

14th International Conference on Pressure Surges Eindhoven, The Netherlands; 12th - 14th April 2023

Pressure Surges

Pressure Surges, Fluid Transients and Water Hammer all refer to potentially dangerous pressure fluctuations in pipes containing liquids. Developments in this field are driven by incidents and accidents such as those reported in a wide range of industrial systems: from 6 mm titanium tubes carrying hydrazine in satellites to 4 m concrete pipes conveying water in manmade rivers. Application areas range from mining to aerospace and from physiology to nuclear power. Positive use of the phenomenon is also possible: in hydraulic ram pumps, in industrial cleaning processes, in non-intrusive blockage and leakage detection, and in everybody's circulation of blood.

The Pressure Surges conference series has been running since 1972, with forerunners in 1971 and 1970, and it continues to bring together practical engineers and theoretical academics, young and old, inexperienced and specialist, from all over the world. It is the leading conference in the area and the proceedings are proven books of reference for anyone interested in the subject.

The 14th conference will embrace both traditional and novel subjects, as listed below. Industrial papers will present case studies, each telling its own story. Research papers will give updates on the latest developments in modelling, simulating and validating pressure surges. Dedicated Forum papers will stimulate audience interaction with presenters and will complement other discussion and debate sessions dedicated to interactive participation.

One focus of this 14th conference is on Control Systems and their effect on transients plus the effect of potential transients on their design and implementation.

- Are control systems too complex and should we aim to simplify them?
- Is there benefit in surge specialists engaging with their Instrumentation, Control and Automation (ICA) counterparts?
- Can appropriate control systems eliminate the need for conventional surge protection?
- Can artificial intelligence and machine learning be applied to control system design

Renowned specialists have been invited to lead special sessions dedicated to these contemporary themes.

Who should attend?

Everyone who owns, constructs, designs, analyses, researches into or manufactures equipment for pipe systems needs to appreciate the possible consequences of pressure surges for them and would therefore benefit from participation in the conference.

Worldwide participants include:

- Owners / Operators
- Contractors / Managers
- Designers / Consultants
- Manufacturers / Regulators
- Software developers / Hardware implementers
- Research Institutes / Government
- Universities / Students