15th IIR Conference on Phase-Change Materials and Slurries for Refrigeration and Air Conditioning

PCM 2026

XI'AN - CHINA

SEPTEMBER 16-18

15th IIR Conference on Phase-Change Materials and Slurries for Refrigeration and Air Conditioning

September 16-18, 2026 Xi'an, China

Programme

Hosted by

- International Institute of Refrigeration (IIR)

Sponsored by

- Moon Environment Technology Co.,Ltd.

Organized by

- Chinese Association of Refrigeration
- Xi'an Jiaotong University
- Tsinghua University
- National Innovation Platform (Center) for Industry-Education Integration of Energy Storage Technology
- China-Kyrgyzstan Belt and Road Joint Laboratory on Clean Energy and Energy Storage
- Shaanxi Association of Refrigeration



General Information

Language

The official language for the conference is English. All papers and presentations should be prepared in English.

Electricity

Electricity is supplied at 220V, 50Hz AC throughout China.

Internet access

Wireless Internet access is available to the conference attendees in Shangri-La Hotel, Xi'an.

Currency and Banking

The official name for the currency of China is the Renminbi (RMB). It is denominated into the Yuan. Foreign currency can be exchanged for RMB at airports, banks and hotels. Major credit cards are accepted at most hotels.

Speaker Guide

Oral presenters are required to copy their presentation to the computer 10 minutes before the scheduled session. To avoid disruption of the session, the author will not be allowed to use their own computer and files will need to be downloaded to the computer from a USB key.

Liability

The conference secretariat and organizers cannot accept liability for personal accidents, loss of or damage to private property of participants, students and accompanying persons, either during, or directly arising from PCM2026. Participants should make their own arrangements with respect to health and travel insurance.

Committees

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Organizing Committee

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Prof. Zhang Hua, Vice-President of Commission B2, IIR, University of Shanghai for Science and Technology, China

Prof. Zhang Qunli, Beijing University of Civil Engineering and Architecture, China

Prof. Zhang Xuelai, Shanghai Maritime University, China

Prof. Zhang Yinping, Tsinghua University, China

Registration

All prospective participants are encouraged to register on-line (https://pcm2026.scimeeting.cn) at your earliest convenience.

Registration Type	On-line Registration		On-site Registration
	Early (by August 1, 2026)	Standard (by September 1, 2026)	
Regular Participants	720 €	760 €	800 €
Private and corporate members of the IIR, members of the International Scientific Committee of the Conference, members of CAR	500 €	540 €	580 €
Students	360 €	380 €	400 €
Accompanying persons	180 €	190 €	200 €
* The registration fees include coffee breaks, lunches, conference dinner, conference badge & bag. * Accompanying fees include lunches, conference dinner.			

