

Program

Program of APCOW 2025

2025/12/15

Time	Activity	Location
9:00-12:00	Registration	1st Floor, Convention Center
13:30-14:00	Welcome Address & Group Photo	Conference Hall 2, 2F
14:00-14:45	Plenary Session: Breaking Waves on a Floating Offshore Wind Turbine (Keynotespeaker: Alistair Borthwick)	Conference Hall 2, 2F
14:45-15:30	Plenary Session: Bottleneck Technologies and Solution Cases in Offshore Wind Turbine Design (Keynote speaker: Joonmo Choung)	Conference Hall 2, 2F
15:30-16:00	Tea Break	Conference Hall 2, 2F
16:00-16:45	Industrial-Academic-Research Forum: The prospective of Offshore Wind Mixing with other energies	Conference Hall 2, 2F
16:45-17:30	Industrial-Academic-Research Forum: How to develop an Interdisciplinary degree program for offshore wind	Conference Hall 2, 2F

2025/12/16

Time	Activity	Location
9:00-10:10	Parallel Sessions	2nd and 4th Floors, Convention Center
10:10-10:35	Tea Break	2nd and 4th Floors, Convention Center
10:35-11:50	Parallel Sessions	2nd and 4th Floors, Convention Center
13:30-15:10	Parallel Sessions	2nd and 4th Floors, Convention Center
15:10-15:30	Tea Break	2nd Floor, Convention Center
15:30-16:15	Plenary Session: Outlook of Floating Offshore Wind Turbine Projects in Japan (Keynote speaker: Shigeo Yoshida)	Conference Hall 2, 2F
16:15-17:00	Plenary Session: Offshore Wind Turbine Aerodynamics Research in China: Status and Future Development (Keynote speaker: Wenzhong Shen)	Conference Hall 2, 2F
18:30-20:00	Awards Dinner	

2025/12/17

Time	Activity	Location
9:00-10:15	Parallel Sessions	4th Floor, Convention Center
10:15-10:35	Tea Break	4th Floor, Convention Center
10:35-11:50	Parallel Sessions	4th Floor, Convention Center
13:30-15:00	Parallel Sessions	4th Floor, Convention Center

Aerodynamics Session

Chair	Co-Chair	Time	Reporter	Report Title	Location	
12/16	Seiya Watanabe	Xiaobo Zheng	9:00-9:15	Xiaoqin Ni	Effects of Installation Angle on Flutter Instability Types of A Two-Dimensional Airfoil	405
			9:15-9:30	Jian Hu	The Influence of Aerodynamic Imbalance on the Flutter Limit of Large Wind Turbines	
			9:30-9:45	Kosuke Ureshino	Performance verification and application analysis of the two-dimensional Porous Disk model	
			9:45-10:00	Qi Chen	Study on the applicability of unsteady aerodynamic force correction model for large-scale wind turbine	
			10:00-10:15	Xinming Yang	Towards an efficient dynamic wake model for floating wind turbines	
12/16	Hyungyu Kim	Xingya Feng	10:35-11:00	Zhteng Gao	Wake and Load Analysis for High-Altitude Wind Farms Based on a Meso-Micro Scale Computational Method	405
			11:00-11:15	Xiaoyu Gong	Influence of two-turbine layout on downstream aerodynamic loads under wake-motion coupling in floating offshore wind turbines	
			11:15-11:30	Yousef Hussein	Evaluation of Lattice Boltzmann Method for Three-Dimensional Hill Wake Simulation	
			11:30-11:45	Shuxing He	Nonlinear Aeroelastic Analysis and Validation of Wind Turbine Blades Using a Geometrically Exact Beam Model	

