



The 3rd Chinese International Turbomachinery Conference

About CITC

The 3rd Chinese International Turbomachinery Conference (CITC) is organized by Chinese Journal of Turbomachinery together with Asian Fluid Machinery Committee, China General Machinery Industry Association, Xi'an Jiaotong University, Beijing University of Chemical Technology and Dalian University of Technology (Collaborative Innovation Center of Major Machine Manufacturing). It will be held during April 12-15, 2018 in Chong Qing city, China.

CITC is the exclusive Turbomachinery conference in China, enabling extensive communication between industry and academic personal and promoting manufacturing and R&D activities. It will attract attendees from various levels such as researchers, academic professionals, engineers and customers of turbomachinery products. The conference will establish a platform for exchanging ideas and solutions, encouraging partnerships and promote future cooperation among industry and university.

Based on the Chinese background, it is focusing on both fundamental and applied topics in turbomachinery. The discussion about the cutting edge technologies, the advanced methodologies and the optimization on turbomachinery supports development of the education, basic science and technology for application in this industry. The diversified conference suits for various participators who will be engaged in invited lectures and regular oral presentations organized in keynote sessions and technical sessions, plus visiting activities.

Chong Qing is a very interesting city with beautiful landscape, abundant historical culture and delicious local food, which attracts people from China and all over the world. It is really worth a visit!

Conference Committee

Prof. Peter Childs/Imperial College London
Prof. Pietro Zunino/University of Genova, Italy
Prof. Luis San Andrés/Texas A&M University, US
Prof. Qun Zheng/Harbin Engineering University, China
Prof. Matthias Meinke/RWTH Aachen University, Germany
Prof. Mehdi Vahdati/Imperial College London
Prof. Kwang-Yong Kim/Inha University, Korea
Prof. Grant Laidlaw Ingram/Durham University
Prof. Albert C.J. Luo/Southern Illinois University
Prof. Guang Xi/Xi'an Jiao Tong University, China
Prof. Jia-zhong Zhang/Xi'an Jiaotong University, China
Xiaomo Jiang, Ph.D./GE, US

Invited Lecture

Here are some of invited lectures, to be continued
LEAP Engine Development and Integration with C919 Airplane
John Liu, LEAP-1C Program Director CFM International, GE Aviation

Gas Turbine Engine Internal and Secondary Flow Systems
Prof. Peter Childs/Imperial College London, UK

Industrials and Laboratories: 40 years of history between LMFA and Safran about unsteadiness and instabilities for compressor
Prof. Xavier Ottavy/Fluid Mechanics and Acoustics Laboratory (Ecole Centrale de Lyon), France

Advanced model predictions vs test data in tilting pad bearings for compressors
Prof. LUIS SAN ANDRÉS/Turbomachinery Laboratory Texas A&M University, US

Progress in computational aeroelasticity
Prof. Mehdi Vahdati/Imperial College London, UK

Boundary layer development and loss production in adverse pressure gradient flows
Prof. Pietro Zunino/University of Genova, Italy

High Fidelity Numerical Simulations for Gas Turbine Flows
Prof. Zhiyin Yang/University of Derby, UK

Big Data-based Smart Prediction of Damage for Turbomachinery
Xiaomo Jiang, Ph.D./GE

Stall and Surge in Compressors
Prof. Xin-qian Zheng/Tsinghua University, China

Development of a pump design software using design optimization in a range of specific speed
Prof.Kwang-Yong Kim/Inha University,Korea

Conference Sessions

The conference will be organized by committee members in several sessions following the scope. The conference programme includes an opening ceremony, invited lectures, keynote presentations and parallel technical sessions and discussions.

Here are parts of sessions, to be continued

- Gas Turbine Engine Internal Air Systems and Secondary Flow Systems
Organizer: Prof. Peter Childs/Imperial College London
- Rotor-stator Aerodynamic Interaction in Turbomachinery
- Centrifugal Compressor and Fan Aerodynamics
- Boundary Layers and Secondary Flows in Turbomachinery
Organizer: Prof. Pietro Zunino/University of Genova, Italy
- Magnetic Bearing Technology
Organizer: Prof. Su-yuan Yu/Tsinghua University
- Damage Prediction of Centrifugal Compressors
Organizer: Dr. Xiao-mo Jiang/GE
- Stability, Dynamics and Flow Control in Turbo-machinery
Organizer: Prof. Jia-zhong Zhang/Xi'an Jiaotong University
- Experiment and Measurements in Turbomachinery
- Stall and Surge in Compressor
Organizer: Prof. Xavier Ottavy/Fluid Mechanics and Acoustics Laboratory (Ecole Centrale de Lyon)
- Computational aeroelasticity of Turbomachinery
Organizer: Prof. Mehdi Vahdati/Imperial College London
- Steam Turbine
Organizer: Prof. Grant Ingram/Durham University
- Bearings and Seals for Rotordynamics of Turbomachinery
- pump
Organizer: Prof. Luis San Andrés/Turbomachinery Laboratory Texas A&M University
- Rotordynamics of Turbomachinery
Organizer: Prof. Paul Allaire/University Virginia
Prof. Adolfo Delgado/Texas A&M University

Scope

The scope of the conference is ranging from the design, theory, numerical simulation, experiments, methodology to the application of turbomachinery which cover compressors, blowers, fans, steam and gas turbines, expanders, aeroengines and pump. The scopes include all areas of turbomachinery, i.e.

I Aerodynamic design and optimization

- Numerical methods and advanced simulations
- Multidisciplinary design and optimization
- Noise and vibration

II Structural design and optimization

- Reliability analysis
 - Fatigue, fracture and life prediction
 - Rotor dynamics
 - Bearings and seals
- III Experiment and measurements
- IV Heat transfer
- V Manufacturing processes and new materials
- VI Fault diagnostics and maintenance
- VII New products and applications

Paper Submission

Submission of Papers as well as registration for the conference are directed to the website:
<http://conference.cftn.cn>

Please find the guidelines of format for the abstract and paper on the above conference website.
 Abstracts and papers should be written in English.

Important Date

Deadline of paper submission	February 28, 2018
Early-bird registration	Before March 12, 2018
Registration on site	April 12, 2018
Conference date	April 13~15, 2018

Publication of Papers

The proceedings of the conference will be published online in open access. Selected papers recommended by reviewers will be published by Springer, Journal of Applied Nonlinear Dynamics and Chinese Journal of Turbomachinery scheduled after the conference.

Sponsor

Chinese Journal of Turbomachinery
 The Chinese General Machinery Industry Association
 Aisan Fluid Machinery Comiittee
 Xi'an Jiao Tong University
 Collaborative Innovation Center of Major Machine Manufacturing in Liaoning, Dalian University of Technology
 Beijing University of Chemical Technology

Contact

Hong Wang: 86-013889842965
 Nan Li: 86-015998276938
 Office: 86-0-24-25800521/25801521
 E-mail: aurora-eos@qq.com

Conference website: <http://conference.cftn.cn>

Address: No.16A Kaifa Road, Economic & Technological Development Area, Shenyang, Liaoning, China, Zip Code: 110869