

## PROGRAMME AT A GLANCE

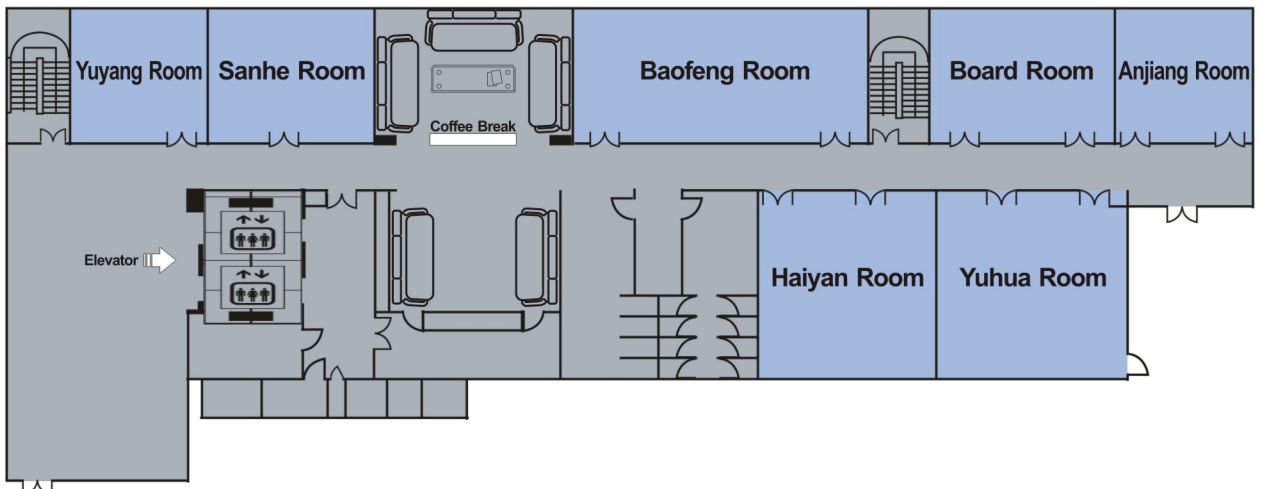
Wednesday 19th Oct	
All-Day	10:00-22:00 Registration on sit
	18:00-20:00 Dinner 1F Dian Cafe 1887

Thursday 20th Oct					
AM	08:30-08:50 Opening Ceremony Yunnan Grand Ballroom	08:50-12:00 Keynote Lecture Yunnan Grand Ballroom			
PM	13:40-18:00 Keynote Lecture Yunnan Grand Ballroom	13:40-17:30 CITA Member Technical Lecture 3F Function Room	13:40-18:20 Suspended Turbomachinery 3F Crowne Plaza Club	14:00-17:00 Mechanical Structure & Rotordynamic Sanhe Room	13:40-18:00 Heat Transfer Baofeng Room
	14:00-18:00 Aero Engine& Gas Turbine Board Room	13:40-17:00 Digital Twins Anjiang Room	13:40-18:00 Aerodynamic Design and Optimization Yuhua Haiyan Room		

Friday 21th Oct					
AM	09:00-12:00 Keynote Lecture (Academic) Yunnan Grand Ballroom 1 (West)	08:30-11:50 Keynote Lecture (Industrial) Yunnan Grand Ballroom 2+3 (East)	08:40-11:40 Mechanical Structure & Rotordynamic 3F Function Room	08:40-11:40 Bearings and Seals 3F Crowne Plaza Club	08:40-11:40 Manufacturing Process and Materials Sanhe Room
	08:40-12:00 Heat Transfer Baofeng Room	09:00-11:40 Experiment and Measurement Board Room	08:40-12:00 Aerodynamic Design and Optimization Anjiang Room	08:40-12:00 Aerodynamic Design and Optimization Yuhua Haiyan Room	
PM	13:40-17:20 Keynote Lecture (Academic) Yunnan Grand Ballroom 1 (West)	13:30-18:00 Keynote Lecture (Industrial) Yunnan Grand Ballroom 2+3 (East)	13:40-18:00 Aerodynamic Design and Optimization 3F Function Room	13:40-17:40 Bearings and Seals Sanhe Room	13:40-17:40 Heat Transfer Baofeng Room
	13:40-17:40 Aerodynamic Design and Optimization Board Room	13:40-17:40 Aerodynamic Design and Optimization Anjiang Room	13:40-17:00 Aerodynamic Design and Optimization Yuhua Haiyan Room		

Saturday 22th Oct					
AM	08:30-11:30 Keynote Lecture (Academic) Yunnan Grand Ballroom 1 (West)	08:20-12:10 Keynote Lecture (Industrial) Yunnan Grand Ballroom 2+3 (East)	08:30-11:50 Heat Transfer Baofeng Room	08:10-11:50 Aerodynamic Design and Optimization & Heat Transfer Yuhua Haiyan Room	08:30-11:50 Bearings and Seals Board Room
	09:00-12:00 Course Anjiang Room	PM 13:30-15:10 Keynote Lecture (Industrial) Yunnan Grand Ballroom 2+3 (East)	13:30-15:10 Keynote Lecture (Industrial) Yunnan Grand Ballroom 1 (West)		

## MEETING ROOMS IN THE 2ND FLOOR



<b>20th Oct,2022</b>		<b>OPENING CEREMONY</b>	
<b>Meeting Room: Yunan Grandballroom</b>			
<i>Chairperson:Shu-hua Yang</i>			
8:30-8:50	Speech delivered by:Yong Zhang, Vice president,CTO ,Shenyang Blower Works Group Corporation Guang Xi, Vice principal, Xi'an Jiaotong University Xiao-fei Ma ,Vice chief engineer,Hangzhou Steam Turbine Co.,Ltd.		
		<b>KEYNOTE LECTURES</b>	
<i>English Session</i>			
<i>Chairman:Chu-Hua Zhang</i>			
8:50-9:30	The development of sealing technology used in turbomachinery	<b>Yu- ming Wang</b> (Fellowship of the Chinese Academy of Science), Wei-feng Huang,Yong-jia Li Tsinghua University	
9:30-10:00	Coffee Break		
10:00-10:40	2022-j12D02 Full-3D optimization design method of turbomachinery based on computer 3d vision of artificial intelligence	<b>Prof.Guang Xi</b> Xi'an Jiaotong University	
10:40-11:20	2022-j12D01 A study on the turbulence-blade interaction noise reduction with the bionic configuration for axial-flow turbomachinery	<b>Prof. Wei-yang Qiao</b> Northwestern Polytechnical University	
11:20-12:00	2022-i26F17 Efficiently improving the cooling for gas turbine's hot components by surface vortex control	<b>Prof. Yu Rao</b> Shanghai Jiao Tong University	

20th Oct		KEYNOTE LECTURE	<i>English Session</i>
		<b>Meeting Room: Yunan Grandballroom</b>	<b>Chairman: Chu-hua Zhang</b>
Time	No./ Title	Author/Affiliation	
13:40-14:20	2022-i26D01 Secondary flows in radial turbine volutes	<b>Hua Chen</b> Dalian Maritime University, China	
14:20-15:00	2022-j05D02 Advances in aerodynamics and structure dynamics of wind turbine in deep sea	<b>Jia-zhong Zhang</b> School of Energy and Power Engineering, Xi'an Jiaotong University, China	
15:00-15:40	2022-j12D05 Unsteady aerodynamics and timescales in small high speed	<b>R.F.Martinez-Botas</b> Imperial College London, UK	
15:40-16:00	Coffee Break		
16:00-16:40	2022-i29J06 Advanced analysis of hot gas ingress into the wheel space of an axial turbine stage	<b>Matthias Meinke</b> Fluid Mechanics and Institute of Aerodynamics, Department of Mechanical Engineering, RWTH Aachen University, Germany	
16:40-17:20	2022-i29J03 Small scale turbomachinery – opportunities, applications, and challenges	<b>Jürg Schiffmann</b> Ecole Polytechnique Fédérale de Lausanne, Switzerland	
17:20-18:00	2022-i29J01 A New Generation of High-Fidelity CFD Software	<b>Charles Hirsch</b> Cadence–design System Co.,Ltd.Belgium	

20th Oct		TECHNICAL PRESENTATION OF CITA MEMBERS	Chinese Session
Meeting Room: Function Room			
Time	No./ Title	Author/Affiliation	
13:40-14:10	2022-i27A13 The new generation of industrial steam turbine technology and product introduction from shenyang dewatt turbine power co., ltd.	<b>Feng-ming Ju</b> Harbin Turbine Company.,Ltd.;Shenyang Dewatt Turbine Power Co., Ltd.	
14:10-14:40	2022-i27A04 The development of nitrogen centrifugal compressor for hl unit	<b>Xiao-jian Cui</b> Nantong Dart-Rich Fan Co., Ltd.	
14:40-15:10	2022-i27B07 Collaborative design and development - turbine industry applications	<b>Yan Pan</b> New Dimension Systems Co., Ltd.	
15:10-15:40	2022-i27F01 End-tooth connection technology for a new generation of aeroengines and gas turbines	<b>De-lin Shi</b> XiongMing Aviation Science Industry (Wuhu) Co.,Ltd.	
15:40-16:00	Coffee Break		
16:00-16:30	2022-i27B05 A brief analysis of the application of permanent magnet synchronous motors in centrifugal fans	<b>Sheng-guo Lv</b> Jiangsu Zhuerkang Motor Energy Efficient Technology Co., Ltd.	
16:30-17:00	2022-i27A06 Aerodynamic analysis and optimization of transonic centrifugal compressor	<b>Xiang-jun Fang</b> Beihang University / Jiangsu Zhanggu Lipori Power Technology Co., Ltd.	
17:00-17:30	2022-j09C01 Improving Energy Efficiency Due New Intercooler Set-up for Centrifugal Compressors in Air Separation Plants	<b>Walter Mayr</b> Sineco Technology (Spain / China)	

