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UNIVERSITY OF LONDON
— EST 1894 —

**Institution of
MECHANICAL
ENGINEERS**

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REFRIGERATION AIR CONDITIONING HEAT PUMPS



machines
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MTA
The Manufacturing Technologies
Association

bcas
BRITISH COMPRESSED AIR SOCIETY

13th International Conference on Compressors and their Systems

11th – 13th September 2023
City, University of London



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The 13th International Conference on Compressors and their System will be held at City, University of London between 11th and 13th September 2023.

This conference provides a forum where developments in air, gas and refrigeration compressors, vacuum pumps, expanders, related systems and components will be discussed. The program will contain keynote addresses, high quality research and technical papers, podium presentations, industry sessions with topics of high importance as well as forums and informal discussions. We, invite industrial leaders to propose topics they would like to present.

Conference theme. Compressors and Expanders in Future Energy Systems

Conference scope. Papers are invited on a wide range of topics on compressors, expanders, pumps, and their systems including, but not limited to:

- Safety and Environmental Impact
- Energy Efficiency and Carbon Footprint
- Heating and cooling demand integration
- Efforts towards Net Zero emission
- Sustainable power and heat
- System Integration and Behaviour
- Technology Developments
- Numerical and experimental modelling, analysis, and testing
- Design and Manufacture
- Novel applications
- Operation, Maintenance and Reliability
- Education and Professional Development.

Conference chairman: Professor Ahmed Kovacevic

Who should attend? Manufacturers and designers of compressors, expanders, their systems and control systems, suppliers, end users, researchers and research organisations, academics, educational institutions.

Call for papers. All papers will be written and presented in English and will not have been presented or published at previous events. Authors are required to attend the conference to present their work.

27th November 2022 – Abstract submission deadline of not more than 250 words

19th February 2023 – Selected authors to submit draft paper of up to 4,000 words

14th May 2023 – Draft paper refereed and final paper submitted

Authors are invited to submit their abstracts and papers using CONFTOOL via the Conference website <https://citycompressorsconference.london/>

6th forum/short course: Computational Fluid Dynamics in Rotary Positive Displacement Machines 9th – 10th September 2023

Since 2013, City, University of London has organised very successful forums/short courses on CFD in Positive Displacement (PD) machines. These typically contain a strong input from the compressor industry, CFD software providers and academia. Our sixth event in the series is dedicated to new methods and advanced topics such as:

- Advances in grid generation, CFD tools, Open source CFD solvers and new techniques for PD machine analysis.
- Applicability of new methods such as Machine Learning, Artificial Intelligence, Lattice Boltzmann Methods, Smoothed particle hydrodynamics, Mesh free algorithms and Digital Twins.
- Modelling leakage flows, conjugate heat transfer, stability, and accuracy of Multiphase flow calculations.
- Advances in chamber modelling, FSI applications and hybrid 1D – 3D CFD coupled approaches.
- Experimental techniques for analysis of PD machines.

The short course/forum will bring benefits to specialists from industry, students, researchers, and anyone who is interested in the modelling and design of rotary positive displacement machines. Organised by the Centre for Compressor Technology, it will be held at the Northampton Square site of City, University of London on 9th and 10th September 2023.



Find out more
citycompressorsconference.london



Email for conference
and short course
compressors@city.ac.uk



Email for registration
and payment
events@city.ac.uk



Telephone enquiries
+44 (0) 20 7040 8037