

REFCOLD India

Conference and Workshops



**SOUTH ASIA'S PREMIER REFRIGERATION &
COLD-CHAIN EXHIBITION**

**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+

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

AGENDA

10:30 am	Inauguration – National President / MD – Amul / Chair – REFCOLD 23 Mr Yogesh H Thakkar , National President SY 2023-24, ISHRAE HQ, New Delhi Mr. Yogesh Mudras , Managing Director, Informa Markets India Pvt Ltd Mr Amit Vyas , Managing Director, Amul Dairy, Anand Mr Raja M Sriraam , Chair, Refcold 2023, Chennai Mr N S Chandrasekar , Chair - NSC, Refcold 2023, Chennai Dr Sukumar Devotta , Chair, Seminar / Workshop, Refcold 2023 Chennai
11:30 am	Dr. S Arun 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 Dr. Simarpreet Singh , NTNU, State-of-the-art implementation of R744 heat pump unit (Poster Display) Dr. Siva Reddy , Mr. Guruchetan , IITM, Modeling of CO ₂ heat pump integrated thermal storage for dairy application (Poster Display) Dr. Pradeep Gupta , Mr. Vinod , IISc + SINTEF OC, Performance characterization of CO ₂ heat pump with Flooded Evaporator (Poster Display) Mr. Prosenjit , Mr. Jan , BITS+SINTEF OC, Simulation of the educational unit using Dymola (Poster Display)
13:00 pm	LUNCH

SESSION II

Refrigeration for Food Processing & Cold Storage

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

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 Arvind Surange holds a Master's degree in Refrigeration and Air-conditioning Engineering from University of Roorkee (1963). He has also done an Advanced Training on Refrigeration and Air Conditioning Projects in Germany and Denmark. Started his own consultancy firm in July,1971
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	<p>and since then have handled assignments for over four hundred projects of various types, including cold stores, precooling and frozen food plants, ice and ice cream plants and dairies, breweries, etc. He has handled designing, planning and execution of various industrial refrigeration and air conditioning projects.</p>
14:30 pm	<p>Refrigeration Technologies: The Sustainability Issue - Via Online Dr. Lambert Kuijpers, A/gent b.v. Environmental Consultancy, Venlo, Netherlands</p> <p>Dr. Lambert Kuijpers has been involved in the UNEP Refrigeration, AC and Heat Pumps TOC (RTOC) for quite some time. He has also been involved in many 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. Lambert also works as a consultant – as an employee of the A/gent consultancy company b.v. (NL). He is a member of many refrigeration associations and has published many publications. Lately, most of them were on net-zero issues for RACHP.</p>
15:00 pm	<p>Challenges on Dairy Processing and Storage Mr. C.P. Charles, Member central Executive Committee, Indian Dairy Association</p> <p>Charles has 42 Year Experience in Dairy Sector. Currently Director, Tedmag Training Academy Designed and conducting the following programmes, off-line & on-line Skilful Milk Sourcing Skilful Marketing & Sales for Dairy Industry programs, Ghee Manufacturing Technology & Market opportunities as skill development in the dairy sector. involved as Consultant in Dairy Sector and National Level Resource Person, FSSAI.</p>
15:30 pm	<p>COFFEE BREAK & NET WORKING</p>
15:45 pm	<p>Safety Standards and Trouble Shooting of Refrigeration Plants - Via Online Dr. Alex Pachai, Global Consultancy, ApS, Denmark</p> <p>Dr. Alex Pachai, worked at JCI since April 1st, 2000; Technology Manager. His Field of work: Safety, Trouble shooting, Start up and commissioning, Project meetings, Sales meetings, Conference activity, Marketing, Market evaluation, Manuals and instructions, guide lines, policy work. During the ensuing 40+ years he has worked to develop environmentally responsible solutions to many challenges faced by the refrigeration industry. These included compressor development for ammonia, hydrocarbons, carbon dioxide and water industrial systems, as well as systems for the design for novel ways to use these refrigerants.</p>
16:15 pm	<p>Designing a High-Efficiency HC-290 Chiller for Medium Back Pressure Applications (Retail Food Stores) - Via Online Dr. Omar Abdulaziz, Department of Mechanical Engineering, The American University in Cairo, New Cairo, Egypt</p> <p>Dr. Omar Abdelaziz Ahmed is Professor of thermofluids with more than 15 years of Research and Development and project management experience in energy-efficient building technologies, sustainable energy production and utilization, alternative cooling and heating technologies, and alternative lower GWP refrigerants. Abdelaziz 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>
16:45 pm	<p>CONCLUDING REMARKS</p>

SESSION III

National Centre for Cold Chain Development (NCCD)

