

Calendar of Events

April 25, 2024

Webinar: Mentorship at a Glance: Networking and Opportunities at IA2024

9:00am-10:00am EDT

Join us for an informative webinar in April focusing on mentorship opportunities and networking guidance tailored to students and early career researchers attending the Indoor Air conference in July. Titled "Mentorship at a Glance: Networking and Opportunities at IA2024," this webinar will take place on Thursday, April 25, at 9:00 am US/EDT.

Organized by ISIAQ Student Representative Rita Lam, the session will feature presentations by Dr. Andrew Hoisington, Early Career Event Director of Indoor Air 2024, and Dr. Sarah Haig, Mentoring and Networking Lunch Director of Indoor Air 2024

June 10, 2024

- June 14, 2024

Fluid mechanics of buildings for energy, health, and well-being

Time TBD

The summer school is aimed at PhD students, early career researchers, and people working in industry who have an interest in buildings, indoor environments, and their impact on energy consumption, human health, and well-being. Prerequisites include some knowledge of fluid mechanics or building physics, and a hunger to learn more. Lecturers on the summer school will include Cath Noakes, Corinne Mandin, Bert Blocken, Jørn Toftum, and Henry Burridge.

July 7, 2024

- July 11, 2024

Indoor Air 2024

Honolulu, Hawaii

Indoor Air 2024 will take place July 7-11, 2024 in Honolulu, Hawaii, USA. The conference theme is Sustaining the Indoor Air Revolution: Raise Your Impact.

October 9, 2024
- October 10, 2024

AIVC Conference: Retrofitting the Building Stock: Challenges and Opportunities for Indoor Environmental Quality

Dublin, Ireland

In a world striving to achieve carbon neutrality by 2050, it is imperative to strike a balance that sustains both our environment as well as the health and comfort of the individuals inhabiting buildings. Considering that 90% of the current buildings are projected to remain in the year 2050, retrofitting the existing building stock is paramount to reaching decarbonisation goals.

From the perspective of climate goals, reducing energy use in the built environment via energy retrofit and climate neutral newly constructed buildings are critical. However, it is crucial to prioritise indoor environmental quality when reducing energy usage to meet climate targets. Well-designed and executed retrofits are needed to reduce carbon emissions while ensuring healthy indoor environments. Building retrofit professionals, energy conservation experts, ventilation system designers & installers, and indoor air quality specialists must collaborate on innovative solutions to achieve these multifaceted objectives. AIVC 2024 will serve as a multidisciplinary platform to address the emerging challenges by exchanging cutting-edge ideas, research findings, policies and industrial experiences.

The conference organisers invite contributions centred around the pivotal role of ventilation, airtight building and ductwork designs, and ventilative cooling solutions in enhancing Indoor Environmental Quality (IEQ) and overall health in existing buildings. Case studies demonstrating innovative solutions are also welcome.

The 44th AIVC conference "Retrofitting the Building Stock: Challenges and Opportunities for Indoor Environmental Quality" will be held on 9 & 10 October 2024 in Dublin, Ireland together with the 12th TightVent and the 10th venticool conferences. The conference will take place at Croke Park.

Conference Scope

In a world striving to achieve carbon neutrality by 2050, it is imperative to strike a balance that sustains both our environment as well as the health and comfort of the individuals inhabiting buildings. Considering that 90% of the current buildings are projected to remain in the year 2050, retrofitting the existing building stock is paramount to reaching decarbonization goals.

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Conference Concept

The conference will consist of parallel sessions largely devoted to:

*Smart ventilation, Indoor Air Quality and health
Building and ductwork airtightness*

Ventilative cooling – Resilient cooling

Conference topics

Smart ventilation, Indoor Air Quality and health:

Integration of ventilation in building energy retrofits

Associated health benefits of energy retrofits

Strategies to reduce exposure to outdoor and indoor air pollutants (filtration, air cleaning, source control)

Resilient approaches in IAQ management (infection control, hazardous events, etc.)

Inspection, monitoring, maintenance, reliability and durability of ventilation systems

Model based data analytics and control strategies for smart ventilation, including the role of consumer-grade IAQ sensors

Building Information Modelling (BIM), Life Cycle Assessment (LCA) and ventilation systems

Standards, policies and legislation.

Building and ductwork airtightness

Role of airtightness in building energy retrofits

Energy and IAQ impact of envelope and ductwork leakage

Innovative measurement and airtightening techniques

Compliance schemes for airtightness

Long-term performance: durability of airtightness

Ventilative cooling - Resilient cooling:

Role of ventilative and resilient cooling in building energy retrofits

Occupant IEQ perception and satisfaction

Resilient approaches to extreme heat events and climate change

Control strategies and personal comfort control

Standards, legislation and compliance tools

Conference organizers

The conference is an initiative from:

INIVE on behalf of the AIVC, TightVent, and venticool;

the University of Galway;

the Maynooth University; and

the Sustainable Energy Authority Of Ireland (SEAI)

Important dates

Abstracts Acceptance Confirmation due: April 22, 2024

Papers' or Extended Summary Submission due: July 1, 2024