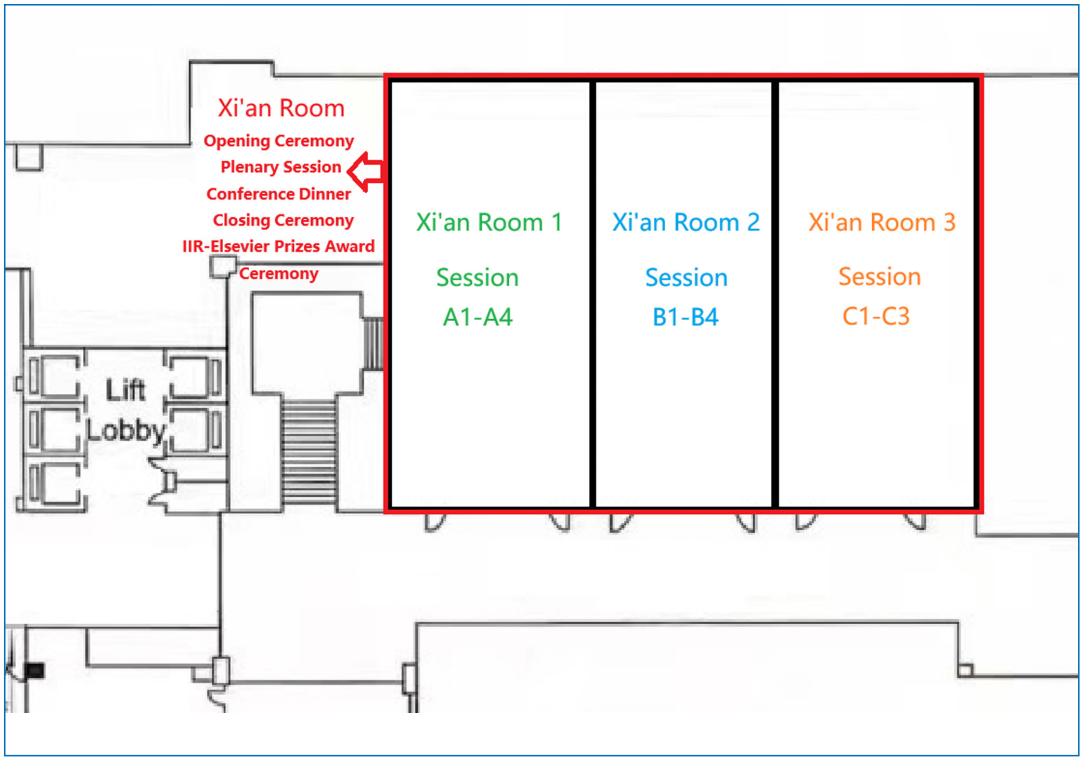
Venue & Accommodation

Shangri-La Hotel, Xi'an
西安香格里拉大酒店
Address: 38B Keji Road, Yanta District, Xi'an, Shanxi, China
陕西省西安市高新区科技路38号乙
Phone: (86 29) 8875 8888
电话: (86 29) 8875 8888

Regular King Room: CNY600
Regular Twin Room: CNY600

http://pcm2026.car.org.cn

Floor Plan



2nd Floor

Programme

09/16 Wednesday

14:00-21:00	**Registration**	Hotel Lobby (1st Floor)
18:00-21:00	**Welcome Reception**	Yicafe (1st Floor)

09/17 Thursday

08:30-09:00	**Opening Ceremony** Xi'an Room (2nd Floor)		
09:00-10:00	**Plenary Session** Xi'an Room (2nd Floor) Chair: Assoc.Prof. Baolong Wang, Tsinghua University		
09:00-09:30	**Plenary Lecture 1** **Thermal Energy Storage for Clean Cooling - Challenges & Recent Progress** Prof. Yulong Ding, University of Birmingham		
09:30-10:00	**Plenary Lecture 2** **Efficient heating by solar coupled heat pump with phase change heat storage** Prof. Xuejun Zhang, Zhejiang University		
10:00-10:30	**Coffee Break**		
10:30-12:30	**Session A1** Energy storage and savings (I) Xi'an Room 1 (2nd Floor)	**Session B1** Thermophysical properties of PCMs and slurries (I) Xi'an Room 2 (2nd Floor)	**Session C1** Industrial and building applications of PCMs and slurries (I) Xi'an Room 3 (2nd Floor)
12:30-13:30	**Lunch** Yicafe(1st Floor)		
13:30-15:30	**Session A2** Energy storage and savings (II) Xi'an Room 1 (2nd Floor)	**Session B2** Thermophysical properties of PCMs and slurries (II) Xi'an Room 2 (2nd Floor)	**Session C2** Industrial and building applications of PCMs and slurries (II) Xi'an Room 3 (2nd Floor)

