

PRESERVE THROUGH INNOVATION FOR A BETTER FUTURE

The REFCOLD Conference sessions will offer a captivating platform for experts and enthusiasts in the refrigeration and cold chain domain to converge. Delving into cutting-edge research and innovations, attendees would explore topics like Clean & Sustainable Cooling Solutions for Food Processing & Cold Storage, Natural Refrigerants - Are We ready to adopt, Innovative Design or Technology for Net Zero Cold Storage Plants, Case Studies & Challenges on Dairy Processing and Storage and many more. Through interactive workshops and demonstrations, participants will gain practical insights into optimizing cold chain processes. While the conference's dynamic atmosphere would foster collaboration and idea-sharing, leaving attendees inspired and committed to shaping a more efficient and sustainable future for refrigeration and cold chain technologies.

DAY: 01 - 12th OCTOBER 2023

SESSION I

Inauguration and IIR_IINDEE+

Session Chairman : Prof M. P. Maiya, IIT Madras, Chennai

Time : 10.30 AM – 13.00 PM | Venue – Chennai Trade Centre

AGENDA

10:30 am	Inauguration Event
11:30 am	Dr. Sarun Kumar, NTNU , Introduction to INDEE+ and the expected impacts Prof. Armin Hafner, NTNU , Energy efficient CO ₂ based refrigeration / chiller / heat pump units Prof. Pramod Kumar, IISc , Natural Refrigerants – Are we ready to adopt? Prof. M. S. Dasgupta, BITS , Propane based refrigeration unit for onboard flake ice unit Dr. Arun B. S., CIFT+SINTEF OC , Modeling and simulation of 350 kw NH ₃ -CO ₂ cascade tunnel freezers Mr. Sonal, Mr. Aditya, CEEW+NEA , How to operationalize lifecycle refrigerant management in India
13:00 pm	LUNCH

SESSION II

Refrigeration for Food Processing & Cold Storage

Session Chairman : Mr. C Subramaniam, Chair ITC, ISHRAE

Time : 14.00 PM – 16.45 PM | Venue – Chennai Trade Centre

KEY SPEAKERS



Mr. Arvind Surange

Chairman and
Managing Director,
ACR Project
Consultants Pvt.
Ltd., Pune, India



Dr. Lambert Kuijpers

A/gent b.v.
Environmental
Consultancy, Venlo,
Netherlands



Mr. C.P. Charles

Member central
Executive Committee,
Indian Dairy
Association



Dr. Alex Pachai

Global Consultancy,
ApS, Denmark



Dr. Omar Abdulaziz

Department of
Mechanical
Engineering, The
American University in
Cairo, New Cairo,
Egypt



Mr. Alpaslan Terekli

Application Manager
Secop GmbH Turkey

AGENDA

14:00 pm	Innovative Design or Technology for Net Zero Cold Storage Plants
	Mr Arvind Surange , Chairman and Managing Director, ACR Project Consultants Pvt. Ltd., Pune, India Mr. Arvind Surange obtained his Masters degree in Refrigeration and Air-conditioning Engineering from the University of Roorkee in 1963. He underwent advanced training in "Refrigeration and Air Conditioning" in Germany and Denmark and started his Consultancy firm in 1971. Since then, he has been involved in designing, planning and executing projects for cold stores, pre-cooling, frozen food, ice, ice cream, dairy and brewery applications
14:30 pm	Refrigeration Technologies: The Sustainability Issue - Via Online
	Dr. Lambert Kuijpers , A/gent b.v. Environmental Consultancy, Venlo, Netherlands Dr. Lambert Kuijpers is a member of the UNEP Refrigeration, AC and Heat Pumps Technical Options Committee (RTOC). He has also been involved in various Science Assessment Reports on the Ozone Layer. During 2021-22, he was a "Review Editor" for the "Policy and Scenarios" chapter of the Science 2022 Assessment Report. He works as a Consultant with the A/gent consultancy company in the Netherlands. He is a member of many refrigeration associations and the author of many publications, the latest on net-zero issues for RACHP.

