## Monday, August. 14, 2023 Laining hotel

## Room Shan Dong Ting (山东厅) - 6<sup>th</sup> floor

	1	ment erosion Chair: Xijie Song (Yangzhou University)			
Paper ID	Time	Paper Title	Paper Authors		
Invited Lecture	10:00-10:30	Research and application of key technologies for the large-scale high-efficiency corrosion-resistant and wear-resistant pumps	Wen Yang (Sanlian Pump Industry Co., Ltd, China)		
248	10:30-10:45	Experimental Study of the Effects on Performance of Francis Turbine due to Sediments in Flow	Ravi Poudel, Junde Shi, Zilong Zhao, Zhongdong Qian, Zhiwei Guo, Sailesh Chitrakar, Bhola Thapa		
183	10:45-11:00	Influence of sediment concentration on erosion characteristics of hydraulic machinery materials	Song Guohua, Yang Junfeng, Sun Shuaihui, Li Shaoyi, Li Meng, Wang Kai, Wu Pengbo, Zhao Yifan, Guo Pengcheng		
332	11:00-11:15	Numerical analysis of the sand abrasion of a Pelton turbine injector	Liang Quanwei, Liu Jie, Xiao Yexiang, Zhu Yilin, Li Haijun, Zhou Hengte, Yang Nianhao, Deng Haifeng, Du Qingpin		
138	11:15-11:30	Numerical simulation of sand erosion in Venturi tube under different flow characteristics and sand content	Jiale Pan, Weilong Guang, Qiang Liu, Jiahao Lu, Ran Tao, Di Zhu, Ruofu Xiao		
259	11:30-11:45	PIV experimental study on water-sediment two-phase flow in NACA0012 cascade	Lei Zhu, Zhen Liu, Jianguang Zhang, Haiping Zhang, Li Lu		
	Coffee Break				
12:15-14:00 Session: Ocean energy & Small and micro hydropower Chair: Xijie Song (Yangzhou University)					
118	12:15-12:30	Numerical investigation of the hydrodynamic properties of oscillating water column air chambers (OL)	JiaWei Ding, Zhenmu Chen, Baoshan Zhu, Dongji Xuan, Yunde Shen, Yong Li, Mingge Wu		
209	12:30-12:45	Research on sediment flow characteristics of bucket in a Pelton turbine	Jiaxing Lu, Lihao Li, Yong Gong, Linyong Qian, Xiaobing Liu		
53	12:45-13:00	The dynamical response of turbulent flow to bed deformation under submerged discharge and plane vertical impinging jets	Liao Tingting, Xu Huating		
240	13:00-13:15	Analysis of OWC impulse turbine flow characteristics considering the tip clearance	Liu Jiajie, Liu Jie, Xiao Yexiang, Du Qingpin, Lin Hao, Zhu Yilin		
378	13:15-13:30	Investigation on hydraulic characteristics of a model and prototype bulb turbine based on similarity criteria	Xuezhi Zhou, Yongyao Luo, Zhengwei Wang, Soohwang Ahn, Hongyun Luo, Yibin Wu, Jingming Zhou		
88	13:30-13:45	Technical Characteristics and Application Introduction of Horizontal Shaft Francis Double Runner Hydro Turbine Unit	Ding Kuang, Chen Zujia		
14:00-16:00					
16:00-18:00	) Session: Mult	ti-field coupling& Selected topics (and others) Chair: Beibei Xu (Northwest A&F University)			
42	16:00-16:15	Analysis of factors affecting erosion and wear of high chromium cast iron for dredge pump and its performance improvement (OL)	Wang W K, Guo T, Ma Y		
74	16:15-16:30	Intelligent Positioning System Design for Bridge Crane in Hydropower Plant (OL)	Tiehua Chen, Ming Xu, Yanze Zou, Guangxin Wu, Xinyu Zhao and Yu Pan		

126	16:30-16:45	Research on the Digital Maintenance Construction of Hydropower Unit (OL)	Tiehua Chen, Yu Pan, Xinze Liu Guangxin Wu, Ming		
			Xu		
24	16:45-17:00	Numerical prediction of erosion of Francis turbine in sediment laden flow	Jinliang Wang, Xijie Song, Li Wang, Mingliang Zhao,		
			Zhengwei Wang		
188	17:00-17:15	Exploration and Application of Welding Technology for Misalignment of Pressure Pipe Orifices in a Pumped Storage Power Station	Haitang Mi, Peilei Feng, Xiaoya Chen, Anping Zhu,		
			Jianqiang Guo, Xiangxiang Liu, Shaohua Wang, Xi		
			Wang		
136	17:15-17:30	POD Mode Analysis of the Wake Flow of Savonius Hydrokinetic Turbine Runner	Weilong Guang, Jiale Pan, Qiang Liu, Jiahao Lu, Ran		
			Tao, Di Zhu, Ruofu Xiao		
139	17:30-17:45	Research and Application of an Intelligent System for Dredging Engineering Geological	71 I II'C II D' V' 'V V 1'II		
		Database Based on Exploration Data	Zheng Lu, Hui Sun, He Bai, Xiaowei Yan, Yuchi Hao		
18:00-18:15 Coffee Break					
18:15-20:00 Session: Multi-field coupling & Selected topics (and others) Chair: Beibei Xu (Northwest A&F University)					
4.5	18:15-18:30	Multi-channel deterioration trend prediction of pumping storage unit based on temporal graph	Xiangqu Xiao, Chaoshun Li		
45		convolution network			
143	18:30-18:45	Fault diagnosis method of rolling bearing based on MSSA-VMD algorithm	Tian Yu, Chaoshun Li		
	18:45-19:00	Assembly welding key points of a large Francis turbine runner	Hengqian Zhang, Wenshuang Wang, Jinsheng Chen,		
197			Peng Liu, Gaomeng Zhang, Zhipeng Tian, Yonghong		
			Lu		
347	19:00-19:15	Numerical investigation on fluid-solid interaction of large-scale centrifugal pumps for pump station			
			Shuai Liu, Yuhan Gao, Yongming Zhi, Lei Tan		
1.46	19:15-19:30	Research on modulation characteristics of multi-physical fields in typical rotating machine with	Zhengyang Liu, Tonghe Zhang, Yongxing Song, Bin		
146		eccentric air-gap faults	Huang, DazhuanWu		
20:00-22:00 <b>Dinner</b>					

## **Online connections:**

Tencent Meeting (VooV Meeting): ID: 381-643-144