

Call for Papers 14.iFK

14th International Fluid Power Conference

Fluid Power: Sustainable Productivity

March 19 - 21, 2024 in Dresden



CRITERIA & INFORMATION

The conference topics act as suggestions for your paper. Unusual contributions are explicitly welcome! Authors interested in contributing a paper to the conference are requested to submit an abstract of the article in English language as pdf-file latest by **June 18, 2023**. The abstract shall clearly depict the technical innovation as well as the main results. Please use the template available at www.ifk-dresden.de. We expect abstracts with a length of 300 words.

After the selection of abstracts, authors will have the option to have a review of their paper. Papers will be accepted and published after successfully passing the evaluation or review process. The contributions are published in compliance with the Open Access guidelines. For further information please visit the conference website. Authors have to pay participation fee for the conference.

KEY DATES

Submission of Abstract	June 18, 2023
Notification of Acceptance	End of August, 2023
Submission of Full Papers	
> with Review	October 15, 2023
> without Review	January 14, 2024
Conference	March 19 -21, 2024

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INVITATION

The 14th International Fluid Power Conference (IFK) will be held in Dresden on March 19-21, 2024. The IFK is one of the world's most significant scientific conferences on fluid power control technology and systems. It offers a common platform for the presentation and discussion of trends and innovations to manufacturers, users and scientists.

There are three days filled with fundamental research and methodology, new approaches in fluid power system design and latest developments in industry. It is this combination of industry and academia that makes IFK special and an interesting forum to discuss developments in fluid power. The conference is accompanied by an exhibition where the industry presents their latest products and displays the huge variety of fluid power systems.

The theme of the 14th IFK is „Fluid Power: Sustainable Productivity“. With this motto, we address the current needs of our industry to develop throughout the coming years by increasing productivity, facing new regulations and meeting soci-

al requirements. Furthermore, the digital infrastructure must be designed sustainably so that it can be operated efficiently over its entire life cycle. The conference addresses all integration stages of fluid power from components to system development and manufacturing in all sectors: Mobile, Industrial and Pneumatic.

The IFK thrives on interesting scientific contributions of high quality. We welcome and encourage you to submit your newest research and discuss your findings in front of a wide technical audience during the 14th IFK.

I look forward to seeing you in Dresden in March 2024!



Prof. Dr.-Ing. J. Weber, Director

CONFERENCE TOPICS

Energy Management

- › Regeneration & Recuperation
- › Thermal Management
- › Renewables
- › Hybrid Drives
- › Storage Concepts
- › Control Strategies

Design Process

- › Efficient Simulation
- › HiL-, SiL-, MiL-Tests
- › Realtime Simulation
- › Validation & Analysis
- › New Approaches & Methods

Digitalization, Connectivity & Communication

- › Predictive Maintenance, Diagnosis & Condition Monitoring
- › Cyber-Physical Systems
- › Data Processing & Analysis
- › New Applications & Business Models

Fluids & Tribology

- › Fluids
- › Material Compatibility & Mixture Problems
- › Environmentally Friendly Fluids
- › New Fluids & Additives
- › Materials & Seals
- › Aging & Predictive Maintenance
- › Tribology & Rheology
- › Surface Modifications: Coatings & Structures
- › Cavitation

Components

- › Pumps & Motors
- › PFAS-free components
- › Valves
- › Actuators & Sensors
- › Accumulators
- › Peripheral Devices
- › Novel Production Technologies
- › Smart Field Devices

Systems

- › Reliability & Robustness
- › Analysis & Control
- › Networks
- › Smart Integration
- › Autonomous Systems
- › Functional Safety

Mobile Applications

- › Electrification
- › Mobile Hydraulics
- › Mobile Pneumatics
- › Fuel Technologies
- › On-/Off-Highway
- › Automotive
- › Aerospace
- › Traffic
- › Maritime

Pneumatics

- › Energy Efficiency
- › Automation & Control Design
- › Smart Devices
- › Feasibility
- › New Applications

Industrial Applications

- › Oil & Gas Extraction
- › Transport & Piping
- › Machinery
- › Process Technology
- › Testing
- › Water Hydraulics

New & Special Applications

- › Medical
- › Food & Hygienics
- › Robotics
- › Inventions