15:30-16:00	**Coffee Break**		
16:00-17:30	**Session A3** Transport phenomena of PCMs and slurries: mass, momentum and heat transfer (I) Xi'an Room 1 (2nd Floor)	**Session B3** Numerical and experimental methods dedicated to PCMs and slurries (I) Xi'an Room 2 (2nd Floor)	**Session C3** Industrial and building applications of PCMs and slurries (III) Xi'an Room 3 (2nd Floor)
18:30-20:30	**Conference Dinner**		Xi'an Room (2nd Floor)

09/18 Friday

08:30-10:00	**Session A4** Transport phenomena of PCMs and slurries: mass, momentum and heat transfer (II) Xi'an Room 1 (2nd Floor)	**Session B4** Numerical and experimental methods dedicated to PCMs and slurries (II) Xi'an Room 2 (2nd Floor)	
10:00-10:30	**Coffee Break**		
10:30-12:00	**Plenary Session** Xi'an Room (2nd Floor) Chair: Prof. Xuejun Zhang, Zhejiang University		
10:30-11:00	**Plenary Lecture 3** **The Role of Latent Thermal Energy Storage in the Decarbonization: from Lab to Market** Assoc. Prof. Simone Mancin, University of Padova		
11:00-11:30	**Plenary Lecture 4** **Prospects for the development of thermal energy storage with ice slurry adapting to new electricity system** Prof. Xianting Li, Tsinghua University		
11:30-12:00	**Plenary Lecture 5** **Thermal Energy Storage: Highly-efficient Mechanisms and Dynamic Regulation Methods** Prof. Ming-Jia Li, Beijing Institute of Technology		
12:00-12:30	**Closing Ceremony** Xi'an Room (2nd Floor) **IIR-Elsevier Prizes Award Ceremony**		

12:30-13:30	**Lunch**
14:00-17:00	**Technical Tour** National Innovation Platform (Center) for Industry-Education Integration of Energy Storage Technology (14:00 Gather in the Hotel Lobby)

09/17 Thursday

Xi'an Room 1 (2nd Floor)

Session A1: Energy storage and savings (I) Chair: Assoc. Prof. Baolong Wang, Tsinghua University	
10:30-10:45	**Supercooling Characteristics of Sodium Thiosulfate Hydrates (034)** Takeru Iijima, Aoyama Gakuin University
10:45-11:00	**Ice Slurry Storage AC Systems for Interruptible Load Ancillary Services and Price Arbitrage: Energy Allocation (133)** Assoc. Prof. Baolong Wang, Tsinghua University
11:00-11:15	**Two-Dimensional CFD Modeling and Experimental Validation of a Phase Change Slurry Thermal Energy Storage System (047)** Dario Groppi, University of Pisa
11:15-11:30	**Optimizing building solar hybrid combined cooling, heating and power systems: Inverse problem method with an illustrative example (062)** Yue Xie, Tsinghua university
11:30-11:45	**Research on Robust and opportunity model based on IGDT of integrated energy system with ice storage system (069)** Xiaoyan Huang, Guangzhou Institute of Energy Conversion, Chinese Academy of Sciences
11:45-12:00	**Multi-Objective Optimization for Sizing Pv-Integrated Heat Pump with PCM Storage: A Comparative Climate Study (043)** Liying Zhao, University of Padova
12:00-12:15	**Heat and Mass Transfer Characteristics in Bubbling Absorption Process of Nozzle-type Lithium Bromide Absorber (160)** Zihao Ma, Beijing University of Civil Engineering and Architecture

09/17 Thursday

Xi'an Room 2 (2nd Floor)

