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FOREWORD

The 9th International Conference on Compressors and their Systems will be held at the City University London from 5th to 9th September 2015, and as its Chairman, for the first time this year, it is my pleasure, to welcome you.

Due to major ongoing reconstruction work in the university main buildings, we have moved all the public sessions to the beautiful Mermaid Conference Centre, in the heart of London. However, despite restricted facilities, the conference reception on Sunday the 6th September and the short course will be held at the main site of the university.

This series of conferences started in 1999 organised by the Fluid Machinery Group of the Institution of Mechanical Engineers (IMechE) but since 2009 it has been managed by City University London in conjunction with the IMechE and the Institute of Refrigeration, both of which have been very proactive in promoting it. The Organising committee is grateful for their support and continued encouragement. This partnership between our three organisations helps the conference to continually grow.

This year, after rigorous reviewing, we have accepted 85 technical papers for presentation, the highest number in the conference history. In addition, in this book, you will find abstracts of the 2 keynote presentations, 6 Industry presentations and 12 presentations for the Short course on CFD in positive displacement machines. On behalf of the organising committee I would like to thank all our reviewers listed on the pages below for their hard work and for providing the assistance in the difficult process of selecting interesting and high standard papers for the conference.

With the extended number of papers and following on your feedback from the last conference, this year we have introduced three parallel sessions for the main two technical days in order to avoid the less popular poster presentations.

In addition we have introduced a 3rd day, specifically for Industry, to consider business and market influences on compressor design and manufacture, including the impact of new technologies and changes in economic, environmental and regulatory conditions. Senior representatives from industry will speak about how their companies are addressing such strategic issues. This will be an additional opportunity for networking and discussion. Separate meeting rooms will be available on this day. Discussion forums will follow the presentations, and we expect that these will generate interest in further contacts and exchanges.

I would like to extend my special thanks to our main sponsors, Holroyd PTG, Howden and Kapp Niels for their continuing support for the conference. With their generous contributions we have managed to keep the conference fees at the same level as in 2013, despite extending it to 3 days and holding it outside the University.

Let me also draw your attention to the 2nd Short course/forum on Computational Fluid Dynamics in rotating positive displacement machines. This event follows the very successful 1st Short Course/Forum held at the last conference in 2013 and will concentrate on the analysis of leakage and multiphase flows. An international team of experts will be giving a series of lectures on a wide

range of uses for this form of analysis and I hope that as many of you as possible will have taken advantage of this event, while coming for the conference itself.

The welcome reception on Sunday the 6th September 2015 will be dedicated to the celebration of the 20th anniversary of the Centre for Positive Displacement Compressors Technology which was formed at City University in 1995 with support from the Royal Academy of Engineering and Holroyd, its main aim being to assist British manufacturers of screw compressors. The Centre has since made a significant impact on the screw compressor world, far beyond the British Isles and continues to grow in supporting the screw machine industry. Recently renamed the Centre for Compressors Technology its aim has been extended to help promote the development of all types of compressors and expanders. I would be pleased to see as many of you as possible, attending this event, where I can greet each of you and where informal and personal contacts are most easily made.

On this occasion, I must thank all those who have helped to make this event happen. Special thanks go to Louise Gordon, Emma Leaver and Sham Rane who did most of the organisation work and to all members of the organising committee and the international liaison committee. Also, I would like to commend Dr Kristina Soldatova who joined the International liaison committee two years ago and who took trouble to translate our flyers and other promoting materials and include them in Russian journals. This brought a large number of papers and participants to the Conference from that part of the world.

Please do not forget to complete your assessment of the conference before leaving, and indicate how you think it can be improved next time. All the members of the Conference Committee hope that you find the event to be both worthwhile and enjoyable and we look forward to welcoming you to City University London.

Professor Ahmed Kovacevic

Conference Chairman

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