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

KEY SPEAKERS



Mr. Ashish 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	<p>National Policies of the Ministry of Agriculture and Farmers Welfare for the Development of Horticulture</p> <p>Mr. Ashish Fotedar, COO, National Centre for Cold-chain Development, Gurgaon, Haryana</p> <p>Asheesh Fotedar holds over 20 years of rich experience in Refrigeration industry in designing and executing turnkey refrigeration projects/ Sales & Marketing/ Revenue Expansion. He has extensive experience in the development of cold storage projects, as well as in business operations and HVAC and refrigeration projects. Mr. Asheesh Fotedar started his journey with Majestic Park Plaza, Ludhiana as HVAC Engineer, where he delivered a Cold room in 2001 for the Indian Army in the LEH sector of Drass, Kargil, in a record seven days. He had also worked as the Regional Head (Projects and Supermarket) - Refrigeration for Blue Star Ltd., Gurgaon.</p>
11:30 am	<p>Role and Responsibilities of Private Sector for Sustainable Cooling in Cold Chain Development</p> <p>Mr. Ashish Gupta, Standard Refrigeration Pvt Ltd, New Delhi</p> <p>Ashish Gupta is the MD of Standard refrigeration Pvt. Ltd in Delhi, which delivers engineering and specialized products in HVACR and Indoor Environment Quality. Ashish Spearheads several strategic business growth initiatives and has developed his organization with multiple verticals, Air conditioning, Air purification and Disinfection, UVC, Cold store components, Indoor Air Quality, Product development, System/Solution providing, Energy Efficiency solutions and AI with remote monitoring.</p>
12:00 pm	<p>Certification of Refrigeration equipment's for Cold chain Industry</p> <p>Rajagopal Sivakumar, Agrivaluechain Services Pvt. Ltd. Chennai, Consultant: Eurovent Certita Certification, Paris, France</p> <p>Rajagopal Sivakumar has over Twenty-Seven years of Industry and consulting experience in Development of Agribusiness Industry and expertise in Agri & Horticulture value chain Projects Design, analysis and Implementation. Sivakumar is currently working with Private sector Agribusiness development guidance from concept to completion for Post harvest management, Cold chain and Food Processing industry projects. He works with Government , Academic & International Financial Institutions for Technical and Policy advisory services and involved in Skill development programs. He has been engaged as a consultant with Eurovent Certita Certification since 2018 .</p>
12:30 pm	<p>Standards and codes for fire detection in Cold rooms</p> <p>Mr. Jiju Nair, National Marketing Manager, Honey well</p> <p>Jiju holds Bachelor of Engineering Degree (EEE) from Anna University, MBA (Finance & Marketing) from IMI Univ & PGP in AI/ML from Great Lakes Univ. He is National Marketing Manager in Enterprise Fire Portfolio Responsible for Notifier, Esser, HS-81, VESDA, Variodyn, X618, Gas Suppression System, ELS, ECS & other Fire brands throughout Enterprise Portfolio,. He has over 14 Years of varied experience into Solution Sales, Product Sales, Services Sales, Business Development, KAM & Marketing around Fire, Security, BMS & Electrical Distribution Products. He holds Certified on NFPA 72 – 2016 & 2019 Edition.</p>
13:00 pm	LUNCH

SESSION IV

Application of Heat Pumps in Food Processing Industries

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
	Prof Alberto Coronas , Department of Mechanical Engineering, Universitat Rovira i Virgili, Tarragona, Spain Prof. Alberto Coronas is currently professor of thermal engineering in the Department of Mechanical Engineering at the Rovira i Virgili University, Tarragona, Spain, and Head of the Research Group on Applied Thermal Engineering (CREVER). His research activity covers the field of absorption technology for industrial refrigeration and heat pumps, heat transfer and thermophysical properties of new working mixtures, and polygeneration technologies.
14:30 pm	Industrial Heat Pumps for Heating and Cooling Applications - Via Online Dr. Andy Pearson , Group Managing Director, Star Refrigeration, Glasgow, UK Dr Andy Pearson is the Group Managing Director of Star Refrigeration and ASHRAE Fellow. Established in 1970, Star Refrigeration leads the way in natural refrigeration and heating technology. Working closely with its customers, the company strive to offer a comprehensive range of cost effective, eco-friendly and socially responsible heating and cooling solutions to suit a variety of different business needs. Star Refrigeration has experience in the design and successful installation of industrial heat pumps.
15:00 pm	CO₂ Heat Pumps for Process Heating and Cooling Prof. Armin Hafner , NTNU Norwegian University of Science and Technology, Trondheim, Norway Professor Dr.-Ing. Armin Hafner has recently started at NTNU in Trondheim, Norway, as a professor in refrigeration technology. During the past two decades, Armin has been working at SINTEF with research topics related to CO2 refrigeration technology applied in various applications. His focus is in the fields of refrigeration and heat pump technology in general, as well as CO2 technology for various applications such as supermarkets, industrial heat pumps, and transport refrigeration. Additionally, he is involved with system design for refrigeration, air conditioning and heat pumps, including working fluid with an emphasis on natural working fluids, CO2, NH3, and hydrocarbons.
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 has Specialties in the area of Fluid Mechanics and Heat Transfer, Engineering experimentation and Design, Mathematical Analysis. His professional experience includes: Development of phenomenological models for engineering systems, Planning, design and execution of engineering experimentation involving energy conversion systems and Technical proposal writing, project planning, negotiations with vendors, technical consulting to 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 has competence in Refrigeration and Heat Pump Systems, High temperature Heat Pumps, Snow making systems at ambient temperature above 0oC, Energy Efficiency in Industrial Processes using Heat Pumps, Enhanced Technologies in Heat Pump Assisted Atmospheric Freeze Drying and in Fluid bed dryer in combinations with Microwave and Infrared heating, Mechanical and Ultra Sound Vibration.</p>
16:45 pm	<p>Heat Pump for Cardamom Drying</p> <p>Mr. Jeyaprakash Gurusamy, Trane Technologies, Bangalore</p> <p>Mr Jeyaprakash has M.E, Thermal Engineering (Refrigeration & Airconditioning)PGDP- Operations from IMT-CDL Ghaziabad, His Key Competencies are in Refrigeration system design for commercial and Transport applications, Application Engineering SME on unitary and VRF systems, HVAC and Refrigeration equipment rating standards, Test lab design, operation and calibration standards and Field application and service engineering for Transport and unitary HVAC systems, He is the Certified professional in “Carbon Foot Printing” by CII , Hyderabad and in 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

