

The Institute of Refrigeration Proceedings 2024-2025

Volume 121

Held multiple dates in 2024 and 2025

ISBN: 979-8-3313-3305-8

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2026) by The Institute of Refrigeration (IOR)
All rights reserved.

Printed with permission by Curran Associates, Inc. (2026)

For permission requests, please contact The Institute of Refrigeration (IOR)
at the address below.

The Institute of Refrigeration (IOR)
Kelvin House, 76 Mill Lane
Carshalton, Surrey SM5 2JR
Charitable Incorporated Organisation 1166869

Phone: +44 (0) 20 8647 7033

www.ior.org.uk

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

The Institute of Refrigeration

PROCEEDINGS

Volume 121

2024-25

CONTENTS

<i>Presidential Address on Digitalisation and Artificial Intelligence - Shaping the Future of Heating and Cooling</i> Lisa-Jayne Cook FInstR.....	1
<i>Thermomechanical Energy Conversion and Storage for Cooling and Heating Decarbonisation: A Thirty-Year Journey of Technology Development</i> Professor Yulong Ding.....	19
<i>Energy Usage in the Industrial Refrigeration Sector: Food, Drink, Chemical and Pharmaceutical Refrigeration</i> Dermot Cotter FInstR and Catarina Marques FInstR	31
<i>The Circular Economy in the Refrigeration Sector</i> James Warbuton	51
<i>PED - Is Uk Compliance Under Pressure?</i> David Paget FInstR and Simon Emeny FIMechE	65
<i>Reducing energy consumption and greenhouse gas emissions from the European retail sector</i> Elias Eid, Alan Foster MInstR, Graciela Alvarez and Judith Evans FInstR	75