20th Oct		SUSPENED TURBOMACHINERY	Chinese Session
Meeting Room: Crowne Plaza Club			
Time	No./ Title	Author/Affiliation	
13:40-14:20	The design analysis and experiment of magnetic bearings refer to API617-2014 8th	<b>Lei Zhao</b> Tsinghua University	
14:20-14:40	2022-i27A01 SKF S2M magnetic bearings for natural gas compressors : qualification tests and operational experience	<b>Gubaidullin Askar</b> SKF Magnetic Mechatronics (S2M),France	
14:40-15:00	2022-i27A12 The development and commercial application of magnetic suspension centrifugal impeller	<b>Chun-jiang Han</b> Xinlei Air Compressor Co.,Ltd.	
15:00-15:20	2022-151 Rejection of synchronous vibrations of amb using a nonlin-ear adaptive control algorithm with frequency estimator	<b>Xiao-yu Bian</b> , Zhen-gang Shi, Ni Mo, Lei Shi, Yang-bo Zheng, Xing-nan Liu Institute of Nuclear and New Energy Technology, Tsinghua University	
15:20-15:40	2022-g05H01 Instability analysis and solution of a magnetic levitation blower in high pressure and non-surge area	<b>Yu Li</b> , Ben-yi Wang, Ma-an Ran, Wei-dong Gao, sheng Jing CRRC Dalian Locomotive Research Institute Co., Ltd.	
15:40-16:00	Coffee Break		
16:00-16:20	2022-i19H01 Hybrid air foil thrust bearings design and performance measurement	Fang-cheng Xu <sup>1</sup> , <b>Wen-lin Luan</b> <sup>2</sup> , Shuo-xian Qiu <sup>3</sup> 1.School of Control Science and Engineering of Dalian University of Technology; 2.School of Energy and Power Engineering, Dalian University of Technology Dalian; 3.School of Mechanical Engineering of Dalian University of Technology	
16:20-16:40	2022-i27F08 Solution of low-carbon driven in high-speed fluid machinery	<b>Cai-song Yan</b> Hunan CRRC Shangqu Electirc Co., Ltd.	
16:40-17:00	2022-i19N01 Improved linear active disturbance rejection controller for rotor system of magnetic levitation turbomachinery	Tong-tong Yu, <b>Zhi-zhou Zhang</b> Sun Yat-sen University	
17:00-17:20	2022-i27F14 Application and exploration of magnetic levitation high-speed permanent magnet motor system in the field of turbines	<b>Yi-li Zhu</b> Jiangsu Mingci Power Technology Co., Ltd.	
17:20-17:40	2022-154 Experimental study on centrifugal compressor with foil aerodynamic gas bearings for hydrogen fuel cell	Qi Wang, <b>Shan-ju Yang</b> , Jie Hao, Wen-can Hua, Yi-ming Zeng College of Mechanical and Electronic Engineering, Northwest A&F University, Yangling, Shaanxi, China	
17:40-18:00	2022-i27F10 Research and application of magnetic levitation four stage air compressor technology	<b>Yi-yan Yuan</b> Suzhou Palboom Electric Co., Ltd.	
18:00-18:20	2022-i27F09 Development of magnetic levitation high temperature special pump	<b>Cheng-ke Yin</b> Suzhou Supermag Intelligent Technology Co.,Ltd.	

20th Oct		MECHANICAL STRUCTURE&ROTORDYNAMIC	English Session
Meeting Room: Sanhe Room			
Time	No./ Title	Author/Affiliation	
14:00-14:20	2022-j10I01 Analysis of Aerodynamic Force Induced by Rotating Stall and Rotor Vibration in Centrifugal Compressor	<b>Xing-yu Tai</b> , Ji-gang Meng, Yun Li, Zhong-hui Xiao, Yu-ying Sun Shenyang Blower Works Group Corporation	
14:20-14:40	2022-f23B01 Forced vibration analysis and crack growth calculation of compressor's impeller	<b>Xue-bo Shao</b> Shenyang Blower Works Group Corporation	
14:40-15:00	2022-f12I01 Research on dynamic of a flexible rotor with non-centering squeeze oil film damper	<b>Wei-jian Nie</b> <sup>1,2</sup> , Wang-qun Deng <sup>2,3</sup> , Xiao-guang Yang <sup>1</sup> , Wen-kui Liu <sup>2,3</sup> , Ya Tong <sup>2</sup> , Yi Feng <sup>2</sup> 1.School of Energy and Power Engineering, Bei Hang University;2.AECC Hunan Aviation Powerplant Research Institute;3. Key Laboratory of Aero-engine Vibration Technology, Aero Engine Corporation of China	
15:00-15:20	2022-f13D01 Research on targeted suppression method for unbalanced coupling vibration of the cantilever coaxial dual-rotor system	<b>Xin Pan</b> <sup>1,2</sup> , Xin Zhang <sup>1,2</sup> , Jia-qiao Lu <sup>1</sup> , Meng Zhang <sup>1</sup> 1.Key Laboratory of Engine Health Monitoring- Control and Networking of Ministry of Education, Beijing University of Chemical Technology; 2.Beijing Key Laboratory of High-end Mechanical Equipment Health Monitoring and Self-Recovery, Beijing University of Chemical Technology	
15:20-15:40	2022-g20C01 Vibration reduction of high-pressure air compressor based on the composite damping base	<b>Feng Zhao</b> <sup>1,2</sup> , He Li <sup>1</sup> , Hui Li <sup>1</sup> , Duo Liu <sup>2</sup> 1.School of Mechanical Engineering and Automation, Northeastern University; 2.Shenyang Blower Works Group Corporation	
15:40-16:00	Coffee Break		
16:00-16:40	2022-j05D01 ( <b>Invited Lecture</b> ) On gas turbine sealing clearance: interplay between-fluid dynamics and rotordynamics	<b>Dr. Sivakumar Subramanian</b> Indian Institute of Technology Madras, India	
16:40-17:00	2022-001 Nonlinear Analysis of Rotor- Bearing- Seal System with Varying Parameters Muszynska model Based on CFD and RBF	<b>Rui Wang</b> , Yue-fang Wang, Xiao-jian Cao, Shu-hua Yang, Xing-lin Guo Shenyang Blower Works Group Corporation	

20th Oct		HEAT TRANSFER		Chinese Session
Meeting Room: Baofeng Room				
Time	No./ Title	Author/Affiliation		
13:40-14:20	2022-j07102 <b>(Invited Lecture)</b> Overall cooling analysis of the hot component with large curvature	<b>Kun Du</b> Northwestern Polytechnical University		
14:20-15:00	2022-i26F03 <b>(Invited Lecture)</b> The enhancement of film cooling by Dean Vortices	<b>Pin-ting Chen</b> NUAA(Nanjing University of Aeronautics and Astronautics)		
15:00-15:20	2022-012 Study on radiation influence characteristics of flat gas film cooling based on ash gas program method	<b>Yi-cheng Wang</b> , Xian-long Meng, Cun-liang Liu, Qi-ye Liao School of Power and Energy, Northwestern Polytechnical University, 1 Dongxiang Road, Chang'an District		
15:20-15:40	2022-g31101 Study on flow and heat transfer characteristics of windward bend lattice sandwich structure with variable cross section	<b>Yu-bi Zhang</b> , Xiao-hui Bai, Yuan-bo Gao, Cun-liang Liu School of Power and Energy, Northwestern Polytechnical University		
15:40-16:00	Coffee Break			
16:00-16:40	2022-i26F21 <b>(Invited Lecture)</b> Application of Machine Learning in Internal Flow and Heat Transfer in Aero-engines	<b>Chun-hua Wang</b> NUAA(Nanjing University of Aeronautics and Astronautics)		
16:40-17:00	2022-g19D01 A comparative analysis of shaped holes on the suction surface of turbine vanes	<b>Yan Jiang</b> Beihang University		
17:00-17:20	2022-120 Research on the construction method and heat flow characteristics of the turbine fractal cooling channel	<b>Ya-fei Liu</b> , Qing-fu He, Zhong-ran Chi Key Laboratory for Power Machinery and Engineering of the Education Ministry of China, School of Mechanical Engineering, Shanghai Jiao Tong University		
17:20-17:40	2022-g18F01 Research on Influence of Channel Density on Flow and Heat Transfer Performance of Small-gap Crossed-rib Channels	Yong-xin He <sup>1</sup> , Kang Huang <sup>1</sup> , <b>Yu-ting Jiang</b> <sup>1</sup> , Jie Wang <sup>1</sup> Song-bing Lu <sup>2</sup> 1. Harbin Engineering University; 2. State Key Laboratory of Aerodynamics, China Aerodynamics Research and Development Center		
17:40-18:00	2022-g20O01 Research on numerical accuracy of air-cooled turbine based on the source point model	<b>Jing-wei Huang</b> , Suo-cheng Zhang, Zhong-ran Chi Turbomachine Institute, School of Mechanical Engineering, Shanghai Jiao Tong University		

20th Oct		AERO-ENGINE & GAS TURBINE	English Session
Meeting Room: Board Room			
Time	No./ Title	Author/Affiliation	
14:00-14:40	2022-i26F02 <b>(Invited Lecture)</b> Quantitative analysis method of turbomachinery loss sources and its application	<b>Wei-lin Yi</b> Beijing Institute of Technology	
14:40-15:00	2022-f14E01 Influence of total pressure distortion on aerodynamic performance of ducted thrust fan	Dong Zhang, Li-min Gao, Lei Zhao, <b>Ke-xin Wang</b> Northwestern Polytechnical University, School of Power and Energy	
15:00-15:20	2022-i26F15 Numerical simulation investigation on a hydrogen micromix combustor	<b>Da Mo</b> AECC Shenyang Engine Research Institute	
15:20-15:40	2022-f19D01 Numerical investigations on the high load turbine cascades designed for small scale test rig	<b>Qi-yun Long</b> , Zheng-xin Ji, Ming-xu Qi, Hong Zhang Beijing Institute of Technology	
15:40-16:00	Coffee Break		
16:00-16:20	2022-148 The aerodynamic design and optimization on large expansion ratio axial turbine of auxiliary power system (APU)	<b>Shu-hao Fang</b> , Lei Luo, Wei Du School of Energy Science and Engineering, Harbin Institute of Technology	
16:20-16:40	2022-i26F14 Aeroelastic issues and vibration suppression of high performance fan	<b>Yi-xiong Liu</b> Northwestern Polytechnical University/AECC Shenyang Engine Research Institute	
16:40-17:00	2022-081 Study on loss quantitative analysis methodology for high load fan	<b>Liang-ye Liu</b> , Wei-lin Yi Beijing Institute of Technology	
17:00-17:20	2022-i26F01 Numerical analysis of propeller-pylon interaction	<b>Zhe Yang</b> Fluid Mechanics and Institute of Aerodynamics, Department of Mechanical Engineering, RWTH Aachen University, Germany	
17:20-17:40	2022-f19K01 Design of a small scale linear turbine cascade test section	<b>Zheng-xin Ji</b> , Qi-yun Long, Ming-xu Qi, Chang-mao Yang Beijing Institute of Technology	
17:40-18:00	2022-056 The control of shroud leakage loss by reducing axial mixing	<b>Dong-ming Huang</b> , Wei-hao Zhang, Yu-fan Wang, Shou-min Jiang, Peng Wang, Yun Chen National Key Laboratory of Science and Technology on Aero-Engine Aero-thermodynamics, School of Energy & Power Engineering, Beihang University; AECC Shenyang Engine Research Institute	



