



CITY
UNIVERSITY OF LONDON
— EST 1894 —



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
- 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 Machines (PDM). 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 in the application of chamber models, 3D CFD and experimental techniques in PDM such as:

- Advances in grid generation, CFD tools, Open source CFD solvers and new techniques for PD machine analysis.
- Applicability of new CFD and Numerical 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 PDM.

Participants from industry and academia are invited to present results of their research and analysis in the forum. To aid the research further; the forum will provide test results of dry air and oil injected twin screw compressors, a roots-blower, a dry air single screw expander and an ORC vane expander data for benchmark studies.

This short course/forum will bring benefits to engineers, engineering managers and specialists from industry, students, researchers and educators from academia and anyone who is interested in the modelling and design of rotary positive displacement machines. It will be presented by leading scientists and researchers from industry and academia and will give an insight into new technologies and the state of the art in the modelling of PDM.

The Forum/Short Course is organised by the Centre for Compressor Technology and will be held at the Northampton Square site of City, University of London on 9th and 10th September 2023.



Find out more
[www.city.ac.uk/
compressorsconference](http://www.city.ac.uk/compressorsconference)



Email for conference
and short course



Email for registration
and payment



Telephone enquiries
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