

In association with



MVJ College of Engineering, Bangalore
in association with
INAE Bangalore Chapter
Presents

VISHWA 2025

A ONE-DAY WORKSHOP ON

**Innovations for a Climate-Resilient &
Sustainable Future on Earth and Beyond**





About MVJCE

MVJ College of Engineering was established in 1982 to impart education in engineering, management, and beyond. MVJCE bears state-of-the-art infrastructure that creates an environment for progressive learning and development. The college is approved by AICTE—New Delhi, affiliated to VTU—Belagavi, and recognised by UGC with 2(f) & 12(B) status. We currently offer 15 undergraduate programs, 8 postgraduate programs, and Ph.D under 9 programs or research centres.

MVJCE is ranked among the top engineering colleges in Karnataka and has been recognized for its academic performance. The college aims to provide quality education with industrial exposure, promote innovation and entrepreneurship, and develop outstanding engineers and leaders. MVJCE is renowned for equipping students with the skills required to excel in the industry. For over a decade, students at MVJCE have created numerous top-notch innovative projects and earned several accolades in prestigious competitions. Their achievements have been showcased in various leading newspapers, reflecting the college's unwavering commitment to nurturing talent and fostering innovation. MVJCE is known for its dynamic learning environment, which seamlessly blends technical education with character development, preparing students to be industry-ready professionals.

About INAE

The Indian National Academy of Engineering (INAE), established in 1987, promotes engineering and technological excellence in India. Operating autonomously under the Department of Science and Technology, INAE fosters innovation and collaboration among engineers, scientists, and professionals. Its accomplished fellows provide guidance in shaping engineering policies. The academy collaborates with industry, academia, and government to address engineering challenges and promote sustainable development. INAE stands as a beacon of excellence, advancing engineering principles for the betterment of society and the nation.

About VISHWA 2025

VISHWA inspires young minds to explore and marvel at the wonders of the universe. It underscores the profound impact of science on our world and emphasizes the importance of fostering a spirit of curiosity and discovery in future generations. National Science Day not only highlights the significance of science in our daily lives but also celebrates the relentless pursuit of scientific knowledge and innovation. It stresses the necessity of nurturing curiosity and discovery in the young minds who will shape our future.

MVJ College of Engineering, Bangalore, and the Indian National Academy of Engineering – Bangalore Chapter proudly present VISHWA 2025 on February 28, 2025. The event, themed “ Innovations for a Climate Resilient & Sustainable Future on Earth and Beyond ” will bring together thought leaders, researchers, and innovators to explore solutions for climate resilience and sustainability, including net-zero carbon emissions, circular economy models, and clean energy technologies. Featuring keynote addresses and competitions, VISHWA 2025 aims to inspire collaboration across industries, academia, and governments. The event is open to all undergraduate students from science and engineering colleges, with no registration fee for the workshop.

OBJECTIVES VISHWA 2025

-  Foster interdisciplinary collaboration to tackle climate challenges
-  Explore innovative solutions for sustainable industrial practices
-  Highlight the role of technology in climate adaptation and mitigation
-  Encourage actionable ideas for creating a sustainable future both on Earth and in space



JOIN US IN OFFERING FEASIBLE SOLUTIONS TODAY FOR A SUSTAINABLE & RESILIENT TOMORROW.

FOCUS AREAS



Climate Tech Innovations

Climate tech innovations develop solutions for climate change and sustainability, focusing on renewable energy, carbon capture, smart agriculture, and advanced waste management. This interdisciplinary field combines physics, chemistry, biology, and data science, enabling students to design experiments, prototype solutions, and promote sustainability for a cleaner, safer future.



Cyber Systems for Sustainability

Integrating science with cyber systems enables innovative solutions for environmental challenges and sustainability. Using advanced computing, data analytics, and IoT, students can optimize resource use, enhance energy efficiency, and monitor environmental impacts. This approach empowers them to develop scalable, tech-driven solutions for a greener future.



Clean Energy Systems & Carbon Management

Clean energy systems focus on generating power from renewable sources like solar, wind, hydro, and geothermal, reducing dependence on fossil fuels. These systems are key to transitioning to a low-carbon economy and mitigating climate change. Carbon management involves strategies to capture, store, and reduce carbon dioxide emissions, including carbon capture and storage (CCS) technologies. Together, clean energy systems and effective carbon management are essential for achieving global sustainability goals and limiting the impacts of climate change.

Prize Money

A total cash prize of Rs. 40,000 will be awarded to the top three presentations in both the oral and poster categories.