15:00 pm	<p>Challenges on Dairy Processing and Storage</p> <p>Mr. C.P. Charles, Member central Exective Committee, Indian Dairy Association</p> <p>Mr. C. P. Charles is a Member of the Central Executive Committee of the Indian Dairy Association. He has a rich experience of 42 years in the Dairy Sector. He is the Director at Tedmag Training Academy and regularly conducts skill development programs on sourcing, manufacturing and marketing for the dairy sector. He serves as a consultant for the dairy sector and is a "National Level Resource Person" at FSSAI.</p>
15:30 pm	COFFEE BREAK & NET WORKING
15:45 pm	<p>Safety Standards and Trouble Shooting of Refrigeration Plants - Via Online</p> <p>Dr. Alex Pachai, Global Consultancy, ApS, Denmark</p> <p>Dr. Alex Pachai has been working at JCI since April 1st, 2000, as the Technology Manager. He specialises in the design, development, safety, troubleshooting, and start-up and commissioning of refrigeration equipment and systems. He has been instrumental in developing compressors for ammonia, hydrocarbons, carbon dioxide, and water refrigerant systems. In the last 40+ years, he has been working towards environmentally friendly solutions to the many challenges faced by the refrigeration industry and novel ways to use refrigerants.</p>
16:15 pm	<p>How to handle Natural refrigerants in commercial refrigeration systems?</p> <p>Mr. Alpaslan Terekli, Application Manager Secop GmbH Turkey</p> <p>Mr. Alpaslan Terekli has been a dedicated professional in the refrigeration industry since the year 2000. He began his career as a Quality Engineer with BSH, a leading manufacturer of home appliances, and in 2005, he moved to its Pre-Development Dept in Germany. In 2015, he joined SECOP, a renowned compressor manufacturer and is currently working as an Application Manager. He has consistently prioritised technical competence, comprehensive understanding of customer requirements and supporting them in making informed decisions.</p>
16:45 pm	<p>Designing a High-Efficiency HC-290 Chiller for Medium Back Pressure Applications (Retail Food Stores) - Via Online</p> <p>Dr. Omar Abdulaziz, Department of Mechanical Engineering, The American University in Cairo, New Cairo, Egypt</p> <p>Dr. Omar Abdelaziz is a Professor of Thermofluids with more than 15 years of experience in research, development and project management in energy-efficient building technologies, sustainable energy production and utilisation, alternate cooling and heating technologies, and alternate low GWP refrigerants. He is currently a member of the United Nations Techno-economic Assessment Panel (TEAP) and a co-chair of its Refrigeration, Air Conditioning, and Heat Pump Technical Options Committee (RTOC). He is an active member of ASHRAE. He serves on its research administration committee as a Research activity subcommittee chair.</p>
17:15 pm	CONCLUDING REMARKS

DAY: 02 - 13th OCTOBER 2023

SESSION III

National Centre for Cold Chain Development (NCCD)

Session Chairman : Mr. S Sankaran, Past National President, ISHRAE

Time : 10.30 AM – 13.00 PM | Venue – Chennai Trade Centre

KEY SPEAKERS



Mr. Asheesh Fotedar

COO, National Centre for Cold-chain Development, Gurgaon, Haryana



Mr. Ashish Gupta

Standard Refrigeration Pvt Ltd, New Delhi



Mr. Rajagopal Sivakumar

Agrivaluechain Services Pvt. Ltd. Chennai, Consultant : Eurovent Certita Certification, Paris, France