20th Oct		DIGITAL TWINS	<i>Chinese Session</i>
Meeting Room: Anjiang Room			
Time	No./ Title	Author/Affiliation	
13:40-14:00	2022-j07i01 Solidification Prediction using a Digital Twin for a Continuous Steel Casting Machine	<b>Phong Bui<sup>1</sup></b> , Felix Wietbuescher <sup>1</sup> , Matthias Meinke <sup>2</sup> 1.SMS group GmbH, Düsseldorf, Germany;2.Institute of Aerodynamics, RWTH Aachen University, Germany	
14:00-14:40	2022-j07H01 ( <b>Invited lecture</b> ) Digital Twin of Thermo-mechanical Field in Three Dimensional Space of Component System by Fusion Sensor Data	<b>Wei-zhe Wang</b> Shanghai Jiao Tong University	
14:40-15:20	2022-i26F12 ( <b>Invited lecture</b> ) Time series forecasting and applications in energy equipments	<b>Hai-tao Liu</b> Dalian University of Technology	
15:20-15:40	2022-i27A07 The realization approach and application scenarios for digital twin of screw pumps	<b>Zhi-qiang Gan</b> Tianjin Pumps & Machinery Group Co.,Ltd	
15:40-16:00	Coffee Break		
16:00-16:20	2022-f12H01 A new method for remaining life prediction of mechanical equipment based on multi information fusion DTW-Transformer network	Shu-jie Liu, <b>Shu-ai Lv</b> Dalian University of Technology	
16:20-16:40	2022-f14H01 Dynamic Characteristics Simulation of Gas Turbine Based on Multi-system Integration Simulation Method	Zhi-tao Wang, <b>Tian-hao Guan</b> , Jia-fan Luo, Jing Wang Harbin Engineering University	
16:40-17:00	2022-106 Tool state visualization method based on digital twin technology	<b>Dai Wei</b> Dalian University of Technology	

20th Oct		AERODYNAMIC SIMULATION AND OPTIMIZATION		English Session
Meeting Room: Yuhua+Haiyan Room				
Time	No./ Title	Author/Affiliation		
13:40-14:20	2022-j12F01 <b>(Invited Lecture)</b> Study on the flow characteristics of counter-rotating compressors with new aerodynamic layout	<b>Xiao-chen Mao</b> Northwestern Polytechnical University, School of Power and Energy		
14:20-14:40	2022-h04Q01 Performance of the transonic compressor with total temperature distortion	<b>Hong-liang Zhao<sup>1</sup></b> , Wen-qiang Zhang <sup>2</sup> , Juan Du <sup>3,4,5,6</sup> , Min Zhang <sup>3,4,5,6</sup> , Hong-wu Zhang <sup>3,4,5,6</sup> 1.North China Electric Power University; 2.School of Mechatronical Engineering, Beijing Institute of Technology; 3. Advanced Gas Turbine Laboratory, Institute of Engineering Thermophysics, Chinese Academy of Sciences; 4.Key Laboratory of Advanced Energy and Power, Chinese Academy of Sciences; 5.Innovation Academy for Light-Duty Gas Turbine, Chinese Academy of Sciences; 6.School of Engineering Science, University of Chinese Academy of Sciences		
14:40-15:00	2022-g31O01 Investigation of time spectral vanishing viscosity method for solving the time spectral equation	<b>Xuan-long Da</b> , Ding-xi Wang School of Power and Energy, Northwestern Polytechnical University		
15:00-15:20	2022-f08H01 A novel optimisation of a transonic centrifugal impeller based on 3D inverse design method	<b>Peng Wang</b> , Shun Lv, Zhan-cheng Dou, Wan-xin Fu, Ming-ding Zhang Advanced Design Technology (Shanghai) Ltd, Weichai Power Ltd.		
15:20-15:40	2022-032 Effects of pulsed jet intensity on the performance of s-duct	<b>Cheng-ze Wang<sup>1</sup></b> , Hua-wei Lu <sup>1</sup> , Shi-qi Wang <sup>2</sup> , Xiao-zhi Kong <sup>1</sup> , Dong-zhi Ren <sup>1</sup> , Tian-shuo Huang <sup>1</sup> 1.School of Marine Engineering, Dalian Maritime University; 2.Aero Engine Academy of China, Advanced Jet Propulsion Innovation Center		
15:40-16:00	Coffee Break			
16:00-16:20	2022-g31N02 Efficient structural sensitivity calculations using an adjoint method in an open- source computational structural mechanics solver	<b>Yang Han</b> , Shou-jia Gong, Yi Li, Jun-xing Tang, Ding-xi Wang, Shen-ren Xu School of Power and Energy, Northwestern Polytechnical University		
16:20-16:40	2022-i26F28 Performance of the transonic compressor with total temperature distortion	<b>Wen-qiang Zhang</b> Beijing Institute of Technology		
16:40-17:00	2022-h15J01 Investigation of mechanism of tip leakage flow and its control strategy of a compressor cascade	<b>Xi Gao</b> , Zhi-yuan Cao, Jing Yang, Bo Liu, Li-min Gao School of Power and Energy, Northwestern Polytechnical University		

20th Oct			AERODYNAMIC SIMULATION AND OPTIMIZATION			<i>English Session</i>		
Meeting Room: Yuhua Room+Haiyan Room								
Time		No./ Title			Author/Affiliation			
17:00-17:20		2022-118 Numerical and experimental investigations of axial flow fan with bionic forked trailing edge			<b>Zhong Liang</b> <sup>1</sup> , Jun Wang <sup>1</sup> , Wei Wang <sup>1</sup> , Boyan Jiang <sup>1</sup> , Yanyan Ding <sup>1</sup> , Wanxiang Qin <sup>2</sup> 1.School of Energy and Power Engineering, Huazhong University of Science and Technology; 2.Guangdong Sunwill Precising Plastic Corp., Ltd.			
17:20-17:40		2022-f08G01 Influence of the modeling accuracy of manufacturing deviations on evaluating of the compressor performance uncertainty			<b>Ming-zhi Li</b> <sup>1</sup> , Xian-jun Yu <sup>1,2</sup> , Guang-feng An <sup>1,2</sup> , Bao-jie Liu <sup>1,2</sup> 1.Research Institute of Aero-Engine, Beihang University; 2. National Key Laboratory of Science and Technology on Aero-Engine Aero-Thermodynamics			
17:40-18:00		2022-g31O03 Multi-row turbomachinery aerodynamic design optimization by an efficient and accurate discrete adjoint method			<b>Hang-kong Wu</b> , Ding-xi Wang, Xiu-quan Huang School of Power and Energy, Northwestern Polytechnical University			

<b>21th Oct</b>			<b>KEYNOTE LECTURE (ACADEMIC)</b>			<i>English Session</i>		
<b>Meeting Room: Yunan Grandballroom1</b>								
<b>Time</b>		<b>No./ Title</b>			<b>Author/Affiliation</b>			
9:00-9:40		2022-i30B01 Performance and technology trends of compressors for turboshaft/turboprop engines			<b>Hai-liang Jin</b> Hunan Aviation Powerplant Research Institute, Aero Engine Corporation of China			
9:40-10:20		2022-j07O01 Shaped hole film cooling studies at NPU: past and future challenges			<b>Cun-liang Liu</b> School of Power and Energy at Northwestern Polytechnical University			
10:20-10:40		Coffee Break						
10:40-11:20		2022-i29J05 On multiphase pump seals: leakage and gas injection to control seal centering stiffness			<b>Luis San Andres</b> , Xue-liang Lu Turbomachinery Laboratory, Texas A&M University, USA Hunan Sund Industrial and Technological Co.,Ltd.			
11:20-12:00		2022-i26F10 Experimental and numerical methods for the fluid-induced rotordynamic characteristics of rotating seals in turbomachinery			<b>Zhi-gang Li</b> Xi'an Jiaotong University			

21th Oct		KEYNOTE LECTURE (INDUSTRIAL)	<i>Chinese Session</i>
Meeting Room: Yunan Grandballroom2+3			
Time	No./ Title	Author/Affiliation	
8:30-9:00	The Development Chance and Challenge of Turbomachinery Industry under Carbon Peaking and Carbon Neutrality	<b>Yong Zhang</b> Shenyang Blower Works Group Corporation	
9:00-9:30	2022-i27A10 Application and Development of GT and Compressor in West East Gas Pipeline	<b>Gang Guo</b> Pipechina West East Gas Pipeline Company	
9:30-10:00	2022-h03d01 Review of All Possible Conversion Equations of Influence Coefficients with Different Formats on Two-Plane Balancing	<b>John Yu</b> Baker Hughes,US	
10:00-10:20	Coffee Break		
10:20-10:50	2022-i26F11 Comparative Study of Technologies of Energy Cascade Utilization for Mid-grade Steam	<b>Prof.Feng Lin</b> JiMei University, China	
10:50-11:20	2022-i27F12 The Development and Prospects of Dongfang Turbine's Independent Gas Turbine	<b>Wen Jia</b> Dongfang Turbine Co.,Ltd.	
11:20-11:50	2022-i27B08 The Application of Steam Turbine in Clean Energy Field	<b>Zhi-xian Pan</b> Hangzhou Steam Turbine Co.,Ltd.	

