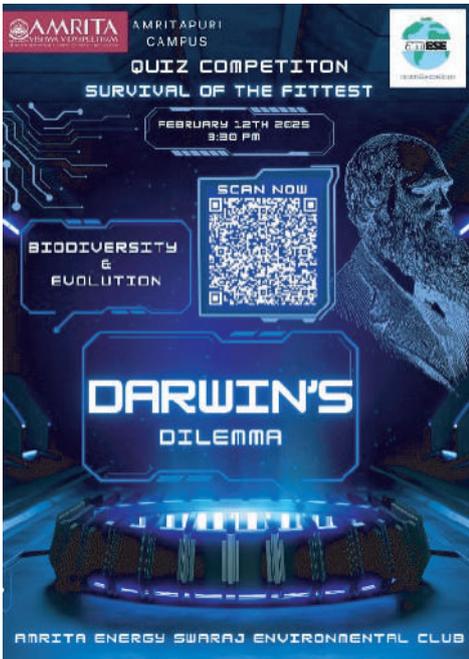
JAN 1ST TO 31ST 2025

Exciting prizes for the champions!

Amrita Energy Swaraj and Environmental Club

2

As part of Darwin's Day celebrations, a Darwin's Day Quiz Competition was held, offering participants a chance to challenge themselves and explore the wonders of Evolution and Biodiversity. The competition, held on February 12 at 3:30 PM, 34 registered teams, each



consisting of 2 members. The event was structured into 5 rounds, progressively testing participants' knowledge, analytical skills, and quick thinking. The 1st two rounds, conducted via the Quizzes app, assessed fundamental concepts in biology, genetics, evolution, and general science, leading to the elimination of 16 teams. In Round 3, participants tackled a custom crossword puzzle, requiring them to recall biological terms and interconnect concepts, reducing the field to five finalist teams. Rapid Fire Round (Round 4) tested quick thinking under pressure, with each team answering 10 questions in 60 seconds. The final Buzzer Round determined the ultimate winners based on both knowledge and reflexes. After an intense and engaging competition, Punit & Ankit (RAE) secured First Prize, followed by Karthika & Saparnya (Biotech) in Second Place and Oviya & Adritha (Biotech) in Third Place.



3

This Valentine's Day, amESE Club celebrated love beyond people by embracing the beauty of nature through a special photography contest, "Through the Lens: Love for Nature." Participants captured breathtaking moments that showcased their admiration for the environment, promoting a culture of sustainability and appreciation for nature. The competition received an overwhelming response, with 598 photo submissions that beautifully highlighted the wonders of the natural world. The contest featured public voting on Instagram (@amese.club) from February 14th to 28th, engaging a wide audience in appreciating these stunning visuals. After an exciting competition, the winners were announced: Manikanta Vara Prasad won the 'Most Likes' award, Sandeep T secured 1st place, and Venkat Nagireddy claimed 2nd place. The event successfully spread love for nature, encouraging creativity & environmental awareness. Participation e-certificates were issued to all contributors as a token of appreciation for sharing their passion for nature.



4

As part of Women's Day celebrations, the club organized an awareness talk on Saukhyam: Reusable Pad on March 3, 2025, from 5:30 PM to 6:30 PM at Akshaya Mess Hall, Girls' Hostel. The session was led by Ms. Anju Bist, Managing Director of Saukhyam Pads, who shed light on the significance of sustainable menstrual hygiene and the impact of reusable pads on both personal health and environmental conservation. She discussed how Saukhyam Pads, made from natural materials, provide a safe, cost-effective, and eco-friendly alternative to conventional sanitary products, reducing menstrual waste and promoting sustainability.



The session emphasized women's health, affordability, and environmental responsibility, encouraging participants to consider making a switch to reusable options. Attendees also had the opportunity to engage in an interactive discussion, where they could ask questions, share experiences, & gain deeper insights into sustainable menstrual practices. The event successfully created awareness, inspired informed choices, & empowered young women to take steps toward a greener, more sustainable future. Around 100 students participated in the session, making it a highly engaging and impactful event.



