

Call for abstracts for the IOR Annual Conference

The Journey Towards Net Zero Heating and Cooling, Beyond Refrigeration 2021.

Virtual Conference on 21st&22nd April 2021

Deadline for abstracts: 29th January 2021 - Deadline extended.

If you are involved in market leading innovation or initiatives that will help achieve carbon reductions in the refrigeration, air conditioning or heat pump field we are inviting you to share your achievements by presenting a paper at this conference.

Papers should report on original case studies of application of technology, research-based findings that have a practical implementation and innovative technical developments. They must contain quality research material, scientific or technical information such as quantifiable carbon savings achieved or environmental gains, and not have been published previously.

Conference Themes

Combining Heating and Cooling Demand - Heating and cooling systems have until now been specified and supplied as separate services. By integrating heating and cooling into one system, energy use could be reduced by half. The opportunities for sharing heating and cooling are not limited to one owner or site – there is vast potential for heating to be shared across site owners, buildings, and processes.

Using Energy Intelligently - To achieve net zero, we need to address the issues of where our energy comes from and how we use it. Our homes and businesses need renewable energy that is both reliable and cheap. The grid needs to be able to supply and store energy generated by intermittent renewables sources such as wind and solar to use when there is most demand.

Making use of Best Available Technology - In a rapidly developing and innovating marketplace purchasers and specifiers need reliable and authoritative guidance on what new technologies are available, as well as where and how they can be used. We need to share expert experience and knowledge to ensure technologies live up to expectations.

Reducing the Need for Mechanical Cooling - Alternatives to cooling need to be considered as a first step – passive cooling, natural ventilation – all have a critical part to play in reducing carbon emissions from cooling processes. Low Tech solutions that can avoid the use of energy also need to be made more widely available

Achieving Best System Performance - System performance in operation – not just component rating – is the critical factor for achieving high efficiency and should be incentivised. The focus needs to be on monitoring, measuring, and maintaining system efficiency over the life of the system – as well as flexibility to adjust to changing demands

Developing the Best People and Skills - Lack of skilled personnel is not just a barrier to the take up of new technology but to the effective implementation of all technologies. The UK suffers from a lack of skilled engineers and experienced RACHP technicians. A long-term industry-driven strategy is needed to recruit, upskill and invest in the future of people in our sector.

Working Together - Understanding of the challenges for our sector raised by net zero cooling is low. Lack of clear communications to ensure consumers make the best purchasing decision and lack of knowledge of specifiers are contributing factors. As experts we have a duty to work together across sectors, job roles and with policy makers to get our message across more clearly.



Abstract Submission Form.
Email the completed form to lisa@ior.org.uk

Full details can be found at <https://ior.org.uk/netzero>

Full Title	
Lead authors name	
Lead authors employer	
Lead author job title	
Lead author email address	
Names and companies of any additional authors	
Contact for correspondence if different from lead author Supply name & email	
Abstract outline:	
Keywords: a maximum of 8	
Into which theme would the paper fit. Select all that are appropriate	Combining/ Balancing Heating and Cooling Demand Using Energy Intelligently Making use of Best Available Technology. Reducing the Need for Mechanical Cooling Achieving Best System Performance Developing the Best People and Skills Working Together

The following deadlines apply:

- Closing date for abstracts 29th January 2021
- Submission of final paper if accepted 24th February 2021