



Invitation

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1st International Conference on
Computational Method in
Fluid Power Technology

Methods for solving practical
problems in Design and Control

26 - 28 November 2003
Melbourne Australia

Invitation The purpose of the 1st International Conference on Computational Method in Fluid Power Technology is to provide delegates with practical knowledge and solutions for the effective analysis, design and control of fluid power systems.

This conference is the first forum for those using computer based methods for solving practical engineering problems in design and control of fluid power. The presenters are currently developing and implementing these software solutions in the Asian, US, Europe and other markets.

The organiser is Fluid Power Net International (FPNI) - an organisation which promotes information and technology transfer for the fluid power industry worldwide. FPNI has national networks in over 23 countries that bring together companies, laboratories, universities and industry associations.

Melbourne is a beautiful city that offers unique sightseeing opportunities with world class cuisine and entertainment. An interesting social programme will be arranged for partners and those wishing to remain after the conference.

We look forward to seeing you in Melbourne in November 2003.



Jacek Stecki

Chairman of the Organising Committee

1st International Conference on Computational Method in Fluid Power Technology

Methods for solving practical problems in Design and Control

The Conference will showcase the latest software based tools, methods and techniques being used and developed for analysis, design and control of complex engineering systems – particularly fluid power based systems.

An important criteria in determining presenters has been their expertise in the use and development of advanced computer based methods applied to solving current practical issues.

Attendees will see current international ‘best practice’ and can utilise this knowledge for solving practical problems in their own operations.

Why attend? Streamline your existing analysis, design and control processes and procedures.

Update on developing trends and opportunities provided by the latest software and techniques developed specifically for the engineering field.

Opportunity to exchange practical experiences with other delegates.

Who is presenting? The presenters represent leading international organisations that are either developing or implementing these software solutions in Asia, the US, Europe and around the world.

Over 100 abstracts were received from 27 countries.

Internationally co-sponsored by leading organisations from Europe, Asia and the US.

Who should attend?

+ Industrial and Research Engineers – particularly those working in the field of fluid power systems

Consulting Engineers – working in the field of motion control.

Software developers – particularly those focused on the engineering sector.

Managers of engineering companies and organisations.

What will be presented?

+ Modelling and simulation of fluid power systems with special emphasis on software for analysis, design and control of fluid power system, real-time simulation.

Artificial intelligence applications in fluid power field.

Computer aided method for design (CAD, FEA, CAM) optimization and manufacturing of hydraulic and pneumatic systems.

Failure analysis, condition monitoring and maintenance of fluid power components and systems.

Information technology and web-based collaborative environments for research in fluid power technology.

Computers in design and control of mechatronics and motion control systems.

Advanced visualisation/control techniques and their integration with fluid power technology, e.g virtual reality technology.

Application of modelling and simulation and other computer software in fluid power education.

Computational fluid mechanics (CFD) in application to design and analysis of fluid power components with focus on fluid mechanics and fluid-structure interactions (2 and 3 dimensional wave propagation in fluids, including fluid structure interaction), handling changing geometry in CFD codes (as is the case for instance in any valve when changing its spool position), combination of network based simulation models with CFD methods, simulation of elasto-hydrodynamic problems, coupling of FEM and CFD, thermal analysis.

Registration Details

Full registration details and information on recommended hotels are available at the Conference website: www.fluid.power.net

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Pricing

	Before August 31	After August 31
Fluid Power Members	AU\$850	AU\$950
Speakers	AU\$850	AU\$950
Delegates	AU\$1000	AU\$1200
Students	AU\$450	AU\$600

Sponsoring Organisations

British Fluid Power Association (BFPA)
 Fluid Power Education Foundation (FPEF)
 Danish Mechatronics Association
 The Fluid Transmission and Control Institution, Chinese Mechanical Engineering Society
 Hydraulic Control and Power Section of Polish Society of Engineers and Technicians (SIMP) [Pol]
 Hydraulika i Pneumatika [Pol]
 The Japan Fluid Power System Society
 The International Journal of Fluid Power
 US National Fluid Power Association (NFPA)
 US Fluid Power Society (FPS)
 The Society of Automotive Engineers (SAE)
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