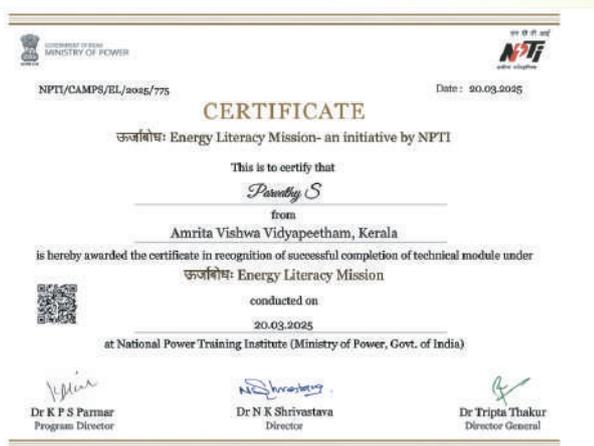
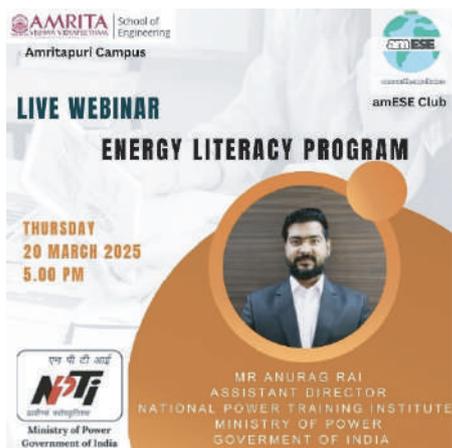
5



As part of World Water Day 2025, amESE organized an insightful talk on "Glacier Preservation & Climate Crisis: A Call to Action for the Youth" at Amriteshwari Hall, Amrita Vishwa Vidyapeetham, Amritapuri Campus, on March 19, 2025, from 4:00 PM to 5:00 PM. The event aligned with the World Water Day 2025 theme, "Glacier Preservation," highlighting the crucial role of glaciers in sustaining life and the urgent need to protect them from climate change.

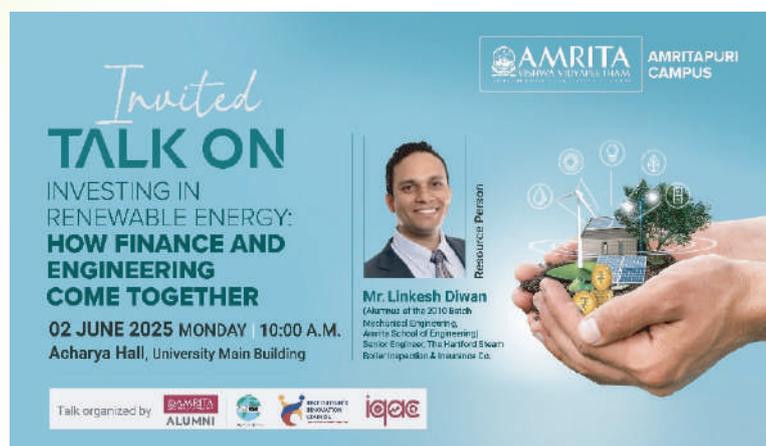
Mr. Amardeep Yadav, the guest speaker, emphasized the alarming rate of glacier melting and its impact on freshwater resources & ecosystems. He urged the youth to take action through advocacy, sustainable practices, & innovation, stressing that raising awareness & reducing carbon footprints can drive significant change. The session served as a powerful reminder that immediate efforts are essential to preserve these vital ice reserves and ensure a sustainable future.





A live webinar on the Energy Literacy Program was organized on March 20, 2025, at 5:00 PM, featuring Mr. Anurag Rai, Assistant Director, National Power Training Institute, Ministry of Power, Government of India, as the speaker. The session focused on raising awareness about energy conservation, efficiency, and sustainability, highlighting the crucial role of energy literacy in building a greener future. Participants gained valuable insights into responsible energy consumption and the government's initiatives to promote sustainable energy solutions. The webinar also covered innovative strategies for optimizing energy use in both daily life and industries. Attendees had the opportunity to interact with the speaker and explore practical approaches to energy sustainability. A total of 55 students participated, and certificates were issued to all attendees.