21th Oct		MECHANICAL STRUCTURE&ROTORDYNAMIC	Chinese Session
Meeting Room: 3F Function Room			
Time	No./ Title	Author/Affiliation	
8:40-9:00	2022-g25I01 Research on high cycle fatigue of turbocharger turbine blade based on vibration test verification	<b>Hai-bo Ban</b> , Zhi-jian Liu, Bo Zhang, Wen-biao Ye, Jia-wei Huang CRRC Dalian Institute Co.,Ltd.	
9:00-9:20	2022-f13J01 Hydro test analysis and optimization design of large variable cross-sectional compressor casing	<b>Xue-bo Shao</b> Shenyang Blower Works Group Corporation	
9:20-9:40	2022-g08E01 Rotor dynamics design of a radial inlet turbine	<b>Dong-po Jiang</b> , Ning Yu, Wen-hui Ji, Zhi-wei Shao Hadian POWER Equipment National Engineering Research Center Company Ltd	
9:40-10:00	2022-j02J01 Reduction modeling method of tenon blade and its application in the improvement of blade root structure parameters	Zi-lin Chen, <b>Ti-chang Jia</b> , Chao-feng Li, Zhen-ya Yang Northeastern University	
10:00-10:20	2022-f23H01 The surplus influence coefficient balancing method based on genetic algorithm	<b>Jing-xuan Zhang</b> , Yun-bing Tang, Xiao-fu Xie Changzhou E&E Turbo-Power Co., Ltd.	
10:20-10:40	Coffee Break		
10:40-11:00	2022-009 Damage tolerance analysis of compressor blade root connector in wide operation mode	<b>Xu-qing Nie</b> <sup>1</sup> , En-minzhou <sup>1</sup> , Wei-hua Xiao <sup>2</sup> , Heng-qing Gu <sup>3</sup> , Da-xiong Liao <sup>1</sup> 1.China Aerodynamic Research and Development Center; 2. Jiangsu Xinyang New Material Co., Ltd.; 3.Shanghai Electric Blower Works Co., Ltd.	
11:00-11:20	2022-g21C01 Dynamic characteristics of dual- rotor inter- shaft bearing system with defect on the outer ring under synchronous impact	<b>Guan-shu Zuo</b> , Lei Hou, Yu-shu Chen Harbin Institute of Technology	
11:20-11:40	2022-i28H01 Research on the Influence of Tooth-on-Rotor Labyrinth Seal on Rotor Stability	<b>Jie Yao</b> , Ji-gang Meng, Yong Hu, Zhong-wei Zhang Shenyang Blower Works Group Corporation	

21th Oct		BEARINGS & SEALS	English Session
Meeting Room: Crowne Plaza Club			
Time	No./ Title	Author/Affiliation	
8:40-9:20	2022-i26F19 <b>(Invitation Talk)</b> The key technology of typical static and dynamic seal structures in aero-engines	<b>Dan Sun</b> Shenyang Aerospace University	
9:20-9:40	2022-i23I01 Numerical investigation of the floating ring seal gas hydro-dynamic lubrication based on the local differential quadra-ture-lagrange method	<b>Shuang Wang</b> , Dan Sun, Ran Zhang, Jin-yu Jiang, Yan-peng Li Shenyang Aerospace University	
9:40-10:00	2022-f23I01 Vibration characteristics of high-speed ball bearing of aero-engines	<b>Yun-Bing Tang</b> , Jing-Xuan Zhang Changzhou E&E Turbo-Power Co., Ltd.	
10:00-10:20	2022-048 Research of contact state and temperature field distribution of angular contact ball bearing in high-temperature environment	Qing-peng Han, <b>Xin-hang Shen</b> , Bin Wu, Rui Zhu, Hang-yuan Lv Shanghai University of Electric Power	
10:20-10:40	Coffee Break		
10:40-11:00	2022-074 Experimental study on tribological and leakage characteristics of rotating spring energized seal under high and low temperature	<b>Deng-yu Liu</b> , Jun Zhao, Shuang-xi Li, Xin-ni Zhao, Le-le Huang College of Mechanical and Electrical Engineering, Beijing University of Chemical Technology	
11:00-11:20	2022-g31O05 Study on leakage mechanism and law of typical high-temperature dynamic seals	<b>Chao-peng Duan</b> , Wei-hua Yang, Cheng-yang Li, Hao Gu Nanjing University of Aeronautics and Astronautics	
11:20-11:40	2022-063 Analysis of influencing factors and optimization of high speed floating mechanical seal end face deformation	<b>Rao Zheng</b> , Xin-Xin Yan, Shuang-Xi Li, Wen-Hao Zhang, Wen-Hao Wei Beijing University of Chemical Technology	

21th Oct			PROCESSING MANUFACTURING & MATERIALS	Chinese Session
Meeting Room: Sanhe Room				
Time	No./ Title	Author/Affiliation		
8:40-9:00	2022-153 Geometric inspection of film-cooling holes via light-field imaging	<b>Sheng-ming Xu</b> , Sheng-xian Shi, Fei Zeng, Ming-yu Gan, Yang Li Shanghai Jiao Tong University, AECC Hunan Aviation Power-plant Research Institute		
9:00-9:20	2022-i27F06 Research progress of wrought superalloys in china	<b>Min-qing Wang</b> China Iron & Steel Research Institute Group/Gaona Aero Material Co., Ltd.		
9:20-9:40	2022-h31M01 Failure analysis of 1Cr18Ni9Ti oil return pipe	<b>Rui-yu Sun</b> , Wen-wei Tong, Kai-kuo Zhang, Bo-zhi Liu AECC Shenyang Engine Research Institute		
9:40-10:00	2022-i27H01 Cause analysis for cracking of aeroengine compressor rotor blade	<b>Ming-kun Liu<sup>1</sup></b> , Guo-liang Liu <sup>2</sup> , Zhen-yu Han <sup>1</sup> , Wen-wei Tong <sup>1</sup> , Cai-guang Wu <sup>1</sup> 1.AECC Shenyang Engine Research Institute; 2.Xi'an Aero Engine Company. Technology Center		
10:00-10:20	2022-f21C01 Effect of process parameters on stress field of laser additive manufacturing	Zhao-hui Ren, <b>Yu-lin Liu</b> , Ze-yu Jiang, Heng-fa Luo, Xing-wen Zhang, Shi-hua Zhou School of Mechanical Engineering and Automation, Northeastern University		
10:20-10:40	Coffee Break			
10:40-11:00	2022-i27F11 Fushun special steel turbine steel products development	<b>Li-na Zhang</b> Fushun Special Steel Co.,Ltd.		
11:00-11:20	2022-i27A11 The solution of EDM for key components in turbine technology	<b>Jian-mei Guo</b> Beijing Institute of Electro-machining Co.,Ltd.		
11:20-11:40	2022-g11K01 The Hazards and identification methods of plunger bottom edge collision for five-axis plunge milling	Xue-qin Wang <sup>1</sup> , <b>Zhao-cheng Wei<sup>1</sup></b> , Xin Shu <sup>2</sup> , Jian-hua Yong <sup>2</sup> , Yong Zhang <sup>2</sup> , Min-jie Wang <sup>1</sup> 1.Key Laboratory for Precision and Non-traditional Machining Technology of Ministry of Education, Dalian University of Technology; 2.Shenyang Blower Works Group Corporation		
11:40-12:00	2022-j14J01 Application of nanometer material and nanometer coating technology in TRT	<b>Qing-fen Tian</b> Shanghai Inframat NanoTechnology Company, Ltd.		



21th Oct		HEAT TRANSFER	English Session
Meeting Room: Baofeng Room			
Time	No./ Title	Author/Affiliation	
8:40-9:20	2022-i26F08 <b>(Invited Lecture)</b> Visualized heat transfer experiments of gas turbine internal cooling passages	<b>Jiang Lei</b> Xi'an Jiaotong University	
9:20-10:00	2022-i26F07 <b>(Invited Lecture)</b> Research on advanced impingement cooling characteristics inside turbine blades	<b>De-hai Kong</b> Northwestern Polytechnical University	
10:00-10:20	2022-095 Numerical investigation of decoupled overall cooling effectiveness for film cooling structure	<b>Run-zhou Liu</b> , Hai-wang Li, Ru-quan You, Zhi Tao Beihang University	
10:20-10:40	Coffee Break		
10:40-11:00	2022-098 Multi-objective optimization of crater geometry for laminated cooling configuration with conjugate heat transfer simulations	<b>Xin Huang</b> , Jian Pu, Jian-hua Wang University of Science and Technology of China	
11:00-11:20	2022-103 Experimental and numerical study of swirl impinging cooling onto a leading edge ribbed model with film cooling holes	<b>Yong Luan</b> , Yu Rao, Hong-jie Yan School of Mechanical Engineering, Shanghai Jiao Tong University	
11:20-11:40	2022-g19B02 Flow resistance characteristics of rotary ribbed channels	Ru-quan You <sup>1,2</sup> , <b>Yun-teng Xu</b> <sup>1,2</sup> , Hai-wang Li <sup>1,2</sup> 1.National Key Laboratory of Science and Technology on Aero Engines Aero-thermodynamics, Beihang University, Beijing 102206, China ; 2.Research Institute of Aero-Engine, Beihang University, Beijing 102206, China	
11:40-12:00	2022-072 Effect of slot jet flow on non-axisymmetric endwall cooling performance of high load turbines	Kun Du <sup>1,2,3,4</sup> , <b>Yi-hao Jia</b> <sup>1</sup> , Hui Song <sup>1</sup> , Lei Chen <sup>5</sup> , Qian Zhang <sup>5</sup> , Ting-ting Cui <sup>5</sup> , Cun-liang Liu <sup>1,3,4</sup> 1.School Power and Energy, Northwestern Polytechnical University; 2.Yangtze River Delta Research Institute of NPU, Northwestern Polytechnical University; 3.Shaanxi Key Laboratory of Thermal Sciences in Aero-Engine System, Northwestern Polytechnical University; 4.NPU-KAI International Joint Laboratory of Advanced Aero-Engine Thermal Structure, Northwestern Polytechnical University; 5.AECC Sichuan Gas Turbine Establishment.	