Session B1: Thermophysical properties of PCMs and slurries (I) Chair: Prof. Xuelai Zhang, Shanghai Maritime University	
10:30-10:45	**The Effect of Inorganic Salt Additives on Supercooling Alleviation and Vacuum Flash Ice-Making Performance of Aqueous Solutions (068)** Yanfeng Zhang, Shanghai Maritime University
10:45-11:00	**Beyond Physical Segregation: the Overlooked Role of Hydrolysis in Salt Hydrate Phase-Change Materials (027)** Davide Toniolo, Lucerne University of Applied Sciences and Arts (HSLU)
11:00-11:15	**Crystallization Characteristics of Sugar Alcohol Particles Precipitated from Aqueous Solutions (057)** Asst. Prof. Takashi Morimoto, Aoyama Gakuin University
11:15-11:30	**A Conductivity-Based Measurement Method for Ice Packing Factor in Supercooled Ice Slurry Using Thermodynamic-Law Corrections (086)** Yuxin Fang, Dalian University of Technology
11:30-11:45	**Experimental Study on the Freeze-Drying Characteristics of Dimethyl Sulfoxide Solution (097)** Xu Nie, University of Shanghai for Science and Technology
11:45-12:00	**Synergistic Regulation of Dispersion Stability and Thermophysical Properties of Functionalized MWCNTs/CuO Hybrid Water-Based Nanofluid Phase Change Materials by Hybrid Surfactants (127)** Xinxin Guang, Tianjin University of Commerce

09/17 Thursday

Xi'an Room 3 (2nd Floor)

Session C1: Industrial and building applications of PCMs and slurries (I) Chair: Laurence Fournaison, Senior Researcher, INRAE, FRISE	
10:30-10:45	**Investigation of the Hygrothermal and Energy Performance of Passive Temperature-Humidity Regulation Walls in Various Climate Zones (037)** Assoc. Prof. Dongxia Wu, Tianjin University of Commerce
10:45-11:00	**Vacuum freezing of phase change materials in cold thermal energy storage-aided transport container for food products(016)** Jakub Chrobak, Silesian University of Technology
11:00-11:15	**Phase change energy storage by H2O--Dynamic Ice-Slurry Unit** Lu Wei, Senior Engineer/vice general manager, YANTAI MOON Energy-saving Technology Co. Ltd.
11:15-11:30	**Comparative Analysis of Three Ice Slurry Production Methods for Thermal Energy Storage Enabling Dispatchability in Industrial Cooling Demands (064)** Ignacio Gurruchaga Garcia, Thermal Systems and Modelling Team Leader, OST Eastern Switzerland University of Applied Sciences
11:30-11:45	**Experimental study on Performance and Stability Analysis of Seawater-Source Ice Slurry Heat Pump System (071)** Zhenjing Wu, Tianjin Chengjian University
11:45-12:00	**Thermal Conductivity and Phase Change Stability Enhanced Sodium Acetate Trihydrate-Based Composite Phase Change Material for Lithium-Ion Battery Thermal Management (158)** Zihao Qu, Harbin Institute of Technology

09/17 Thursday

Xi'an Room 1 (2nd Floor)

Session A2: Energy storage and savings (II) Chair: Dr. Sunil Lonkar, Technology Innovation Institute	
13:30-13:45	**Direct-Contact Phase Change Cold Storage: System Analysis and Perspectives (036)** Assoc. Prof. Dongxia Wu, Tianjin University of Commerce
13:45-14:00	**Engineering Advanced Phase Change Materials for Sustainable Thermal Energy Storage and Cooling Applications (154)** Dr. Sunil Lonkar, Technology Innovation Institute
14:00-14:15	**Optimal design of key water temperatures for a novel supercooled water ice slurry cold storage air conditioning system (075)** Xiaoqian Ma, Tsinghua University
14:15-14:30	**Investigation of a Multi-Temperature PCM Thermal Energy Storage System Coupled with a Carbon Dioxide Dual-Source Heat Pump (032)** Mohammad Mozafarivanani, University of Padova
14:30-14:45	**Preparation and Thermal Properties of Shape-Stabilized Phase Change Thermal Storage Materials with Mesoporous Confinement(134)** Dai Zhiqian, Guangdong University of Technology
14:45-15:00	**Power-Density-Oriented Design of a Plate-Fin Latent Thermal Energy Storage Unit Driven by Two-Phase Working Fluids (137)** Guangdi Liu, Xi'an Jiaotong University
15:00-15:15	**Experimental Study on the Performance of a Fresh Air Preheating System Coupled with Natural Cold Storage (130)** Zhengfei Zhang, School of Civil Engineering, Chongqing University

