

About the Workshop

Cooling will be the single largest driver of rising electricity demand between now and 2050. As the planet experiences record temperatures and increasingly frequent heatwaves, cooling is no longer a luxury — it is a lifeline essential for survival, health, productivity, and economic resilience.

Rising temperatures, population growth, urbanization, and development trends are triggering an unprecedented surge in global cooling demand. Today, an estimated 1.2 billion people are at high risk of serious health, productivity, and nutrition-related impacts due to inadequate access to cooling. However, the challenge is twofold: while cooling protects people, conventional cooling systems can intensify climate change through high energy use and super-polluting refrigerants.

By combining energy efficiency improvements with a rapid transition away from high-global-warming-potential refrigerants, cumulative greenhouse gas emissions of up to 210–460 GtCO₂e could be avoided over the next four decades.

Sustainable cooling is therefore central to both climate adaptation and mitigation. Governments, cities, industries, researchers, and development partners must work collectively to accelerate the transition towards cooling systems that are efficient, inclusive, affordable, and climate friendly.

The workshop aims to bring together professionals and stakeholders from diverse sectors to exchange expertise, perspectives, and practical solutions on:

- Sustainable cooling technologies
- Energy-efficient cooling systems
- Standards, guidelines, and policy frameworks
- Best practices, strategies and case studies for reducing the carbon footprint of cooling systems

The workshop will feature:

- **Keynote sessions** by experts and thought leaders
- **Panel discussions**
- A **hackathon** to create awareness among the students
- A **field visit** to showcase practical systems



Vellore Institute of Technology (VIT)

VIT was founded in 1984 as Vellore Engineering College by the Founder and Chancellor Dr. G. Viswanathan. University status was conferred in 2001 by MHRD Govt. of India in recognition of its excellence in academics, research, and extracurricular initiatives.

Ranking and Accreditation

VIT has emerged as one of the best institutes of India and is aspiring to become a global leader. Quality in teaching-learning, research and innovation makes VIT unique. Engineering and Technology: 142 in the World and 9th best in India (QS World University Rankings by Subject 2025) and Data Science and AI subject areas are within the Top 100 in the world. Computer Science, Information Systems, Electrical, Electronics, and Materials Science subject areas are within the top 200 in the world (QS World University Rankings by Subject 2025) Within the top 2 in India and top 600 in the world (Shanghai ARWU ranking 2025) NAAC Accreditation with A++ grade (3.66 out of 4) Within the top 20 in University, Research and Engineering categories in India (NIRF Ranking, Govt. of India 2025) 352 in the world and 7 in India (QS World University Rankings: Sustainability 2026)

Two day Industry - Academia Workshop on Sustainable Cooling

March 5-6, 2026,
Vellore Institute of Technology,
Vellore



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DEPARTMENT OF
SCIENCE & TECHNOLOGY



Panel discussion 1 - Women Shaping the Future of Sustainable Cooling

NADI Airtechnics Private Limited
E4 Cooling Solutions
Larsen & Toubro Limited (L&T)
INNOWELL Group (Innowell Engineering International Private Limited)

Panel discussion 2 - Sustainable Cooling for the Global South

Kirloskar Chillers Private Limited
Trane Technologies
Carrier Global Corporation
Danfoss
Sustainable Living Lab

Student Ideathon/ Hackathon

Blue Star
Trane Technologies
Danfoss



VIT
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

ISHRAE

ACEE
Association of Energy Engineers



Cool Coalition





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PROGRAMME SCHEDULE

Day 1, March 5, 2026			
Event	Time	Description	Venue
Inauguration	10:00 AM to 10:50 AM	Welcome address Workshop Introduction Inaugural Address	Era Sezhiyan Auditorium, Mahatma Gandhi Block, III floor
		Tree Plantation & Tea Break	
Panel Discussion - 1	11:00 AM to 12:15	Topic: Women Shaping the Future of Sustainable Cooling <i>Mrs. Jayanthi Nagarajan – Nadi Airtechnics Private Limited</i> <i>Mrs. J. Jameela – Senior Lead Engineering Manager, L&T Construction</i> <i>Mrs. Sangeetha Kanagarajan – Founder & CEO, E4 Cooling Solutions</i> <i>Ms. Saranya Mohan, Danfoss</i> <i>Moderator: 3rd Year Mechanical Engineering Student</i>	
ISHRAE Installation	12:15 PM to 1:00 PM	ISHRAE VIT Student Chapter Installation	
		Lunch Break	
Students Interaction	2:00 PM to 2:30 PM	Interaction with Industry Experts Poster Presentation Visit Models & Infrastructure Display	Era Sezhiyan Auditorium, Mahatma Gandhi Block, III floor
Keynote - 1	2:30 PM to 3:15 PM	Latest Developments in Chiller Technology by Mr. Gaurang Dabholkar, Vice President, Kirloskar Chillers	
		Networking Tea Break	

Panel Discussion - 2	3:30 PM to 4:45 PM	Topic: Sustainable Cooling for the Global South: Innovation, Equity, Policy & Skilled Workforce, representatives from Mr. Gaurang Dabholkar, Kirloskar Chillers Trane Technologies (<i>Details yet to be received</i>) Mr. Manjunath M. D., Carrier India Mr. Manogj Sundaresan, Danfoss	
Day 2, March 6, 2026			
Keynote – 2	10:00 AM to 11:00 AM	Extreme Heat and the requirement for innovative cooling strategies for adaptation by Avinash Singh, Sustainable Living Lab	Kamaraj Auditorium, 7th floor, Technology Tower
	Networking Tea Break		
Keynote – 3	11:15 AM to 12:15 PM	HVAC – Sustainable Maintenance and Operations, by Mr. Nagaraj Shetty Carrier India	
Prize distribution	12:15 PM to 1:00 PM	Winner announcement of Poster presentation	
	Lunch Break		
Field visit	2:00 PM to 3:00 PM	Field visit to Chiller plant	SJT Annexure
	3:30 PM to 4:30 PM	Field Visit to TABS building, GDN terrace	GDN Terrace

Parallel Events

- Poster Competitions, Quiz
- Student Ideathon / Hackathon by Trane Technologies, Danfoss, Blue Star

*Please note that schedule is tentative and subjected to small change based on the expert availability