Chair	Co-Chair	Time	Reporter	Report Title	Location	
12/16	Changhong Hu	Yichen Jiang	13:30-13:55	Yichen Jiang	VEROM for FOWT Simulation: Model Validation and Case Studies	405
			13:55-14:10	Seiya Watanabe	Effects of Anisotropic Gaussian Filters on Wind Turbine Wake Simulation Using Actuator Line-Lattice Boltzmann Method	
			14:10-14:25	Ji Qi	Evaluating turbine wake behaviors with a modified porous disk model and polynomial chaos expansion	
			14:25-14:40	Zhiyuan Qiu	Wake Redirection Control for Large-Scale Offshore Wind Farms Based on a 3D Dynamic Wake Model	
			14:40-14:55	Yuchen Liu	An Actuator Line Model for Diffuser Augmented Wind Turbine Simulation with OpenFOAM	
			14:55-15:10	Zhijia Suo	DES Simulation of Unsteady Aerodynamic and Wake Characteristics of a Floating Helical Darrieus-Φ Vertical Axis Wind Turbine	

Chair	Co-Chair	Time	Reporter	Report Title	Location	
12/17	Bofeng Xu	Zhiteng Gao	9:00-9:15	Keen Kuan Kong	Aerodynamic Investigation of a Floating Cross-Axis Wind Turbine (FCAWT) for Offshore Application	405
			9:15-9:30	Jing Sun	Minimum-dissipation model and symmetry-preserving discretization for scalar transport in a turbulent flow	
			9:30-9:45	Xinbao Wang	Experimental study of floating wind turbine aerodynamics based on similarity theory and model design	
			9:45-10:00	Hang Li	A Linearized Analytical Wind Turbine Wake Modelling Method Based on Parameter Optimization	
			10:00-10:15	Chunxu Wang	Research on Aerodynamic Performance of New Vertical Axis Wind Turbines	
			10:15-10:30	Songsong Yang	Numerical investigation on wake evolution and aerodynamic loads responses of floating wind turbines under coupled wind-wave excitation	

Hydrodynamics Session

Chair	Co-Chair	Time	Reporter	Report Title	Location		
12/16	Hao Chen	Lijun Zhang	9:00-9:15	Zixiang Shao	Numerical and Experimental Study on Shared Mooring for Combined Wind-Wave Energy Systems	Conference Hall 2, 2F	
			9:15-9:30	Min Gao	Hydrodynamic forces on a jacket structure under a 3D embedded focused wave in a random wave field		
			9:30-9:45	Shiwen Chen	OpenFOAM-Based Numerical Wave Tank for Hydrodynamic Response Analysis of Floating Offshore Wind Turbines		
			9:45-10:00	Joonmo Choung	Full-Cycle Validation of a 15-MW Floating Offshore Wind Turbine Substructure - Conceptual Design, Load Analysis, Structural Design, and Structural Evaluation		
			10:00-10:15	Daimeng Shang	A New Hydrodynamic Model for Highly Nonlinear Wave Loads on Monopile Structures		
	12/16	Junho Bang	Guan Lin	10:35-11:00	Hao Chen		Towards a Fully Coupled Aero-Hydrodynamic-Mooring CFD Model for Floating Offshore Wind Turbines
				11:00-11:15	Shang Yu		Experimental Study on the Effect of Salter Duck on the Motion Response of a Floating Offshore Wind Turbine Platform
				11:15-11:30	Javeria Ali		A semi-analytical study of a porous dissipative disk for resonance mitigation in a moonpool
			11:30-11:45	Qical Niu	High-Fidelity Hydrodynamic and Data-Driven Optimization of TLP Floaters		

Chair	Co-Chair	Time	Reporter	Report Title	Location	
12/16	Motohiko Murai	Harrif Santo	13:30-13:45	Yu Dong	A Variable Damping Simulation Framework for Floating Offshore Wind Platform Based on Viscosity Equivalent Reduced-Order Method	Conference Hall 2, 2F
			13:45-14:00	Hairui Jiang	Dynamic Response of Carbon Fiber Reinforced Polymers Mooring System for Floating Offshore Wind Turbines	
			14:00-14:15	Haonan Tian	Novel Centralized Mooring Damping System: Design and Numerical Simulation Verification	
			14:15-14:30	Mingshun Li	Submarine Cable Exposure State Recognition Based on Multi-Sensor Fusion and Hybrid Domain Features	
			14:30-14:45	Qianyue Chen	On computation of the second-order velocity potential of scattering waves	
			14:45-15:00	Chongyang Hu	Wake Characteristics of a Floating Wind Turbine Based on Wind-Wave Hydrodynamic Experiments	