09/17 Thursday

Xi'an Room 2 (2nd Floor)

Session B2: Thermophysical properties of PCMs and slurries (II) Chair: Prof. Bin Liu, Tianjin University of Commerce	
13:30-13:45	**Influence of Filler Dimension in Enhancing the Thermal Conductivity of Paraffin Phase Change Material (011)** Dawei Xu, The Hong Kong Polytechnic University
13:45-14:00	**Rheological Characterization of Hexadecane-in-Water Pickering Emulsions Stabilized by Cellulose Nanocrystals and AOT (015)** Pascal Clain, De Vinci Research Centre
14:00-14:15	**Thermal and Corrosion Performance of Low-Melting-Point Nitrate/Nitrite Molten-Salt Phase Change Materials via Synergistic Substitution of LiNO3 with NaNO2-Ca(NO3)2 (140)** Shijie Wang, Tianjin Key Laboratory of Refrigeration Technology, Tianjin University of Commerce
14:15-14:30	**Nuclear magnetic resonance (NMR) for the quantification of state-of-charge and porous confinement dynamics of phase change materials (017)** Claudiu Savulescu, Eindhoven University of Technology
14:30-14:45	**Experimental Study of Flow Supercooling Characteristics of KCl-H_2O Eutectic Solution for Low-Temperature Ice Slurry Production (129)** Chao Zhou, Southeast University
14:45-15:00	**Research on Thermal Properties of Novel Nano-PCMs and Their Applications (147)** Hancong Jin, Tianjin Key Laboratory of Refrigeration Technology, Tianjin University of Commerce

09/17 Thursday

Xi'an Room 3 (2nd Floor)

Session C2: Industrial and building applications of PCMs and slurries (II) Chair: Ignacio Gurruchaga Garcia, Thermal Systems and Modelling Team Leader, OST Eastern Switzerland University of Applied Sciences	
13:30-13:45	**On the Effects of the Heat Transfer Surfaces on Latent Thermal Energy Storage for Domestic Hot Water Applications (049)** Dario Guarda, University of Padova
13:45-14:00	**Performance Enhancement of Ground Source Heat Pump Systems Using Phase Change Material Emulsion in Buried Pipe Heat Exchangers (055)** Luyang Qiu, Xi'an University of Architecture and Technology
14:00-14:15	**Bilayer Epoxy-Based Solid–Solid Phase Change Composites with High Thermal Conductivity and Flame Retardancy for Lithium-Ion Battery Thermal Management (157)** Gelin Jiang, Harbin Institute of Technology
14:15-14:30	**Cross-Latitude Bidirectional Phase Change Energy Storage and Intelligent Thermal Management Systems for Polar Ships (138)** Yiming WANG, Shanghai Maritime University
14:30-14:45	**Preparation and Thermal Performance Optimization of Novel Hydrated Salt Composite Phase Change Materials for Solar Heating Systems (126)** Jiawen Zhu, Tianjin University

09/17 Thursday

Xi'an Room 1 (2nd Floor)

Session A3: Transport phenomena of PCMs and slurries: mass, momentum and heat transfer (I) Chair: Associate Prof. Du Shen, Xi'an Jiaotong University	
16:00-16:15	**Study on the Rapid Preparation and Phase Change Characteristics of Clear Ice under Shear Flow Fields (151)** Zekang Zhen, Beijing Institute of Technology
16:15-16:30	**Ice adhesion characterization using icephobic biomimetic surfaces to overcome reliance on scraper systems in secondary refrigeration (013)** Safa Mohamed Ismail, Université Paris-Saclay
16:30-16:45	**Effect of Solute Concentration and Type on the Flow Characteristics of Ice Slurry in a Horizontal Circular Pipe (035)** Takumi Ishigaki, Aoyama Gakuin University
16:45-17:00	**Magnetic Field Regulated Ice Slurry Formation in Fe_3O_4 Nanofluids (150)** Ziyan Wang, Beijing University of Civil Engineering and Architecture
17:00-17:15	**Study on Distribution Characteristics and Regulation of Trapped Air Bubbles in Two-Dimensional Droplets (108)** Runmiao Gao, Beijing Institute of Technology