Mr. Jiju Nair

National Marketing Manager, Honey well

AGENDA

10:30 am	Registration and Networking
11:00 am	National Policies of the Ministry of Agriculture and Farmers Welfare for the Development of Horticulture Mr. Asheesh Fotedar , COO, National Centre for Cold-chain Development, Gurgaon, Haryana Mr. Asheesh Fotedar brings over 20 years of experience in the refrigeration industry. He has extensive experience in the Design and execution of turnkey refrigeration projects, Development and business operations of cold storage, Refrigeration and HVAC projects. He started his journey with Majestic Park Plaza, Ludhiana, as an HVAC Engineer. In 2001, he delivered a cold room for the Indian Army in the LEH sector of Drass, Kargil, in a record seven days. He has also worked as the Regional Head (Projects and Supermarket Refrigeration) for Blue Star Ltd.
11:30 am	Role and Responsibilities of Private Sector for Sustainable Cooling in Cold Chain Development Mr. Ashish Gupta , Standard Refrigeration Pvt Ltd, New Delhi Mr. Ashish Gupta is the Managing Director of Standard Refrigeration Private Ltd in Delhi, a company delivering engineering solutions and specialised products in the field of HVACR and Indoor Environment Quality. He spearheads several strategic business growth initiatives and has developed his organisation with multiple verticals such as Air conditioning, Air purification and disinfection, UVC systems, Cold store components, Indoor air quality, Energy efficiency solutions and AI.
12:00 pm	Certification of Refrigeration equipment's for Cold chain Industry Rajagopal Sivakumar , Agrivaluechain Services Pvt. Ltd. Chennai, Consultant: Eurovent Certita Certification, Paris, France Mr. Rajagopal Sivakumar has over twenty-seven years of industry and consulting experience in the development of agribusiness. He has expertise in designing, analysing and implementing agricultural and horticulture value chain projects. He is currently working with private-sector agribusinesses, guiding them from Concept to project completion, Post-harvest management, Cold chain, and Food processing. He works with government and financial institutions on technical and policy matters. He has been engaged as a consultant with Eurovent Certita Certification since 2018.
12:30 pm	Standards and codes for fire detection in Cold rooms Mr. Jiju Nair , National Marketing Manager, Honey well Mr. Jiju Nair holds a Bachelor's degree in Electrical and Electronics Engineering from Anna University, an MBA (Finance & Marketing) from IMI University and a PGP in AI/ML from Great Lakes University. He is the National Marketing Manager at Honeywell and is responsible for the Enterprise Fire Portfolio. He has over 14 years of experience in sales and business development of Fire safety, Security, BMS and Electrical distribution products. He is a NFPA 72 – (2016 & 2019 Edition) certified professional.
13:00 pm	LUNCH

SESSION IV

Application of Heat Pumps in Food Processing Industries

Session Chairman : Prof. Srinivasamurthy, Prof Emeritus, IISc, Bangalore

Time : 14.00 AM – 17.15 PM | Venue – Chennai Trade Centre

KEY SPEAKERS



Prof. Alberto Coronas

Department of Mechanical Engineering, Universitat Rovira i Virgili, Tarragona, Spain



Dr. Andy Pearson

Group Managing Director, Star Refrigeration, Glasgow, UK



Prof. Armin Hafner

NTNU Norwegian University of Science and Technology, Trondheim, Norway



Dr. Sidharth Paranjape

OST-Ostschweizer Fachhochschule, Departement Technik Campus, Werdenbergstrasse 4, CH-9471 Buchs, Switzerland



Prof. Trygve M. Eikevik

Norwegian University of Science and Technology, Trondheim, Norway



Mr. Jeyaprakash Gurusamy

Trane Technologies, Bangalore

AGENDA

14:00 pm	IIR - Commission Activities on Heat Pump and Energy Recovery
	<p>Prof Alberto Coronas, Department of Mechanical Engineering, Universitat Rovira i Virgili, Tarragona, Spain</p> <p>Prof. Alberto Coronas is a Professor of Thermal engineering in the Department of Mechanical Engineering at the Rovira i Virgili University, Tarragona, Spain. He heads the Research group on Applied Thermal Engineering (CREVER). His research areas cover Absorption technology for industrial refrigeration and heat pumps, Heat transfer and thermophysical properties of new working fluid mixtures, and Poly-generation technologies.</p>
14:30 pm	<p>Industrial Heat Pumps for Heating and Cooling Applications - Via Online</p> <p>Dr. Andy Pearson, Group Managing Director, Star Refrigeration, Glasgow, UK</p> <p>Dr. Andy Pearson, an ASHRAE fellow, is the Group Managing Director of Star Refrigeration, UK. Established in 1970, Star Refrigeration leads the way in natural refrigeration and heating technology. Working closely with its customers, the company strives to offer a comprehensive range of cost-effective, eco-friendly, socially responsible heating and cooling solutions to suit various business needs. Star Refrigeration has experience in the design and installation of industrial heat pumps.</p>
15:00 pm	<p>CO₂ Heat Pumps for Process Heating and Cooling</p> <p>Prof. Armin Hafner, NTNU Norwegian University of Science and Technology, Trondheim, Norway</p> <p>Prof. Armin Hafner is a Professor of Refrigeration technology at the Norwegian University of Science and Technology, Norway. Over the past two decades, he has been working at SINTEF with research topics related to CO₂ refrigeration technology for various applications. His focus is on refrigeration and heat pump technology, in general, and particularly in CO₂ technology for multiple applications such as supermarkets, industrial heat pumps, and transport refrigeration. His work involves system design for refrigeration, air conditioning, heat pumps, and working fluids, especially natural working fluids.</p>
15:00 pm	COFFEE BREAK & NETWORKING