7 Invited talk by Alumnus :



As part of its knowledge-sharing initiatives, the Amrita Energy Swaraj Environmental Club, in collaboration with the Amrita Alumni Association, the Institution's Innovation Council, and IQAC, organized an invited talk on 'Investing in Renewable Energy: How Finance and Engineering Come Together' on 2nd June 2025 at Acharya Hall, University Main Building, Amritapuri Campus. The session was delivered by Mr. Linkesh Diwan, Senior Engineer at The Hartford Steam Boiler

Inspection & Insurance Co., and an alumnus of the 2010 batch of Mechanical Engineering from Amrita School of Engineering. Drawing from his professional experience, Mr. Diwan provided valuable insights into the integration of engineering innovation with financial strategies in the renewable energy sector. The talk covered investment opportunities, technical considerations, and real-world case studies, enabling students to understand how interdisciplinary collaboration drives sustainable energy projects.



World Environment Day 2025 Celebrations

5th June 2025

To mark World Environment Day, the Amrita Energy Swaraj Environmental Club, in collaboration with BioQuantum Labs, organized a series of engaging and impactful events at the Amritapuri Campus. The celebrations aimed to raise environmental awareness, inspire innovation, and promote sustainable practices among students.



Eco-Quest

World Environment Day Quiz Competition

The day began with Eco-Quest, a quiz competition that tested participants' knowledge on environmental science/engineering, sustainability, and pressing global ecological issues. Conducted in three eco-themed rounds, the quiz saw enthusiastic participation from students across various departments. The event successfully encouraged deeper engagement with environmental topics while fostering a spirit of healthy competition. BioQuantum Labs sponsored the prize money for the winners.

Design Against Plastic

Innovation for Cleaner Water & Cities

The club hosted Design Against Plastic, a two-day competition held on 4th and 5th June 2025. Teams of three members collaborated to develop creative, practical solutions for tackling plastic pollution. Entries were evaluated on creativity, feasibility, and environmental impact. Participants showcased innovative ideas ranging from waste reduction techniques to upcycling methods and sustainable material alternatives. The event not only promoted problem-solving skills but also strengthened the culture of environmental responsibility within the campus.



Invited Talk

Talk on Investing in Renewable Energy

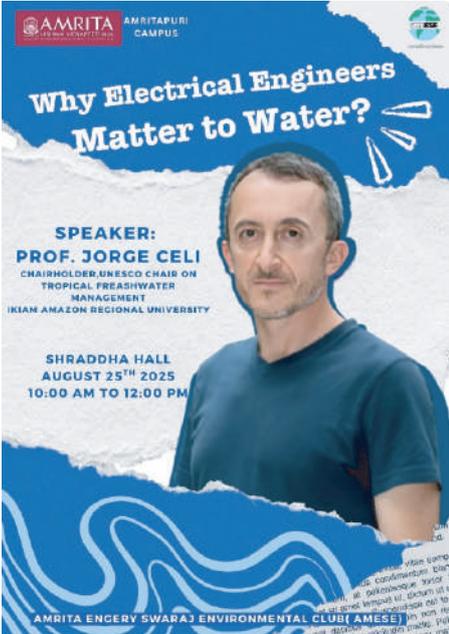


The highlight of the celebration was an insightful talk on "Investing in Renewable Energy: How Finance and Engineering Come Together" by Shri Linkesh Diwan, Senior Engineer at The Hartford Steam Boiler Inspection & Insurance Co., and a distinguished alumnus of the 2010 Mechanical Engineering batch. Shri Linkesh shared valuable perspectives on the interplay between engineering innovation and financial strategies in driving renewable energy

projects. Using real-world examples, he illustrated how interdisciplinary approaches can overcome challenges and maximize opportunities in the sustainable energy sector. The session broadened participants' understanding of the practical applications and economic considerations involved in renewable energy initiatives. Students who won in competitions such as the World Environment Day Quiz Competition and Design Against Plastic were awarded cash prizes.

9 Invited talk on 'Why Electrical Engineers Matter to Water':

The S7 Electrical & Electronics Engineering students attended a guest lecture titled "Why Electrical Engineers Matter to Water?" on August 25th, 2025, organized by the amESE Club at Shraddha Hall, Amrita Vishwa Vidyapeetham, Amritapuri Campus.