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
Macinery 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 Srivatsan Varadan, Director of S V Air Temp Solutions, is a graduate engineer and has an MBA degree from Ivey School of Business. He brings over 35 years of HVACR global experience having worked in the same industry in India, UAE, Oman, US, Canada. His core competencies on technical side are in Application and Design Engineering while on management side include Strategic Marketing, Business Development and Sales. He is keen to share his knowledge and wisdom especially in Refrigeration to build a sustainable food security eco-system.
11:00 am	Farm to Produce in Cold Chain Logistics Mr Karthik Jayaraman , Waycool Foods and Products Pvt Ltd, Chennai, India Karthik Jayaraman is a Founding Team Member of Way Cool Foods. He comes with over 23 years of experience across engineering, automotive and management consulting. His previous experience included heading 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 Abasaheb Kale is the Chief Executive Officer - Sahyadri Farms Sustainable Grassroots Initiatives Limited @ Sahyadri Farmers Producer Company Ltd (Sahyadri Farms) and he did Engineering from Shivaji University and his experience includes Construction, Construction Management, New Business Development, Negotiation, Business Strategy, Project Management, Team Building and Contract Management.
12:00 pm	COFFEE BREAK & NETWORKING
12:15 pm	Panel Discussion on “Environmental Sustainability in Process Chilling - Technology, Refrigerants and Energy Efficiency Panelist: Mr. Manoharan, MD , Gem Orion Macinery Pvt Ltd., Coimbatore Mr. K.P.Manoharan did his BE (Mechanical) from GCT, Coimbatore and ME (Industrial Engineering) from PSG Tech. He is an expert in Heat Transfer Design, Energy Efficient Chillers and Inverter based Refrigeration solutions. As an entrepreneur started manufacturing components for the wet grinders and from 1987 started manufacturing Cooling Towers and Compressed Air Dryers – the first in South India.

	<p>By 1993, pioneered development and manufacturing of water less dry cooling a technical leap in conserving the precious water and continues to supply this technology to OEMs like GE and Cummins. 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> <p>Mr. Chetan Tavare, MD, Climastyring Technologies LLP, Karad, Maharashtra</p> <p>Mr. Chetan Mohan Tavare is a B Tech graduate and had done Masters in Management Studies. He has a rich 25 years experience in Refrigeration Industry in Product Development, Production Management and Quality Systems – having started in Emerson Climate Tech and rose to a position of Director in R&D in Danfoss for Reciprocating Compressors and Condensing Units and later with Dry All as Head – Technology & Quality. Currently he is Director at ClimaStyring Technologies LLP, based at Karad, Maharashtra, manufacturing various Refrigeration solutions, including Process Chillers for Dairy and Manufacturing Industries.</p> <p>Mr. Rangarajan, CEO Electrons Cooling Systems, Thiruvellore, TN</p> <p>Rangarajan Kidambi Is a graduate engineer with over 30 years experience in the refrigeration & air conditioning industry delivering product and process cooling solutions. He has knowledge of the standards testing of air conditioners as per the BIS and also played a part of in a small enterprise making window air-conditioners under the brand name of ELECTRONS, which was provided the ISI certification mark, a first for a micro / small industry in the country in the 80's. His experience covers the gamut of Equipment Design, Costing, Execution of HVAC&R systems and leveraging the use of current technologies to the benefit of all stake holders.</p> <p>V. Parthasarathy, Consultant, Refrigeration & Cold Chain Industry</p> <p>V. Parthasarathy has 4 decades of experience in Domestic, Commercial and Industrial Refrigeration, with various corporate including Shriram Refrigeration, Tecumseh India, Danfoss Industries and Ice Make Refrigeration connected to Refrigeration Sales, Pan India Channel Management and Operations Management. He has done Diploma in Mechanical Engineering, Masters in Political Science and a Management Program in IIM-A. Is currently a Consultant for Refrigeration Product/Solution Design, Refrigeration Applications for Dairy and Cold Chain, besides Sales & Change Management.</p> <p>Moderator :</p> <p>Prof Sukumar Devotta, Former Head, NEERI, CSIR Nagpur</p>
13:15 pm	CLOSING REMARKS

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