AGENDA

15:45 pm	<p>Steam Generating Heat Pump for Process Heating in Agro Food Sector - Via-Online</p> <p>Dr. Sidharth Paranjape, OST–Ostschweizer Fachhochschule, Departement Technik Campus, Werdenbergstrasse 4, CH-9471 Buchs, Switzerland</p> <p>Dr. Sidharth Parajape specialises in the design and mathematical analysis of Fluid mechanics and Heat transfer engineering experimentation. His professional experience includes developing phenomenological models for engineering systems, and planning, designing and executing engineering experimentation involving energy conversion systems. He also offers technical consulting services to the industry.</p>
16:15 pm	<p>Heat Pump Technology for Drying Applications in Agro Food Sector</p> <p>Prof. Trygve M. Eikevik, NTNU Norwegian University of Science and Technology, Trondheim, Norway</p> <p>Prof. Trygve M. Eikevik is a Professor in the Department of Energy and Process Engineering at the Norwegian University of Science and Technology, Norway. He works in areas of Refrigeration and Heat pump systems, specialising in High-temperature heat pumps, Snow-making systems, and Energy efficiency in industrial processes. He also works on Heat pump assisted atmospheric freeze drying and Fluid bed dryers in combination with Microwave and Infrared heating, and mechanical and ultrasound vibration.</p>
16:45 pm	<p>Heat Pump for Cardamom Drying</p> <p>Mr. Jeyaprakash Gurusamy, Trane Technologies, Bangalore</p> <p>Mr Jeyaprakash Gurusamy holds a Master's degree in Thermal Engineering (Refrigeration and Airconditioning) and a PGDP- Operations from IMT-CDL Ghaziabad. His expertise is in Refrigeration system design for commercial and transport applications, HVAC and Refrigeration equipment rating standards, Test lab design, operation and calibration, and Field service engineering for Transport and unitary HVAC systems. He is a Certified Professional in "Carbon Foot Printing" by CII, Hyderabad and a certified Six Sigma Green Belt from LG Electronics.</p>
17:15 pm	CLOSING REMARKS

DAY: 03 - 14th OCTOBER 2023

SESSION V

Refrigeration Systems / Components / Cold Chain Logistics

Session Chairman : Prof. Sukumar Devotta, Prof Emeritus, Anna University, Chennai

Time : 10.00 AM – 13.15 PM | Venue – Chennai Trade Centre

KEY SPEAKERS



Mr. Srivatsan (aka Waatson) Varadan
SV Air Temp Solutions,
Canada



Mr. Karthik Jayaraman
Waycool Foods and
Products Pvt Ltd,
Chennai, India



Mr. Abasaheb Kale
Sahyadri Farms
Sustainable Grassroots
Initiatives Limited,
Nashik, India