21th Oct		EXPERIMENT AND MEASUREMENT	Chinese Session
Meeting Room: Board Room			
Time	No./ Title	Author/Affiliation	
9:30-10:20	<b>(Invited Course)</b> The pneumatic probe technology and flow field test scheme of entire compressor	<b>Wu-qi Gong</b> Xi'an Jiaotong University	
10:20-10:40	Coffee Break		
10:40-11:00	2022-064 Investigation of non-synchronous vibration of compressor blades based on blade tip timing system	<b>Dong-ming Cao</b> , Hong-bing Pu, Huang Huang, Xiu-quan Huang, Ding-xi Wang Northwestern Polytechnical University	
11:00-11:20	2022-g14P0 Investigations into the identification of the stall and surge of an industrial centrifugal compressor by experimental method	<b>Rui Wang</b> , Jian-wei Li, Qiang Zhao, Li-xin Yao, Ming Zeng, Kai-hua Li, De-zhong Liu Shenyang Blower Works Group Corporation	
11:20-11:40	2022-g19A01 The design and vindication of a high pressure rise small flow rate fan	<b>Xiao-li Qu</b> , Hai-yang Zhang, Zheng-hua Gu, Bin Xiao, Guang-wu Gu Facility Design and Instrumentation Institute, China Aerodynamics Research and Development Center	

21th Oct		AERODYNAMIC DESIGN AND OPTIMIZATION	Chinese Session
Meeting Room: Anjiang Room			
Time	No./ Title	Author/Affiliation	
8:40-9:00	2022-h26c01 Reliability analysis of compressor blade high cycle fatigue life based on generalized regression response surface method	<b>Jing-shan Wei</b> , Qun Zheng, Wei Yan, Bin Jiang School of Energy and Power Engineering, Harbin Engineering University	
9:00-9:20	2022-140 Numerical investigation on surge characteristics of axial-centrifugal combined compressor with paired swirl distortion inlet	Zu-wu Yao, <b>Yi-wang Ming</b> , Heng-wang Zhi, Xi Guang School of Energy and Power Engineering, Xi'an Jiaotong University,	
9:20-9:40	2022-131 Numerical simulation of a radial steam turbine with various outlet pressure	<b>Biao Cheng</b> <sup>1</sup> , Zhi-yang Chen <sup>2</sup> , Jing-yuan Ma <sup>2</sup> , Xin-yi Zhou <sup>3</sup> , Rong-rong Ye <sup>2</sup> , Feng Lin <sup>2</sup> College of Marine Equipment and Mechanical Engineering, Jimei University	
9:40-10:00	2022-g30k01 Study on performance deviation of radial turbine under inlet swirl condition	<b>Shi-lue Zhou</b> , Ying-xian Xue, Ming-yang Yang, Kang-yao Deng, Zhan-ming Ding Shanghai Jiao Tong University, North Engine Research Institute	
10:00-10:20	2022-i28j01 Development of a large flow coefficient stage in air compressor	<b>Li-xin Yao</b> <sup>1</sup> , Lin Pei <sup>1,2</sup> , Wei Pei <sup>1</sup> , Shu-xin Yang <sup>1</sup> , Yu Zhou <sup>1</sup> 1. Shenyang Blower Works Group Corporation; 2. Xi'an Jiaotong University	
10:20-10:40	Coffee Break		
10:40-11:00	2022-079 Application of casing treatment in blade vibration alleviation of nozzleless radial turbine	<b>Lei Pan</b> , Ming-yang Yang, Sho-ta Murae, Wataru Sato, Naoto Shimohara, Akihiro Yamagata 1. Shanghai Jiao Tong University; 2. IHI Corporation	
11:00-11:20	2022-f17B01 Economic feasibility analysis of hydrogen storage-delivery-release based on organic solvent and brayton cycle	<b>Tian-feng Zhao</b> <sup>1</sup> , Ming-xu Qi <sup>1</sup> , Hua-nen Xu <sup>2</sup> , Hong Zhang <sup>1</sup> 1. Beijing Institute of Technology; 2. Beijing Bolken Energy Technology Co., Ltd.	
11:20-11:40	2022-h30f01 Optimization design method of turbocharger compressor based on blade loading	<b>Gang Chen</b> , Jian-fei Yan, Guo-wen Chen Tianjin North Tianli Turbocharging Technology Co., Ltd.	
11:40-12:00	2022-j09E01 Advances in gas path analysis of gas turbine and turbomachinery diagnostics	<b>Gang Han</b> Shanghai GT-A Technology Services Co., Ltd.	

21th Oct			AERODYNAMIC SIMULATION AND OPTIMIZATION		English Session
Meeting Room: Yuhua Haiyan Room					
Time	No./ Title	Author/Affiliation			
8:40-9:20	2022-j12H01 <b>(Invited Lecture)</b> Flow mechanism and blade design of aspirated compressor	<b>Zhi-yuan Cao</b> Northwestern Polytechnical University			
9:20-9:40	2022-019 Study of parallel compressor system and real-time simulation based on modular dynamic system greitzer modeling	<b>Yang Su</b> , Xue-jiang Chen, Xin Wang, Xiao-dong Li, Xiao-ming Liu Xi'an Jiaotong University			
9:40-10:00	2022-029 Rotating stall inception prediction using an eigenvalue-based global instability analysis method	<b>Cai-jia Yuan</b> , Shen-ren Xu, Ding-xi Wang Northwestern Polytechnical University			
10:00-10:20	2022-f19J03 Aerodynamic analysis and optimization of the intermediate casing design	<b>Ping Huang</b> , Ruo-peng Yao, Peng Lei AECC Sichuan Gas Turbine Research Establishment			
10:20-10:40	Coffee Break				
10:40-11:00	2022-057 Investigation of various turbulence models for aerodynamic analysis of a high-pressure ratio centrifugal compressor considering surface roughness	<b>Jun-nan Liu</b> , Ding-xi Wang, Xiu-quan Huang School of Power and Energy, Northwestern Polytechnical University			
11:00-11:20	2022-g31K02 Numerical analysis on the aerodynamic characteristics of centrifugal compressor under normal and reverse flow conditions	<b>Bing Qiao</b> , Ya-ping Ju, Chu-hua Zhang Xi'an Jiaotong University			
11:20-11:40	2022-i09K01 Dynamic simulation of centrifugal compressor system based on semi-mechanism modeling	<b>Ming-shun Yan</b> <sup>1</sup> , Xue-jiang Chen <sup>1</sup> , Yang Su <sup>1</sup> , Xiao-ming Liu <sup>2</sup> 1.School of Energy and Power Engineering, Xi'an Jiaotong University; 2.State Key Laboratory of Compressor Technology, Hefei General Machinery Research Institute Co., Ltd..			
11:40-12:00	2022-g01L01 Pre- deformation design of a mixed flow impeller with an arbitrary spatial surface	<b>Chang-ling Yang</b> , Yu-run Li, Han-sen Zou, Yong Zhang, Guang Xi School of Energy and Power Engineering, Xi'an Jiaotong University			

21th Oct		KEYNOTE LECTURE (ACADEMIC)	<i>English Session</i>
Meeting Room: Yunan Grandballroom1			
Time	No./ Title	Author/Affiliation	
13:40-14:20	2022-i26F29 Application of advanced aero-thermo simulation methods in maintenance and repair of gas turbines	<b>Zhong-ran Chi</b> Shanghai Jiao Tong University, China	
14:20-15:00	2022-i26F24 Particulate deposition effects in aircraft engine turbines	<b>Xing Yang</b> Xi'an Jiaotong University, University of Stuttgart, Germany	
15:00-15:40	2022-i29J08 On 3D inverse design method for turbomachinery	<b>Mehrdad Zangeneh</b> Prof Mehrdad Zangeneh, Ph.D. Mehrdad Zangeneh, UK	
15:40-16:00	Coffee Break		
16:00-16:40	2022-i29J04 The development of high-efficient film cooling for gas turbines by application of the conjugate heat transfer technique	Prof. Dr.-Ing. Dieter Bohn, <b>Dr.-Ing. Karsten Kusterer</b> B&B-AGEMA, Germany	
16:40-17:20	Analysis of the errors embodied in the momentum theories as applied to the design and analysis of wind turbines	<b>Rodolfo Bontempo</b> University of Naples Federico II, Italy	

21th Oct		KEYNOTE LECTURE (INDUSTRIAL)	Chinese Session
Meeting Room: Yunan Grandballroom2+3			
Time	No./ Title	Author/Affiliation	
13:30-14:00	2022-i27A08 Development of aero-derivative gas turbine	<b>Jia-chun Gao</b> China Hangfa Gas Turbine Co., Ltd.	
14:00-14:30	2022-j12D03 The Intelligent Development of Steam Turbine in Thermal Power, Nuclear Power and New Energy Field	<b>Zhi-cheng Deng</b> Shanghai Power Equipment Research Institute Co.,Ltd.	
14:30-15:00	2022-i27A09 High Efficient manufacturing Solution of Sophisticated Component for Aero-engine and Gas Turbine in Turbomachinery Field	<b>Bing-qiang Geng</b> SECO TOOLS(Shanghai) Co., Ltd.	
15:00-15:30	2022-i27B02 Machining process improvement in energy generation area in cutting tools` perspective	<b>Xin-xiang Liu</b> GF Maching Solutions	
15:30-16:00	Coffee Break		
16:00-16:30	2022-i29J07 A new concept of regulation of hydraulic axial turbines for low heads	Dario Barsi <sup>1</sup> , Robert Fink <sup>2</sup> , Peter Odry <sup>3</sup> , Marina Ubaldi <sup>1</sup> , <b>Pietro Zunino<sup>1</sup></b> 1.University of Genova, Department of Mechanical, Energy, Management and Transportation Engineering, Genova, Italy.; 2. SEMI Industrial Ltda, Saõ Paulo, Brazil.; 3.University of Dunaujavaros, Department of Control Engineering and Information Technology, Dunaujvaros, Hungary.	
16:30-17:00	2022-i27B04 Applications and prospects of the new generation of axial compressor technology in multi-field	<b>Guang-ping Lu</b> Chengdu Chengfa Science &Energy Power Engineering Co., Ltd.	
17:00-17:30	2022-i27B06 The Manage Solution of Full Life Cycle for Intelligent Motor	<b>Bo Pan</b> Harbin Electric Corporation Jiamusi Electric Machine Company Limited	
17:30-18:00	2022-j07E03 The Discussion on Energy-saving and Emission Reduction Path of Centrifugal Turbomachinery in Industry	<b>Li-jun Jiang</b> Chongqing General Industry(Group)Co.,Ltd.	