09/17 Thursday

Xi'an Room 2 (2nd Floor)

Session B3: Numerical and experimental methods dedicated to PCMs and slurries (I) Chair: Asst. Prof. Marco Azzolin, University of Padova	
16:00-16:15	**Experimental Investigation of a Fluid Ice-Making System with PLC-Based Control (149)** Prof. Feibo Wang, Linyi University
16:15-16:30	**Visualization of Phase Change Front in a Fin-and-Tube LTES: a Combined Infrared, Optical, and Temperature Sensor Approach (058)** Asst. Prof. Marco Azzolin, University of Padova
16:30-16:45	**Study on the Effective Energy Storage Advantage of Shell-and-Tube Latent Heat Thermal Energy Storage Systems over Conventional Water Tanks under Fixed-Volume Constraint (041)** Yuning Huang, The Hong Kong Polytechnic University
16:45-17:00	**Numerical Modelling Framework for Ice Slurry Generation via the Supercooling Method (056)** Ignacio Gurruchaga Garcia, OST Eastern Switzerland University of Applied Sciences
17:00-17:15	**Analysis of Influencing Factors on Melting Time of Tiny Ice Crystals in Flowing Water (073)** Jiangyue Guo, Tsinghua University

09/17 Thursday

Xi'an Room 3 (2nd Floor)

Session C3: Industrial and building applications of PCMs and slurries (III) Chair: Assoc. Prof. Jihong Wang, Dalian University of Technology	
16:00-16:15	**Preparation and Performance of Bone Glue-Based Composite Phase Change Materials for Low-Temperature Storage (144)** Anping Chen, Shanghai Polytechnic University
16:15-16:30	**A novel biomass wood fiber-based shaped phase change material for building envelopes (039)** Pengfei Zhang, University of Shanghai for Science and Technology
16:30-16:45	**Assessment of Cleaning Efficacy for Ice Slurry Pigging in Water Supply Pipelines (120)** Assoc. Prof. Jihong Wang, Dalian University of Technology
16:45-17:00	**Eutectic Design and Performance Enhancement of Sugar Alcohol-Based Composite Phase-Change Materials for Lithium-Ion Battery Thermal Management (159)** Yi Yuan, Harbin Institute of Technology

09/18 Friday

Xi'an Room 1 (2nd Floor)

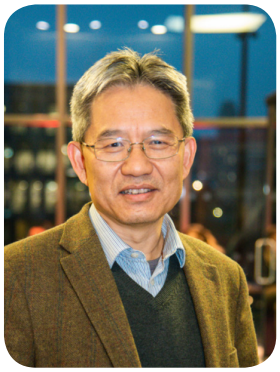
Session A4: Transport phenomena of PCMs and slurries: mass, momentum and heat transfer (II) Chair: Associate Prof. Du Shen, Xi'an Jiaotong University	
08:30-08:45	**Investigation on the Flow and Heat Transfer Enhancement Performance of Double-Sided Enhanced Tubes under Ice Storage Conditions (072)** Yu-Zhong Ding, Xi'an Jiaotong University
08:45-09:00	**Viscoelasticity and Rheological Characterization of Monopropylene Glycol-Based Ice Slurries for efficient use in secondary refrigeration (014)** Safa Mohamed Ismail, Université Paris-Saclay
09:00-09:15	**Directional Solidification of Static Juice Solutions in a Horizontal Hele-Shaw Cell (132)** AYE AYE THET, Beijing Institute of Technology
09:15-09:30	**Non-Newtonian Flow Modelling and Pressure-Drop Prediction of Ice Slurry in a Helical Tube (080)** Weijie Sun, Dalian University of Technology