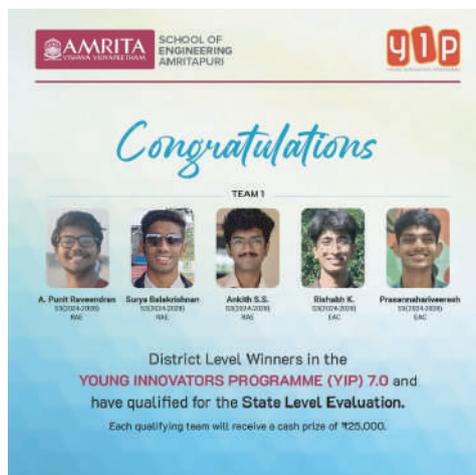
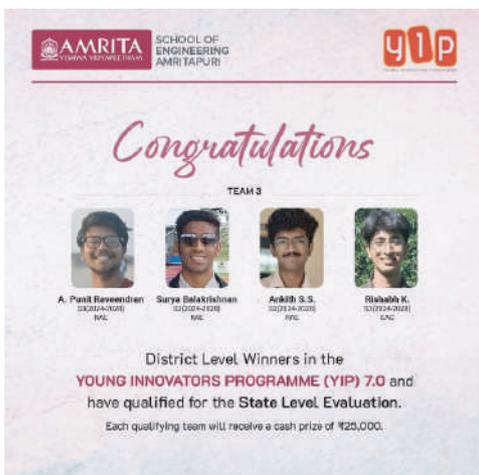
The session was delivered by Prof. Jorge Celi, Chairholder, UNESCO Chair on Tropical Freshwater Management, Ikiam Amazon Regional University. Prof. Celi emphasized the crucial role of electrical engineers in water sustainability through efficient pumping systems, smart monitoring, renewable integration, and treatment technologies. The talk highlighted interdisciplinary collaboration for tackling freshwater challenges. Students actively engaged in the Q&A session, gaining insights into sustainable engineering applications and real-world problem-solving.



YIP 7.0 (Young Innovators Program) District-level winners | 10

Young Innovators Program is a flagship initiative of the Government of Kerala, implemented by the Kerala Development and Innovation Strategic Council (K-DISC). It aims to nurture innovation and problem-solving skills among students by encouraging them to develop creative solutions to real-world challenges, particularly in science, technology, and sustainable development.

Three teams from Amritapuri Campus secured victories at the district-level competition of YIP 7.0, with two of the winning teams representing the amESE Club. Their achievement reflects remarkable innovation, strong teamwork, and a commitment to excellence.





Ozone Day Celebration

As part of the International Day for the Preservation of the Ozone Layer, the amESE club organized an engaging event titled “From Montreal to Tomorrow: Youth Leading Ozone and Global Green Solutions” on 19th



September 2025. The session aimed to raise awareness about ozone protection and global sustainability initiatives through a Mock Summit, where participants discussed and strategized innovative environmental solutions. The event inspired students to become proactive voices in environmental stewardship, reflecting the global commitment to safeguarding our planet’s atmosphere for future generations.

12 | The Preparedness Pact

Panel Discussion on International Day for Disaster Risk Reduction

A Panel Discussion–cum–Debate was held on October 13, 2025, to mark the International Day for Disaster Risk Reduction on the theme “National Strategies for Disaster Risk Reduction: Policies, Preparedness, and Resilience.” Nine student teams represented different countries, presenting their disaster management policies and case studies.



The session included two rounds of presentations and debates, followed by a crisis simulation on forest fires in the U.S., which tested participants’ quick response and teamwork. Policy Exchange Slips encouraged data sharing and alliances; countries like Japan, India, China, the Philippines, and the Maldives demonstrated strong cooperation. The event promoted awareness of global disaster resilience frameworks and strengthened students’ skills in policy analysis, critical thinking, and collaboration.

