Joint Technical Seminar on Passive Radiative Cooling Technology

Details:

Date: 17 August 2026
Time: 6:30pm (Registration)
6:45pm – 8:00pm

Venue: HKIE Headquarters, Chan Yat Mei Sophie Room, 9/F Island Beverley, Causeway Bay, Hong Kong

Programme Highlight:

Passive Mid-Infrared Radiative Cooling Technology: Principles, Applications and Impact

As temperatures rise and decarbonisation becomes a global priority, efficient cooling solutions are increasingly important. This presentation introduces passive mid-infrared radiative cooling, an electricity-free technology that dissipates heat through the atmospheric window (8–13 μm), achieving sub-ambient cooling without energy consumption.

Attendees will learn the science behind the technology, inspired by the Saharan silver ant and breakthrough research published in *Science*. The session will explain how i2Cool's proprietary coatings and films achieve up to 95% solar reflectivity and 95% mid-infrared emissivity, reducing surface temperatures by up to 42°C.

Real-world case studies, including the Dubai Mall project in the UAE and a 10,000 m² factory rooftop installation for Crystal International Group in China, will demonstrate practical applications, energy-saving performance, and verification methodologies. The presentation will also highlight opportunities for deploying passive cooling solutions to support energy efficiency and decarbonisation goals across the built environment.

Beyond architecture, the presentation will explore the broad cross-industry impact of the technology, spanning power and telecommunications infrastructure, logistics and cold chain, photovoltaic systems, and industrial storage. Attendees will leave with a comprehensive understanding of how passive radiative cooling can be integrated into diverse sectors to reduce operational costs, extend equipment lifespan, and contribute meaningfully to decarbonisation goals.

Speaker:



Ivan Choi, Business Development & Investor Relations Manager, i2COOL Limited

Ivan Choi is the Business Development & Investor Relations Manager at i2COOL Limited, responsible for regional business development across the Middle East and ASEAN markets. With a background in Environmental Engineering and Science, he has contributed to major passive radiative cooling projects, including the Dubai Mall rooftop installation in the UAE and a 10,000 m² factory rooftop deployment for Crystal International Group in China. Ivan is a Forbes Greater Bay Area Distinguished Speaker and a recipient of the Rosewood Foundation Entrepreneurship Award.

Language:

English

CPD Certificate:

An electronic copy of CPD attendance certificate (1.5-hour) will be issued to the participants with over 80% attendance within one month after the seminar by email. The organizer reserves the right to disqualify and terminate those non-properly registered participants.

Registration & Enquiry:

The number of participants is limited to 60 in-person attendees. The seminar is free of charge and prior registration is required. For registration, please complete the Registration Form in the following link:

https://docs.google.com/forms/d/e/1FAIpQLSc6HNoZSBuoMBTJiGO7-DuXNRoBaMd_J87feRgnjA6aQT68WQ/viewform?usp=publish-editor

Application will be accepted on a first-come-first-served basis and priority will be given to members of ASHRAE-HKC, CIBSE-HKR and HKIE-BSD. Successful applicants will be informed by a confirmation email on or before 13 August 2026.

For any enquiries, please contact Ms. Winky CHEUNG at 2268 3144 or email at winky.cheung@arup.com.