## Monday, August. 14, 2023

## Laining hotel

## Room Liao Ning Ting(辽宁厅)-6<sup>th</sup> floor

10:00-12:00 Session: Measurement techniques and signal processing Chair: Morten Kjeldsen (Flow Design Bureau AS.)					
Paper ID	Time	Paper Title	Paper Authors		
44	10:00-10:15	Multivariate Iterative Nonlinear Chirp Mode Decomposition: Principles and Applications	Jie Huang, Chaoshun Li		
148	10:15-10:30	Research on fault diagnosis strategy of air-conditioning system based on DPCA and deep learning	Qizheng Ma, Zhiwen Wang, Yongxing Song, Yueping Yu, Linhua Zhang		
211	10:30-10:45	Analyzing the optimization of the control system for pumped storage power plants' main inlet valves	Yalong Wang, Haoran Li, Peilei Feng, Tiancong Liu, Bingqian Li		
337	10:45-11:00	Assessment of Fiber Bragg Grating sensors for monitoring induced strains on the draft tube cone of hydraulic turbines	X Sánchez-Botello, R Roig, O de la Torre, J Madrigal, S Sales, B Mulu, C- M Högström, X Escaler		
13	11:00-11:15	Condition Assessment of Power On-load Tap Changer Based on Structure Weighted Dynamic Time Warping	Ruilin Yang, Lijun Luo, Fan Mo, Yu Liu, Jiada Wei, Pei Zhang		
349	11:15-11:30	Intelligent Hydraulic Model Testing System for Pumped Storage Power Plant	Hongyun Xun, Wenli Liu, Quanwei Liang, Jiangyi Hu		
94	11:30-11:45	Measuring Uncertainty of Hydraulic Generator Efficiency by Calorimetric Method	Xinjie Guo, Chunqiang Pan, Hongtao Li, Xuhui Xu, Cuiwei Jiang		
371	11:45-12:00	Numerical simulation analysis and experimental verification of air flow measurement in large-diameter S-shaped pipe	Lu Jia, Yongzhong Zeng, Xiaobing Liu, Zhishun Yu		
375	12:00-12:15	Optimal Design of Data Acquisition System for Fault Diagnosis of Hydraulic Machinery	H Qiu, B Jin, W Zhao, Z Wang*		
12:15-12:30 Coffee Break					
12:30-14:00 Session: Model tests and laboratory tests Chair: Morten Kjeldsen (Flow Design Bureau AS.)					
129	12:30-12:45	Effect of runner tip clearance on hydraulic performance of Kaplan turbine	Biao Shui, Jue Liu, Tingjun Zhan		
270	12:45-13:00	Research of Model Characteristics based on Probability Statistics Method for Condition Evaluation of Hydropower Unit	Ye Zhou, Dengfeng Cao		
313	13:00-13:15	Research on Automatic Testing of Pump Turbine Model Test Based on Intelligent Technology	Wenfu Han, Zhonghua Gui, Jinbing Ni, Zhe Man, Jinghua Ding, Dongkuo Li, Gang Wang		
335	13:15-13:30	Study of the Measurement Method on the Dynamic Stress and Pressure of Model Pump-turbine Splitter Blades	Yingnan Zhao, Xiaolong Yang, Huanmao Wang, Kai Lin, Jinwei Zhang, Xingchun Lei, Yue Zhao, Wei Zhao		
	13:30-13:45	Study on Cavitation Determination of Pump Turbine Model Test	Wenfu Han, Fei Zhang, Yifeng Zhao, Zhe Man, Jinghua Ding, Dongkuo Li, Gang Wang		
	13:45-14:00	The effects of vortex generators on hydrodynamic performance of blade tip hydrofoil	Pengzhong Wang		
14:00-16:00 Lunch					
16:00-18:00 Session: Computational fluid dynamics and fluid structure interaction Chair: Li Cheng (Yangzhou University)					
324	16:00-16:15	Analysis of the velocity non-uniformity in water jet inlet duct (OL)	Shen ZH.H., Li W, Pan ZH.Y.		

217	16:15-16:30	Effect of structural parameters of biomimetic jellyfish on propulsive performance (OL)	Xingyu Miao, Jinzhe Liu, Kailin Li, Ruihan Zhang, Li Gao		
67	16:30-16:45	Investigation on the effect of different groove depth and width on the tip clearance leakage flow of hydrofoil (OL)	Dong Liu, Chenhao Li		
109	16:45-17:00	Effect of Runner Radial Installation Deviation on the Flow Characteristics of the 1000MW Turbine	Yifan Wang, Xingxing Huang, Lingjiu Zhou, Zhengwei Wang		
135	17:00-17:15	FSI simulation of a high-head pump-turbine during load rejection process	M J Tang, Y G Cheng, D M Liu, H Y Chen, K Liu		
167	17:15-17:30	Vibration of Variable Speed Pump-Turbine in Turbine Operating Range: Simulation by CFD+FEM	Song Xue, Yongguang Cheng, Demin Liu, Hongyu Chen, Yunfa Lin		
125	17:30-17:45	Research on Closing Law of Guide Vane in a Francis turbine during the Load Rejection Process	Xiu Wang, Yan Yan, Wen-Quan Wang		
258	17:45-18:00	Study on noise characteristics of centrifugal fan based on blade loading distribution	Wenhao Cui, Jianjun Feng, Guojun Zhu, Zhenguo Ge, Wei Wang, Chenhao Li		
199	18:00-18:15	Study on the Performance and Wake Effects of a Vertical Axis Wind Turbine with Bionic Blades	H Chang, D Y Li, H J Wang, Y R He, Z G Zuo, S H Liu		
18:15-18:30 Coffee Break					
18:30-20:00 Session: Energy storage and flexibility Chair: Li Cheng (Yangzhou University)					
15	18:30-18:45	Research on hydraulic variable pressure pumped compressed air energy storage system	Biao Yang, Deyou Li, Xiaolong Fu, Haibo Liu, Hongjie Wang		
144	18:45-19:00	On the Water Jet Quality at Part-Load Operation of Pelton turbines	Bernhard Semlitsch		
273	19:00-19:15	Hydraulic transient calculation by wave tracking method for pumped storage power plant with four units in a diversion system	Xinyue Yin, Zongyao Zeng, Yuchuan Wang, Hongyu Chen, Dong Ma		
276	19:15-19:30	Quantitative analysis on influence factors of power response rapidity of pumped storage units	Jingdan Chen, Weijia Yang, Yulan Li, Yiwen Liao, Yifan Huang, Yiming Qian, Qiao Chen		
294	19:30-19:45	Selection of rated head of a pumped storage power station	Long Zhao, Yanan Cheng, Jue Wang		
20:00-22:00 <b>Dinner</b>					

## **Online connections:**

Tencent Meeting (VooV Meeting): ID: 392-935-311