09/18 Friday

Xi'an Room 2 (2nd Floor)

Session B4: Numerical and experimental methods dedicated to PCMs and slurries (II) Chair: Asst. Prof. Marco Azzolin, University of Padova	
08:30-08:45	**Fast Identification of Ice Slurry Flow Fields in Pipes via Dynamic Mode Decomposition (119)** Zhenzhe Huang, School of Infrastructure Engineering, Dalian University of Technology
08:45-09:00	**Experimental Study of Secondary Refrigeration System Using CO_2 Hydrate Slurry (006)** Laurence Fournaison, Senior Researcher, INRAE, FRISE
09:00-09:15	**Experimental Study on Different Phase Change Materials with Enhanced Fin Heat Transfer for Application in Laser Cooling (128)** Xinya Liu, Tianjin University of Commerce
09:15-09:30	**Mechanistic Studies of Water-Ice Phase Change: From Numerical Simulation to Deep Learning Mapping for Cold Energy Storage (092)** Qingyu Yang, Beijing Institute of Technology

Plenary Speakers



Prof. Yulong Ding

University of Birmingham

Title: Thermal Energy Storage for Clean Cooling - Challenges & Recent Progress

Professor Ding holds founding Chamberlain Chair of Chemical Engineering and is the founder of the University of Birmingham Centre for Energy Storage (BCES) and Birmingham Industrial Decarbonisation Taskforce (BIDT). He has published 500+ papers in peer-reviewed journals (GS H-Index >100) and filed ~100 patents, with ~50% related to energy storage. He is an inventor of liquid air energy storage technology and led the initial stage of technology developments (commercialised by Highview). He developed composite phase change materials for thermal energy storage and associated large-scale manufacturing technologies, leading to large scale commercial applications with total installations exceeding ~1000MW / ~8GWh so far. His work on passively cooled container technology has led to large scale commercial demonstration for cold chain applications. His work on perovskite-based CO_2 splitting led to the creation of PeroCycle Ltd. His work has been recognised by the election by the German Alexander von Humboldt Foundation to receive a Humboldt Research Award (2023); Institute of Refrigeration J&E Hall Gold Medal (2023), IChemE Clean Energy Medal (2021), election to Fellow of Royal Academy of Engineering (2020); IChemE Global Awards in three categories of Energy, Research Project and Outstanding Achievement (2019).



Prof. Xuejun Zhang

Zhejiang University

Title: Efficient heating by solar coupled heat pump with phase change heat storage

Dr. Professor Xuejun Zhang is Director of the Institute of Refrigeration and Cryogenics of Zhejiang University. His current research interests focus on energy recovery, utilization and control in HVAC systems, mainly including thermal-moisture decoupling theory, energy storage AC system, dehumidification AC system, air separation and purification technology, and cultural relic's environment control technology etc. In recent years, he has obtained 50 authorized Chinese invention patents, and published over 100 SCI papers, and by the leading research achievement named "Research and application of the control technology of museum thermal-moisture environment", he won the second prize of the Zhejiang Province Science and Technology Award.

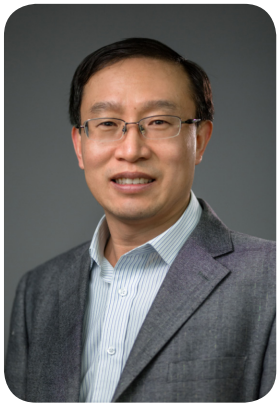


Assoc. Prof. Simone Mancin

University of Padova

Title: The Role of Latent Thermal Energy Storage in the Decarbonization: from Lab to Market