Oral Presentations:

- **First Prize: Rs. 10,000**
- **Second Prize: Rs. 5,000 each (Two Second Prizes)**

Poster Presentations:

- **First Prize: Rs. 10,000**
- **Second Prize: Rs. 5,000 each (Two Second Prizes)**

The presentations will be evaluated by experts from Iisc. and NAL.

Profiles of EXPERTS

Padma Vibhushan Dr. V K Aatre
Former Scientific Advisor to Raksha Mantri and Secretary, DRDO

- Lifetime Achievement Award from Indian National Academy of Engineering in 2016.
- Lifetime Achievement Award from DRDO in 2016.
- Lifetime Achievement Award from Karnataka Science and Technology Academy in 2015.



Padma Bhushan Dr. B N Suresh
Chairman, Board of Governors, MVJCE, Bangalore
Founding Director and Chancellor of IIST established by ISRO in Thiruvananthapuram.

- Former member, Space commission.
- Former Director, Vikram Sarabhai Space Centre (VSSC), Thiruvananthapuram.
- Pioneer Award' from the International Council for System Engineering, USA in 2018
- 'IEEE Simon Ramo Award' from IEEE for exceptional achievement in systems engineering and System Science in 2020.



Dr. S Gopalakrishnan
Chairman, INAE, Bangalore Chapter

- Senior Professor, Department of Aerospace Engineering, IISc.
- Satish Dhawan Young Scientist Award by Government of Karnataka.
- Figures in the Stanford list of top 2% of scientists in the world for four consecutive years.
- Elected for the ASME Founders Medal for his outstanding contributions to Structural health Monitoring and NDE in 2025.



Shri. M Sankaran
Distinguished Scientist & Director U.R. Rao Satellite Centre, ISRO, Bangalore.

- Contributed to Chandrayaan-3 and Gaganyaan missions.
- Played a key role in the successful development of the 70V bus for ISRO satellites and designed unique power generation and distribution systems for interplanetary missions such as Chandrayaan-1 & 2, and Mars Orbiter Mission.
- Leading the Centre towards various prestigious space missions like Human Space Flight-GAGANYAAN, Mars Landing Mission, Lunar Sample Return Mission, Advanced technologies for Bharatiya Antariksha Station



Dr. Bala Govindasamy
Executive member of the Earth Commission, Future Earth
Professor, Center for Atmospheric and Oceanic Sciences, IISc, Bangalore

- Former Physicist (Climate Scientist) at the Lawrence Livermore National Laboratory (LLNL), USA,
- Lead and contributing Author in the 5th (2013) and 6th (2021) scientific assessment of climate change by the Intergovernmental Panel on Climate Change.



PROGRAMME

Time	Activity
9.00 AM	Registration
9.20 AM	About 'Vishwa'
9.22 AM	Invocation
9.25 AM	Welcome address by Dr. Ajayan K R, Principal, MVJCE
9.28 AM	Opening Address by Padma Bhushan Dr. B N Suresh, Chairman, Board of Governors, MVJCE, Bangalore
9.35 AM	Address by Dr. S Gopalakrishnan, Chairman, INAE, Bangalore Chapter
9.43 AM	Vote of Thanks by Dr. M Brindha, Dean- Affiliation & Accreditation, MVJCE, Bangalore
9.45 AM	Distinguished Lecture by Padma Vibhushan Dr. V K Aatre, Former Scientific Advisor to Raksha Mantri and Secretary, DRDO Title of the Lecture: Science and Technology - Historical, Philosophical and Societal Perspectives
10.30 AM	Coffee Break
10.45 AM	Poster presentations by Students group
11.45 AM	Distinguished Lecture by Dr. Bala Govindasamy, Executive member of the Earth Commission, Future Earth Professor, Center for Atmospheric and Oceanic Sciences, IISc. Title of the Lecture: Should we engineer the sky to reverse climate change?
12.30 PM	Oral presentations by Students group
1.15 PM	Lunch Break
2:00 PM	Oral presentations by Students group
2.50 PM	Distinguished Lecture by Shri. M Sankaran, Director, UR Rao Satellite Centre, Bangalore Title of the Lecture: Sustained Spirit of Innovation in Space: ISRO - For a Sustainable Future on Earth and Beyond
3.35 PM	Closing session: <ul style="list-style-type: none">• Summary of Event by Prof. Arnab Tah, Dept. of CSE, MVJCE, Bangalore• Prize & Certificate distribution• Vote of Thanks by Dr. M Brindha, Dean- Affiliation & Accreditation, MVJCE, Bangalore



Engineering A Better Tomorrow

An Autonomous Institute

Venue



Dr. M V Jayaraman Auditorium,
MVJ College of Engineering, Bangalore

Date



February 28, 2025



www.mvjce.edu.in/vishwa-2025



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