21th Oct		AERODYNAMIC DESIGN AND OPTIMIZATION		Chinese Session
Meeting Room: Function Room				
Time	No./ Title	Author/Affiliation		
13:40-14:00	2022-h18C01 Numerical investigation of aerodynamic performance and stability of a transonic compressor with circumferentially non-uniform tip clearance	<b>Ding-yu Zhang</b> Northwestern Polytechnical University		
14:00-14:20	2022-h31101 Numerical optimization analysis of a centrifugal air compressor	<b>Juan-li Wang</b> Dongfang Steam Turbine Co.,Ltd.		
14:20-14:40	2022-155 Numerical study on flow instability characteristics of centrifugal compressor with inlet total pressure distortion	<b>Zhen-fei Wang</b> , Zhi-heng Wang, Ming-yi Wang, Guang Xi School of Engineering, Xi'an Jiaotong University		
14:40-15:00	2022-157 Unsteady propagation and spatial-temporal evolution of inlet total pressure distortion in a centrifugal compressor	<b>Ming-yi Wang</b> , Zhi-heng Wang, Yao-zu Wu, Guang Xi School of Energy and Power Engineering, Xi'an Jiaotong University		
15:00-15:20	2022-045 Numerical Simulation on Inter-stage Nonuniform Bleedin Industrial Gas Turbine Axial Compressors	<b>Jun Ding</b> , Yong-feng Sui, Ji-bing Lan, Peng Chu, Wen-yang Shao, Jian-sheng Zheng, Qun Zheng 1.Hangzhou Steam Turbine Co., Ltd.; 2.Hangzhou Turbine Power Group Co., Ltd.; 3.College of Power and Energy Engineering, Harbin Engineering University 4. Zhejiang Rancon Turbine Machinery Co.,Ltd.		
15:20-15:40	2022-054 Performance improving design on a high speed centrifugal fan	<b>Jia-qi Song</b> , Tong Wang School of Mechanical Engineering, Shanghai Jiao Tong University		
15:40-16:00	Coffee Break			
16:00-16:20	2022-g08C01 Conception and research on the design of centrifugal fan series group	<b>Feng Sun</b> Dezhou Yiwote Blower Co.,Ltd.		
16:20-16:40	2022-093 Study on performance prediction analysis and calibration method of axial flow turbine under variable conditions	<b>Wei Wang</b> , Ze-yu Zheng, Zhi-jia Gu, Ye-ming Lu, Rong Xie College of Energy and Power, Dalian University of Technology		
16:40-17:00	2022-f14L01 Cavitation characteristics analysis of centrifugal aviation fuel pump with inducer	<b>Dan Luo</b> , Wei-jun Wang, Xin Zhao, Xiang-jun Tan, Da-zhuan Wu 1.AVIC Chengdu Caic Electronics Co. Ltd.; 2.College of energy engineering, Zhejiang University		

21th Oct		AERODYNAMIC DESIGN AND OPTIMIZATION	Chinese Session
Meeting Room: Function Room			
Time	No./ Title	Author/Affiliation	
17:00-17:20	2022-127 Numerical study of the effect of blade number on the aerodynamic performance of axial fans	<b>Yingbin Hu</b> , Jianhui Lin, Lie Ma, Wanxiang Qin, Xiaomin Liu 1. School of Energy and Power Engineering, Xi'an Jiaotong University; 2. Guangdong Midea Air-Conditioning Equipment Co., Ltd; 3. Guangdong Sunwill Precision Plastics Co., Ltd	
17:20-17:40	2022-J10E02 Numerical study and analysis of different volute structures of centrifugal fan for air flow dyeing machine	<b>Jun-jie Du</b> 1.School of Energy and Power Engineering,Xi'an Jiaotong University; 2.Shenyang Blower Works Group Corporation	
17:40-18:00	2022-087 Influence of stagger angle on aerodynamic performance of axial supersonic through-flow fan cascades	Shi-jun Sun <sup>1</sup> , <b>Xiao-long Li</b> <sup>1</sup> , Hang Yu <sup>1</sup> , Yan-ming Liu <sup>1</sup> , Song-tao Wang <sup>2</sup> 1.Beijing Institute of Technology; 2.Harbin Institute of Technology	



21th Oct		BEARINGS & SEALS	Chinese Session
Meeting Room : Sanhe Room			
Time	No./ Title	Author/Affiliation	
13:40-14:20	2022-i30B02 <b>(Invited Lecture)</b> High-speed bearing cavity oil gas two-phase back-flow pumping non-contact dynamic pressure sealing technology	<b>Shuang-xi Li</b> Beijing University of Chemical Technology	
14:20-14:40	2022-110 Experimental characterisation of the leakage of leaf seal	<b>Yi Zhang</b> , Wen-yang Chen, Chen-qing Li ENN Energy Power Technology (Shanghai) Co., Ltd.	
14:40-15:00	2022-h21R01 Fracture failure mechanism analysis of bearing inner race in aero-engine	<b>Quan Wang</b> , Qing Li, Jian Ma, Zhen-yu Han AECC Shenyang Engine Research Institute	
15:00-15:20	2022-049 Rolling bearing fault diagnosis based on AVMD and SMA-SVM	<b>Dong-bo Yang</b> Shenyang University of Technology	
15:20-15:40	2022-065 Study on sealing performance of ship stern shaft sealing ring material based on thermal- solid coupling	<b>Wen-hao Wei</b> , Shuang-xi Li, Jing-bo Zhang, Xin-xin Yan, Yu-peng Song College of Mechanical and Electrical Engineering, Beijing University of Chemical Technology	
15:40-16:00	Coffee Break		
16:00-16:20	2022-g31O04 Optimization simulation of static characteristics of thrust sliding bearings for centrifugal pumps	<b>Liu-kai Hou</b> , Kai-yuan Hao Beijing Aerospace Propulsion Institute	
16:20-16:40	2022-i29J02 Research on the load capacity and characteristic of thrust bearing of co2centrifugal compressor	<b>Xiu-li Hou</b> , Wang rui, Shu-hua Yang, Zhong-hui Xiao, Ji-gang Meng Shenyang Blower Works Group Corporation	
16:40-17:00	2022-047 Time-reassigned multisynchrosqueezing s-transform for bearing fault diagnosis	<b>Wei Liu</b> , Yang Liu, Shuang-xi Li, Wen-hao Wei College of Mechanical and Electrical Engineering, Beijing University of Chemical Technology	
17:00-17:20	2022-050 Application of ceemdan-pe and improved ttfp in wind turbine bearing fault diagnosis	<b>Xin-feng Yu</b> Shenyang University of Technology	
17:20-17:40	2022-g20B01 Temperature rise, deformation analysis and structural optimization of high speed hydrodynamic piston ring type seal	<b>Yu-peng Song</b> , Shuang-xi Li, Lian-xiang Sha, Han-yuan Zhao, En-zhe Bi Beijing University of Chemical Technology	
17:40-18:20	2022-j15O01 Heat mass transfer and phase transition characteristics of supercritical CO <sub>2</sub> dry gas seal under near critical condition	<b>Jin-bo Jiang</b> Zhejiang University of Technology	

21th Oct		HEAT TRANSFER	English Session
Meeting Room : Baofeng Room			
Time	No./ Title	Author/Affiliation	
13:40-14:20	2022-i26F23 <b>(Invited Lecture)</b> Intelligent design for turbine cooling	<b>Li Yang</b> Shanghai Jiao Tong University	
14:20-15:00	2022-i26F05 <b>(Invited Lecture)</b> High fidelity numerical simulation of turbine heat transfer based on Self- Adaptive Turbulence Eddy Simulation	<b>Xing-si Han</b> Nanjing University of Aeronautics and Astronautics	
15:00-15:20	2022-067 Effects of turn shapes on flow and heat transfer characteristics in U-shaped channel under rotating conditions	Ru-quan You, <b>Ze-xuan Liu</b> , Hai-wang Li, Jin-cheng Shi, Zhi Tao Beihang University	
15:20-15:40	2022-094 Experimental and numerical investigation on heat transfer and flow resistance characteristics of rotating double-wall structure	Hai-wang Li, <b>Jun-xin Che</b> , Ru-quan You, Zhi Tao Research Institute of Aero-Engine, Beihang University	
15:40-16:00	Coffee Break		
16:00-16:40	2022-j09L01 <b>(Invited Lecture)</b> Flow and heat transfer mechanism of low friction and compact heat transfer structure	<b>Xiao-hui Bai</b> Northwestern Polytechnical University	
16:40-17:00	2022-119 Study on flow resistance characteristics of rotating u-shaped channel	Ru-quan You, <b>Cai-rui Li</b> , Hai-wang Li, Zhi Tao Research Institute of Aero-Engine, Beihang University	
17:00-17:20	2022-073 Effects of the casing-blade relative motion on the blade tip aerothermal performance in a high pressure gas turbine	Kun Du <sup>1,2,3,4</sup> , <b>Na Hui</b> <sup>1</sup> , Hui Song <sup>1</sup> , Lei Chen <sup>5</sup> , Qian Zhang <sup>5</sup> , Ting-ting Cui <sup>5</sup> , Cun-liang Liu <sup>1,3,4</sup> 1.School Power and Energy, Northwestern Polytechnical University; 2.Yangtze River Delta Research Institute of NPU, Northwestern Polytechnical University, Taicang;3.Shaanxi Key Laboratory of Thermal Sciences in Aero-Engine System, Northwestern Polytechnical University;4.NPU- KAI International Joint Laboratory of Advanced Aero- Engine Thermal Structure, Northwestern Polytechnical University; 5. AECC Sichuan Gas Turbine Establishment	
17:20-17:40	2022-078 The effects of coolant ejection angle on cooling effectiveness in an overall vane with a double-plate cooling configuration	Lei Luo, Jin-ming Zhang, Xun Zhou, <b>Wei Du</b> School of Energy Science and Engineering, Harbin Institute of Technology	