Mr. Manoharan,
MD, Gem Orion
Machinery Pvt Ltd.,
Coimbatore



Mr. Chetan Tavare,
MD, Climastyring
Technologies LLP,
Karad, Maharashtra



Mr. Rangarajan,
CEO Electrons Cooling
Systems, Thiruvellore,
TN



V. Parthasarathy
Consultant,
Refrigeration & Cold
Chain Industry

AGENDA

10:00 am	Registration and Networking
10:30 am	Refrigeration for Agriculture – Insights, Challenges & Solutions Mr Srivatsan (aka Waatson) Varadan , SV Air Temp Solutions, Canada Mr. Srivatsan Varadan, Director of S V Air Temp Solutions, Canada, is a graduate engineer with an MBA from the Ivey School of Business. He brings over 35 years of global HVACR experience, having worked in India, UAE, Oman, USA, and Canada. His core competencies are Application and Design engineering, Strategic marketing and Business development. He is always keen to share his knowledge, especially in refrigeration technology, to build a sustainable food security ecosystem.
11:00 am	Farm to Produce in Cold Chain Logistics Mr Karthik Jayaraman , Waycool Foods and Products Pvt Ltd, Chennai, India Mr. Karthik Jayaraman is one of the Founding Team Members of Way Cool Foods. He has over 23 years of experience across engineering, automotive and management consulting. His previous experience includes business transformation, new business development and corporate strategy at Ashok Leyland.
11:30 am	Farm to Market – Opportunities & Challenges Mr Abasaheb Kale , Sahyadri Farms Sustainable Grassroots Initiatives Limited, Nashik, India Mr. Abasaheb Kale is the Chief Executive Officer of Sahyadri Farms Sustainable Grassroots Initiatives Limited and Sahyadri Farmers Producer Company Ltd. He is an engineering graduate from Shivaji University. His experience includes Construction management, New business development, Business strategy, Project management, Team building and Contract management.
12:00 pm	COFFEE BREAK & NETWORKING
12:30 pm	Panel Discussion on “Environmental Sustainability in Process Chilling - Technology, Refrigerants and Energy Efficiency Panelist: Mr. Manoharan, MD , Gem Orion Machinery Pvt Ltd., Coimbatore Mr. K.P. Manoharan obtained his BE in Mechanical Engg from GCT, Coimbatore and his ME in Industrial Engineering from PSG Tech. He is an expert in Heat Exchanger Design, Energy Efficient Chillers and Inverter-based refrigeration solutions. As an entrepreneur, he started manufacturing components for the wet grinders and, in 1987, began manufacturing Cooling towers and Compressed air dryers. By 1993, he pioneered the development and manufacturing of water-less dry cooling. Mr. Manoharan is the Managing Director of Gem Orion Machinery Pvt Ltd., a JV with Orion Machinery of Japan, manufacturing Process Chillers and Inverter precision chillers. Currently Managing Director of Gem Orion Machinery Pvt Ltd., a JV with Orion Machinery of Japan – manufacturing Process Chillers, Inverter precision Chillers and is the largest Air Dryer manufacturer in India.

	<p>Mr. Chetan Taware, MD, Climastyring Technologies LLP, Karad, Maharashtra</p> <p>Mr. Chetan Taware is a B Tech graduate and holds a Master's degree in Management Studies. He has a rich experience of 25 years in the Refrigeration industry in Product development, Production management and Quality systems. He started his career at Emerson and was subsequently the Director of R&D at Danfoss for Reciprocating Compressors and Condensing Units. Mr. Taware is a Director at ClimaStyring Technologies LLP, a company manufacturing various Refrigeration solutions, including Process chillers for dairy and other Industrial applications.</p> <p>Mr. Rangarajan, CEO Electrons Cooling Systems, Thiruvellore, TN</p> <p>Mr. Rangarajan Kidambi Is a graduate engineer with over 30 years of experience in the Refrigeration and Air conditioning industry. He is the CEO of Electrons Cooling Systems, a company involved in product and process cooling solutions. He has a thorough knowledge of the standards for testing air conditioners. His experience covers Equipment Design, Costing, and Project execution. In the early 80s, he played a crucial role in designing, developing and manufacturing an ISI-marked window air-conditioner under the brand name ELECTRONs.</p> <p>V. Parthasarathy, Consultant, Refrigeration & Cold Chain Industry</p> <p>Mr. V. Parthasarathy has four decades of experience in domestic, commercial and industrial refrigeration systems. He has worked in Sales and Operations for Shriram Refrigeration, Tecumseh India, Danfoss Industries and Ice Make Refrigeration. He holds a Diploma in Mechanical Engineering, a Masters degree in Political Science, and has completed a Management Program at IIM-A. He serves as a Consultant for Refrigeration product/solution design and Refrigeration applications for Dairy and Cold-chain.</p> <p>Moderator :</p> <p>Prof Sukumar Devotta, Former Head, NEERI, CSIR Nagpur</p>
13:15 pm	CLOSING REMARKS

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