Assoc. Prof. Simone Mancin is an Associate Professor of Thermodynamics and Heat Transfer and the Director of the Thermal Energy Innovation research group (www.teiresearch.com) at the University of Padova, Italy. He is also member of the Centre for Energy Efficient and Sustainable Technologies of Brunel University London. His research mainly focuses on single- and two- phase heat transfer in enhanced solutions for air conditioning and refrigeration, waste thermal energy management, electronics cooling; Phase Change Materials (PCMs) and Thermochemical Material (TCM) for advanced latent thermal energy storages, and additive manufacturing for Thermal Science. He is the author or co-author of about 250 papers, most published in the international scientific journals. He is associate editor of HEDH, Thermal Science and Engineering Progress, Journal of Energy Storage, Part C: Journal of Mechanical Engineering Science, Heat Transfer Research and he is member of the Editorial Board of International Journal of Thermofluids and Energies.



Prof. Xianting Li

Tsinghua University

Title: Prospects for the development of thermal energy storage with ice slurry adapting to new electricity system

Prof. Xianting Li got his PhD and started his career in Tsinghua University in 1995. He is now a full professor at Dept. of Building Science, School of Architecture, Tsinghua University (Beijing, China), and Head of Dept. of Building Science. He also serves as the President of Section E, International Institute of Refrigeration (IIR), Vice-President of Chinese Association of Refrigeration (CAR); editorial board member of Energy and Buildings, Indoor and Built Environment, Journal of Building Engineering, International Journal of Ventilation etc.; a fellow of International Society of Indoor Air Quality and Climate (ISIAQ) and fellow of International Building Performance Simulation Association (IBPSA).

His research interests include demand-oriented non-uniform indoor environment, high temperature cooling and low temperature heating, air conditioning with natural energies and thermal energy storage, energy-efficient air handling unit and heat pump systems. He has published 10+ books or chapters in book, 260+ journal papers in English, 100+ journal papers in Chinese, 60+ conference papers in English, 100+ Chinese patents.



Prof. Ming-Jia Li

Beijing Institute of Technology

Title: Thermal Energy Storage: Highly-efficient Mechanisms and Dynamic Regulation Methods

Professor Ming-Jia Li is a tenured professor and vice dean of the School of Mechanical Engineering in Beijing Institute of Technology. She is deputy director of Non-silicon Micro-nano Manufacturing Key Laboratory of the Ministry of Industry and Information Technology. She has been selected for the National High-Level Talent Program, appointed as a Ministry of Education Changjiang Distinguished Professor, and serves as a core member of the MOE Breakthrough Program. Her research focuses on Frontiers of Energy and Power Engineering, Energy Storage and Development & Utilization of New Energy. As a Chief Scientist, she hosted national research programs including the Key Basic Research Projects of the Science and Technology Commission of China and the National Key R&D Program of China. She also served as the principal investigator for multiple projects. Over 100 SCI papers are published as the first/corresponding author in world-renowned journals. Among these, 14 papers are ranked as ESI Top 1% Highly Cited Papers, and 12 papers are selected as Research Fronts in the ESI database. She holds an H-index of 59 with over 11,000 citations. She consistently appears on the Elsevier Most Cited Chinese Researchers list and the World's Top 2% Scientists list. She delivered 31 plenary reports and invited keynotes at international and domestic conferences, and served as a session chair 16 times.

Honors and awards received include the Hewitt-Goldstein Young Investigator Award, Asian Young Scientist Award, National High-level Talents Program, National Outstanding Young Talents Program, First Prize of Natural Science Award of the Ministry of Education, etc.

She serves as associate editor for 2 international journals, on the editorial boards for 6 other international journals. She is the Junior Commission Member of B2 Professional Committee of Intl. Institute of Refrigeration, the director of Working Committee of New Energy Storage Technology and Comprehensive Energy System of Chinese Association of Refrigeration, and the deputy director of Youth Committee of Heat and Mass Transfer of Chinese Society of Engineering Thermophysics, among others.