21th Oct			AERODYNAMIC SIMULATION AND OPTIMIZATION	<i>English Session</i>
Meeting Room: Board Room				
Time	No./ Title	Author/Affiliation		
13:40-14:00	2022-053 Effects of inclined squealer rims on axial turbines tip-leakage vortex and loss	<b>Yu-fan Wang</b> , Wei-hao Zhang, Dong-ming Huang National Key Laboratory of Science and Technology on Aero-Engine Aero-thermodynamics, School of Energy & Power Engineering, Beihang University		
14:00-14:20	2022-159 Study on the influence of inlet box structure on the aerodynamic performance of centrifugal fan	<b>Shao-hua Chen</b> , Wen-gang Liu, Jia-xin Hou, Han-wen Liu, Jun-long Xie Huazhong University of Science and Technology		
14:20-14:40	2022-017 Effects of different rough wall microchannels on flow characteristics and performance of the Knudsen compressor	<b>Jiang Lan</b> , Jun-long Xie, Jian-jun Ye, Zhi-xiang Yan, Xiao-xuan Zhang, Xiao Yin School of Energy and Power Engineering, Huazhong University of Science and Technology		
14:40-15:00	2022-g31J02 Numerical study on surface flow characteristics of ceramic matrix composites with different weaving patterns	<b>Jin-yue Zhang</b> , Rong-fei Yang, Xing-shuang Wu, Ning Ge College of Energy and Power Engineering, Nanjing University of Aeronautics and Astronautics		
15:00-15:20	2022-142 Design and optimization of diffuser and deswirler for a 4-stage radial blower with 1d and 3d cfd methods	Dr.Vlad Goldenberg, Dr.Leonid Moroz, Dr.Shigeyuki Tomimatsu, Masatoshi Tomita, <b>Tishun Zhang</b> SoftInWay Inc		
15:20-15:40	2022-g12H01 Study on nonlinear dependence in modal coefficients of bionic airfoil	<b>Qian-hao Xiao</b> , Bo-yan Jiang, Jun Wang, Yan-yan Ding, Xiao-pei Yang School of Energy and Power Engineering, Huazhong University of Science and Technology		
15:40-16:00	Coffee Break			
16:00-16:20	2022-149 Numerical investigation of the flow and noise characteristics for centrifugal fans with various blade exit angles	<b>Jia-xin Hou</b> , Wen-gang Liu, Shao-hua Chen, Jun-long Xie School of Energy and Power Engineering, Huazhong University of Science and Technology		
16:20-16:40	2022-g31O02 Investigation of the sigma approximation technique for the solution of the time spectral equation system	<b>Yu-ze Zhu</b> , Xiu-quan Huang, Ding-xi Wang School of Power and Energy, Northwestern Polytechnical University		
16:40-17:00	2022-061 Numerical investigation of blade distortion law effect on the corner flow separation of axial flow fan	<b>Yan-yan Ding</b> , Jun Wang, Bo-yan Jiang, Qian-hao Xiao, Zhong Liang, Hao Zhou School of Energy and Power Engineering, Huazhong University of Science and Technology		
17:00-17:20	2022-h11J01 Delayed detached eddy simulation of axial-flow compressor rotor	<b>Jia-hao Xiao</b> , Ya-ping Ju, Chu-hua Zhang Department of Fluid Machinery and Engineering, School of Energy and Power Engineering, Xi'an Jiao-tong University		
17:20-17:40	2022-052 Exploration on flow instability characteristics in a two-stage axial flow compressor by numerical simulation method	<b>Xiang-yuan Dou</b> , Tong Wang, Yong-wen Liu School of Mechanical Engineering, Shanghai Jiao Tong University		

21th Oct		AERODYNAMIC DESIGN AND OPTIMIZATION		Chinese Session
Meeting Room: Anjiang Room				
Time	No./ Title	Author/Affiliation		
13:40-14:00	2022-j10e01 Numerical study on leakage and disc friction loss of low flow coefficient centrifugal compressor	<b>Xue-zhi Yu</b> 1.School of Energy and Power Engineering,Xi'an Jiaotong University ;2.Shenyang Blower Works Group Corporation		
14:00-14:20	2022-003 Research on energy saving optimization of air separation unit and high pressure nitrogen pipeline based on dynamic simulation system	<b>Xin-ming Chen</b> , Bo Zhang, Shu Yan, Yan-fei Mu, Shao-ping Shi State Key Laboratory of Coal-Based Clean Energy (Huaneng Clean Energy Research Institute)		
14:20-14:40	2022-f17i01 Design and optimization research of a orc radial turbo-expander inlet chamber	<b>Yang wang</b> <sup>1</sup> , Yan liu <sup>2</sup> , Yi-wen li <sup>1</sup> , Xiao liu <sup>1</sup> 1.Shenyang Blower Works Group Corporation;2.Dalian University of Technology		
14:40-15:00	2022-055 Influence of shaft dynamic characteristics on pressure pulsation of centrifugal pump	<b>Lie-yi Dong</b> , Zhi-jun Shuai, Wan-you Li Harbin Engineering University		
15:00-15:20	2022-091 Aeroacoustics research on seagull airfoils with different trailing-edge serrations	<b>Lei Wang</b> , Xiao-min Liu, Lie Ma Xi'an Jiaotong university, Guangdong Midea Air-Conditioning Equipment Co.,Ltd.		
15:20-15:40	2022-j10D01 Research and application of efficiency improvement technology for power plant fans under the background of flexible peak shaving	Dai-jun Xiang, <b>De-sheng Chen</b> ,Da-wei Shun,Qing-xin Shi, Jin Zheng National Energy Group Zhejiang Electric Power Co., Ltd.; Xi'an Thermal Power Research Institute Co., Ltd.		
15:40-16:00	Coffee Break			
16:00-16:20	2022-141 Numerical investigation on surge characteristics of axial-centrifugal combined compressor with bulk swirl distortion inlet	<b>Wang-yi Ming</b> , Zu-wu Yao, Heng-wang Zhi, Xi Guang School of Energy and Power Engineering, Xi'an Jiaotong University		
16:20-16:40	2022-010 Aerodynamic design optimization of a fan blade by using the learned RBF neural network	<b>Zhen Fu</b> , Jia-qi Luo, Ze-shuai Chen Zhejiang University		
16:40-17:00	2022-084 Through-flow design method of axial compressor considering parameter distribution in blade passage	<b>Yu Gao</b> , Yan Liu, Zhi Li 1. School of energy and power engineering, Dalian University of Technology		
17:00-17:20	2022-h30c01 Transonic flow analysis method and application based on target pressure method	<b>Xiao-han Li</b> , Yan Liu, Jin-guang Yang, Zhi Li, Bin-bin Xue School of energy and power engineering, Dalian University of Technology; Hangzhou Steam Turbine Co.,Ltd.		

21th Oct			AERODYNAMIC SIMULATION AND OPTIMIZATION			<i>English Session</i>		
Meeting Room: Yuhua Haiyan Room								
Time		No./ Title			Author/Affiliation			
13:40-14:20		2022-i26F06 <b>(Invited Lecture)</b> Flutter mechanisms for a wide chord fan			<b>Huang Huang</b> Northwestern polytechnical university			
14:20-14:40		2022-005 Numerical study on the dynamic evolution of cavitation and pressure fluctuation in a centrifugal pump during the startup period			<b>Shao-Feng Liu<sup>1</sup></b> , Hai-Feng Cao <sup>1</sup> , Shi-Wei Ni <sup>1,2</sup> , Guo-Feng Zhao <sup>1,2</sup> , Yu-Xuan Chen <sup>1</sup> , Chen-Xing Jiang <sup>1,2</sup> 1.College of Energy, Xiamen University; 2.Innovation Laboratory for Sciences and Technologies of Energy Materials of Fujian Province (IKKEM)			
14:40-15:00		2022-135 Effects of matching between the inducer and impeller of a centrifugal pump on its cavitation performance			Dao-cheng Wang <sup>1</sup> , <b>Yun-zhang Chen<sup>1</sup></b> , Jin-ping Luo <sup>1</sup> , Lei Liu <sup>1</sup> , Bing-wen Gao <sup>2</sup> , Qing-xi Wei <sup>2</sup> , Li-jun Liu <sup>1</sup> 1.School of Energy and Power Engineering, Xi'an Jiaotong University; 2.Xi'an Pump and Valve plant Co., Ltd.			
15:00-15:20		2022-096 Investigating the flow characteristics of superhydrophobic U-shaped microchannels			<b>Zhi Tao</b> , Wei-dong Fang, Hai-wang Li, Tian-tong Xu, Huang Yi, Han-xiao Wu, Mu-run Li Beihang University			
15:20-15:40		2022-160 Optimization design of air conditioning outdoor unit top plate based on orthogonal test			<b>Wen-gang Liu</b> , Shao-hua Chen, Jia-xin Hou, Jun-long Xie School of Energy and Power Engineering, Huazhong University of Science and Technology			
15:40-16:00		Coffee Break						
16:00-16:20		2022-041 Comparison of active learning approaches for metamodeling and the application for parametric analysis of steam turbine exhaust hood			<b>Rui Hu<sup>1</sup></b> , Xiao-fang Wang <sup>1</sup> , Qing-long Liu <sup>2</sup> , Chao Bian <sup>1</sup> , Xiao Tai <sup>1</sup> , Hai-tao Liu <sup>1</sup> 1.School of Energy and Power Engineering, Dalian University of Technology; 2.Hangzhou Chinen Steam Turbine Power Co., Ltd.			
16:20-16:40		2022-038 Aerodynamic analysis of low- pressure steam turbine exhaust hood with stiffeners			<b>Xiao-dong Qian<sup>1</sup></b> , Xiao Tai <sup>2</sup> , Qing-long Liu <sup>1</sup> , Chao Bian <sup>2</sup> , Rui Hu <sup>2</sup> , Hai-tao Liu <sup>2</sup> , Xiao-fang Wang <sup>2</sup> 1.Hangzhou Chinen Steam Turbine Power Co.,Ltd.; 2.School of Energy and Power Engineering, Dalian University of Technology			
16:40-17:00		2022-i26F26 Study on the yaw-based wake control considering dynamic flow characteristics for wind turbine power improvement			<b>Xin Yu</b> North China Electric Power University, School of New Energy			

<b>22th Oct AERODYNAMIC SIMULATION AND OPTIMIZATION(ACADEMIC) <i>Chinese Session</i></b>		
<b>Meeting Room: Yunnan Grandball Room 1</b>		
<b>Time</b>	<b>No./ Title</b>	<b>Author/Affiliation</b>
8:30-9:10	2022-i26F13 Technology of Controlling the End Walls Flows in the Compressors	<b>Tai-qiu Liu</b> Technology of Controlling the End Walls Flows in the Compressors
9:10-9:50	2022-i30A01 Study on coupling regulation mechanism based on multi-scale turbulent structures and sound fields of a bionic blade	<b>Xiao-min Liu</b> Xi'an Jiaotong University
9:50-10:10	Coffee Break	
10:10-10:50	2022-i26F04 Research on hybrid gas bearings for high-power turbomachinery	<b>Feng Kai</b> Hunan University
10:50-11:30	2022-i26F22 Research on evolution mechanism and flow control technology of internal flow in turbomachinery	<b>Jun Wang</b> HUST Chuazhong University of Science And Technology