Judges: Dr. Shylesh Chandran (Chemistry) and Ms. Gayathri (CIR) Winners: Best Strategic Intervenor – Shriya H (Japan); Best Policy Defender – Dhawaneel Pandya & Sneha Sheth (India); Best Policy Presenter – Govind G. Prabhu & Akshay Baiju (Philippines)



National Pollution Control Day | 15 Celebration



AMRITA SCHOOL OF ENGINEERING (AMRITAPURI) | **AMRITA ENERGY SWARAJ ENVIRONMENTAL CLUB** | **AMRITA INNOVATION COUNCIL**

NATIONAL Pollution Control day CELEBRATIONS

29 NOVEMBER, 2025 | 5.30 PM

Institution's Innovation Council and amESE (Amrita Energy Swaraj Environmental) club
Jointly organizing
Role of latex industries for greener future
Platform: Microsoft Teams

AGENDA

Prayer Song
Punit Raveendran, II year
Department of Robotic and Artificial Intelligence

Welcome Address
Punit Raveendran, II year
Department of Robotic and Artificial Intelligence

Presidential Address
Dr. Jyothi S.N
Associate Dean,
Amrita School of Engineering

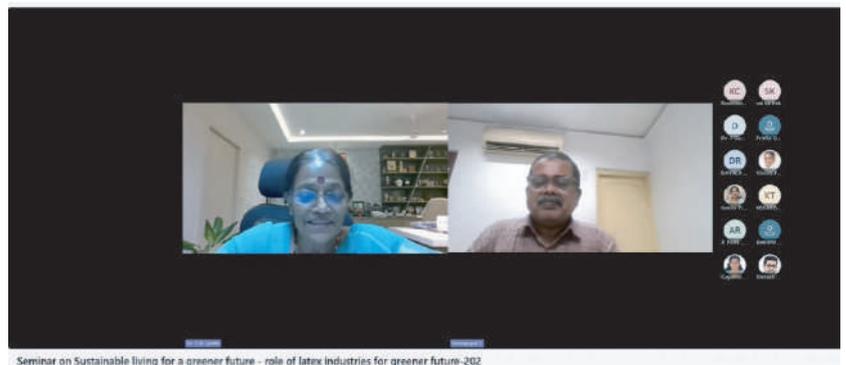
Introduction about Guest speaker
Key Note Address
Mr. Venugopal S
General Manager,
HLL Lifecare Ltd, Thiruvananthapuram

Vote of Thanks
Pritaka Gatike, II Year
Department of Robotic and Artificial Intelligence



SCAN TO JOIN

The amESE Club and IIC, Amritapuri, organized a special webinar on National Pollution Control Day featuring Mr. Venugopal S, General Manager, HLL Lifecare Ltd on the topic "Role of latex industries for greener future". The session focused on sustainable practices in the latex industry and innovative environmental protection strategies. Participants gained valuable insights into green technologies and the path toward eco-friendly industrial transitions. The event concluded with gratitude to the speaker and attendees for contributing to an inspiring and impactful session



Journals

- 1 Prasannakumar, P., Sankarannair, S., Prasad, G., S, P., P, V., S, S., & Shanmugam, R. (2025). Bio-based additives in lubricants: addressing challenges and leveraging for improved performance toward sustainable lubrication. *Biomass Conversion and Biorefinery*, 1-29.
- 2 Prasad, G., Jayadev, A., & Zolezzi, G. (2025). Profiling contaminants of emerging concern on the risk posed to an Indian community. *Water, Air, & Soil Pollution*, 236(10), 681.
- 3 Pulikkal, R., Jayadev, A., Madhu, M., Nair, S. G., Shaji, R., Sasidharan, S.& Prasad, G. (2025). Characterization of Mangrove Sediment Pollution with Focus on Microplastics in Kannur, South India. *Regional Studies in Marine Science*, 104622.

Conferences

Battula Pujith., Radharapu Karthikeyan & Vishnu Priya. Nov (2025). A Review on Sustainable Alternatives to Stubble Burning in Indian Agriculture. *International Conference on Advances in Materials, Modeling, and Analysis for Sustainable and Resilient Infrastructure Volume 2*.

Gouri R Nair;Ardra R Nair & Vishnu Priya.Sep (2025). NO2 Detection and Absorption with IDC sensor in ANSYS Maxwell. *International Conference on Electronics and Sustainable Communication Systems (ICESC)*.