22th Oct		KEYNOTE LECTURE (INDUSTRIAL)	Chinese Session
Meeting Room: Yunan Grandballroom2+3			
Time	No./ Title	Author/Affiliation	
8:20-8:50	2022-i27F05 KSB pump for new energy and low carbon application technology	<b>Bao-gang Wang</b> KSB Shanghai Pump Co.,Ltd.	
8:50-9:20	2022-i27B01 Application of gear-assembled compressor in non-supplementary combustion compressed air energy storage project	<b>Xiao-ming Liu</b> SBW Gear Compressor Co., Ltd.	
9:20-9:50	2022-i27C01 Danobatgroup typical applications in turbine, gas turbine & energy industry	<b>Guang-zhi Xu</b> Danobatgroup China	
9:50-10:20	2022-i27A05 Solution of efficient machining cutters of gas turbine roulette tongue and groove	<b>Zhen-zhou Ding</b> Walter Wuxi Co., Ltd.	
10:20-10:40	Coffee Break		
10:40-11:10	2022-i27A02 Brief analysis of residual voltage power generation technology	<b>Feng Chen</b> China Petroleum Engineering & Construction Corporation Southwest Company	
11:10-11:40	2022-i27B03 Development and application of extra-large high efficiency and energy saving blast furnace top gas recovery turbine unit	<b>Zhong Liu</b> Xi'an Shaangu Power Co.,Ltd	
11:40-12:10	2022-i27F13 Numerical control machining technology of centrifugal compressor blade and indigenous cam software application	<b>Jian-jun Zhao</b> Suzhou Qianji Intelligent Technology Co., Ltd.	

22th Oct		HEAT TRANSFER		English Session
Meeting Room: Baofeng Room				
Time	No./ Title	Author/Affiliation		
8:30-9:10	2022-i26F25 <b>(Invited Lecture)</b> Application of machine learning method in turbine blade cooling	<b>Ru-quan You</b> Beihang University		
9:10-9:50	2022-i26D02 <b>(Invited Lecture)</b> High-order implicit discontinuous galerkin method for turbomachinery flow (presentation topic focus on numerical methods and advanced simulations)	<b>Min Yao</b> Institute for Aero-Engine, Tsinghua University		
9:50-10:10	Coffee Break			
10:10-10:30	2022-082 The film cooling performance in the cutback region with different lip shape	<b>Wei Du</b> , Lei Luo, Song-tao Wang Harbin Institute of Technology		
10:30-10:50	2022-f23S01 Numerical study of film/shock interaction on suction surface of transonic turbine cascade	<b>Kang Huang</b> , Di-yun Chen, Shi-feng Li , Hu-sheng Ma Aerospace Technology Institute, China Aerodynamics Research and Development Center		
10:50-11:10	2022-156 Convective heat transfer and flow characteristics in micro-channels with fins	<b>Mu-run Li</b> , Xuan Gao, Hai-wang Li, Tian-tong Xu, Peng-peng Nie, Wei-dong Fang Beihang University		
11:10-11:30	2022-g31K01 Study on radiation heat transfer characteristics of gas in a DC combustor	<b>Yan-ce Bi</b> , Yuang Liu, Wei-hua Yang, Zhi-gang Sun Nanjing University of Aeronautics and Astronautics		
11:30-11:50	2022-i08F01 Influence of the transient inflow on the aerothermodynamic characteristics of a pre-swirl system	<b>Clarence Chai Jia Cheng</b> , Xiao-yu Yang, Xue-ying Li, Jing Ren Department of Energy and Power Engineering, Tsinghua University		



22th Oct AERODYNAMIC SIMULATION AND OPTIMIZATION & HEAT TRANSFER <i>English Session</i>		
Meeting Room: Yuhua Haiyan Room		
Time	No./ Title	Author/Affiliation
8:10-8:50	2022-j10F01 <b>(Invited Lecture)</b> Turbine aero-thermal testing and measurement techniques	<b>Guillermo Paniagua</b> Purdue University,US
8:50-9:30	2022-i26F20 <b>(Invited Lecture)</b> Thermal analysis method for ceramic matrix composites turbine vane in aero-engine	<b>Ze-can Tu</b> Nanjing University of Aeronautics and Astronautics
9:30-9:50	2022-004 Influence of change law of leading-edge ellipse ratio on inception cavitation performance of centrifugal pump	<b>Fang-fang Zhang</b> <sup>1,2</sup> , Ran Tao <sup>1,2</sup> , Ruo-fu Xiao <sup>1,2</sup> 1.College of Water Resources and Civil Engineering, China Agricultural University; 2.Beijing Engineering Research Center of Safety and Energy Saving Technology for Water Supply Network System, China Agricultural University
9:50-10:10	Coffee Break	
10:10-10:50	2022-i26F09 <b>(Invited Lecture)</b> New insights of gas turbine cooling systems	<b>Xue-ying Li</b> Tsinghua University
10:50-11:30	2022-i26F27 <b>(Invited Lecture)</b> Turbine endwall gap leakage flow control and thermal characteristics investigation	<b>Kai-yuan Zhang</b> Xi'an Jiaotong University
11:30-11:50	2022-035 Research development of axial flow fan in low speed wind tunnel in CARDC	<b>Gao-qiang Yang</b> , Hai-Yang Zhang, Xiao-Li Qu China Aerodynamics Research and Development Center

22th Oct		BEARINGS & SEALS	English Session
Meeting Room: Board Room			
Time	No./ Title	Author/Affiliation	
8:30-8:50	2022-g20E01 Experimental study on tribological and leakage characteristics of rotating spring energized seal under high and low temperature	<b>Deng-yu Liu</b> , Jun Zhao, Shuang-Xi Li, Xin-Ni Zhao, Le-Le Huang College of Mechanical and Electrical Engineering, Beijing University of Chemical Technology	
8:50-9:10	2022-g31N01 Design and performance research of ultra-low temperature spiral groove mechanical seal based on digital method	Rao Zheng, <b>Han-yuan Zhao</b> , Shuang-xi Li, Yu-peng Song Beijing University of Chemical Technology	
9:10-9:30	2022-g09J01 Experimental study of Cr coating on temperature rise and friction wear mechanical seal for high-speed light-load bearing cavity	<b>Hai-chao Yang</b> , Shuang-xi Li, Xiang Zhao, Guo-qing Zhang Beijing University of Chemical Technology	
9:30-9:50	2022-069 Study on the performance of two-stage floating ring isolation seal for high speed turbopump with cryogenic medium	<b>Zi-feng Song</b> , Shuang-xi Li, Xiao-zhu Chen, Tan Zhao, Bai-qi Huang Beijing University of Chemical Technology	
9:50-10:10	Coffee Break		
10:10-10:30	2022-109 Study on sealing performance and structure optimization of high-parameter rotating machinery	<b>Cheng-yao Huang</b> , Shuang-xi Li, Xin-xin Yan, Wen-hao Zhang Beijing University of Chemical Technology	
10:30-10:50	2022-g19M01 Creep behavior and sealing performance analysis of polyper-fluorinated ethylene propylene(FEP) gasket for aero-engine in-flatable valve	<b>Li-jing Liu</b> Beijing University of Chemical Technology	
10:50-11:10	2022-g11H01 Experimental and numerical study on influence of scraping force on radial crack initiation in labyrinth seal fins	<b>Yi-cheng Yang</b> , Jia-qi Chang, Zhao-guo Mi, Wei-hua Yang College of Energy and Power, Nanjing University of Aeronautics and Astronautics	
11:10-11:30	2022-g20B02 Research on lip opening speed and structure optimization of rotary lip seal ring	<b>Yan-fei Gu</b> , Jun Zhao, Shuang-xi Li, Xin-xin Yan, Bai-qi Huang Beijing University of Chemical Technology College of Mechanical and Electrical Engineering	
11:30-11:50	022-063 Analysis of influencing factors and optimization of high speed floating mechanical seal end face deformation	<b>Rao Zheng</b> , Xin-Xin Yan, Shuang-Xi Li, Wen-Hao Zhang, Wen-Hao Wei Beijing University of Chemical Technology	

22th Oct	COURSE	<i>Chinese Session</i>
<b>Meeting Room: Anjiang Room</b>		
Title: Aerodynamic Design Course of High Efficiency Centrifugal Compressor		
9:00-12:00	<p><b>Prof.Yi Wang</b> Central South University</p> <p><b>Course Catalog</b></p> <ol style="list-style-type: none"> <li>1. Research progress on aerodynamic design and internal flow of centrifugal compressors</li> <li>2. Schematic design approach for centrifugal impellers, radial diffusers and volute components</li> <li>3. Detailed design of centrifugal impeller and radial diffuser</li> <li>4. Efficient volute aerodynamic design method and modeling</li> <li>5. CFD simulation analysis</li> <li>6. Industrial case and design key point analysis</li> </ol>	

22th Oct		KEYNOTE LECTURE (INDUSTRIAL)	<i>Chinese Session</i>
Meeting Room: Yunan Grandballroom2+3			
Time	No./ Title	Author/Affiliation	
13:30-14:00	2022-j07E01 The conventional design method of turbomachinery and automatic optimization	<b>Xu-wen Qiu</b> Hefei TurboTides Turbomachinery Technology Co., Ltd.	
14:00-14:30	2022-i27A14 Application idea of turbine BOP technology in industrial energy conservation	<b>Xiao-chi Liang</b> Shanghai Turbine Works Co.,Ltd	
14:30-15:00	2022-i27F03 The development and application of maglev turbomachinery	<b>Zhi-hua Zhang</b> Esurging(Tianjin) Technology Co., Ltd.	

22th Oct		KEYNOTE LECTURE (INDUSTRIAL)	<i>Chinese Session</i>
Meeting Room: Yunan Grandballroom2+3			
Time	No./ Title	Author/Affiliation	
13:30-14:00	2022-i27F07 Technical introduction of centrifugal vapor compressor	<b>Xu Jin</b> Jin Tong Ling Technology Group Co., Ltd.	
14:00-14:30	2022-j07E02 Opportunities and challenges faced by turbine machinery in the transformation of refining and chemical industry	<b>Jin-bo Li</b> Sinopec Engineering Incorporation	
14:30-15:00	2022-h09r01 Discussion on the application of collaborative design in gas turbine packages	<b>Bo-tian Zhao</b> AECC Gas Turbine ShiXin Erection & Engineering (Bei jing) Co.,Ltd.	