Chair	Co-Chair	Time	Reporter	Report Title	Location	
12/17	Binzhen Zhou	Jiahao Chen	9:00-9:15	Zuli Nie	Influence of sway motion on the in-field blockage effect among floating offshore wind turbines	407/408
			9:15-9:30	Jiahao Chen	A Novel Coupling Framework for Considering the Nonlinear Hydrostatic and Hydrodynamic Effects of Floating Offshore Wind Turbines	
			9:30-9:45	Harrif Santo	Deterministic Prediction of Platform Motions to Improve Operability of Maintenance (Walk-to-Work) for Floating Offshore Wind turbines	
			9:45-10:00	Lijun Zhang	Research on scaled model tests of a 20MW semi-submersible wind turbine	
			10:00-10:15	Chih-Cheng Hsu	Numerical Simulation of Three Semi-Submersible Floating Offshore Wind Turbines under Towing Conditions	

Structural Dynamics Session

Chair	Co-Chair	Time	Reporter	Report Title	Location		
12/16	Joonmo Choung	Tian Li	9:00-9:15	Joonmo Choung	Update Report on FLOWStress Expanded User Manual, Integration with Nemo, and ULS Buckling and FLS Assessments	Conference Hall 3, 2F	
			9:15-9:30	Dong Ho Yoon	Fully Coupled Load Assessment Based on HydroQus-OpenFAST Coupling		
			9:30-9:45	Moonyoung Jeong	Crashworthiness Performance Evaluation of a FOWT Floater with High-Ductility Steel		
			9:45-10:00	Hyeongsu Lee	Development of ULS and FLS Strength Assessment Modules for Substructures of Bottom-Fixed Offshore Wind Turbines		
	12/16	Shoutu Li	Xiaobo Zheng	10:35-11:00	Tian Li		Aero-hydrodynamic Coupling Effects in Floating Offshore Wind Turbines
				11:00-11:15	Lee Junyoung		Numerical Investigation on Natural Frequency Phenomena for a 4.2 MW Offshore Wind Turbine Suction Bucket Using Bladed System Code
				11:15-11:30	Chih-Cheng Hsu		Dynamic Response of a Current Turbine under Towing Conditions
			11:30-11:45	Fuyin Cui	Conceptual Design and Dynamic Analysis of a Novel Suspended-Weight Floating Wind-Wave Hybrid System		

Chair	Co-Chair	Time	Reporter	Report Title	Location	
12/16	Jae Ho Jeong	Suxian Long	13:30-13:55	Suxian Long	Structural Optimization of a Floating Cross-Axis Wind Turbine (CAWT)	Conference Hall 3, 2F
			13:55-14:10	Zhenlong Wen	Integrated Design Method for Customized, Automatic and Intelligent Ultra-Large Wind Turbine Blades	
			14:10-14:25	Siqi Lai	Multi-Objective Design of a Semi-Submersible floating offshore wind turbines Parametric Modeling and 1:50 Basin Validation	
			14:25-14:40	Xukun Qing	Efficient prediction model for tower vortex induced vibration based on double-layer LSTM method	
			14:40-14:55	Jiakang Sun	Research on Extreme Value Prediction Methods for Tension Response of Mooring Systems in Large Floating Wind Turbines	
			14:55-15:10	Siqi Chen	Dynamic Response Characteristics of 20MW Floating Dual-Rotor Wind Turbines	

Chair	Co-Chair	Time	Reporter	Report Title	Location	
12/17	Yongkang Zhang	Mingxin Li	9:00-9:15	Yang Li	Wave Loading on Perforated Breakwater-Integrated OWC Systems: A Theoretical Study	406
			9:15-9:30	Yanqi Zhu	Experimental Investigation on Motion Responses of Floating Offshore Wind Turbines under 3D Wave and Wind-Swell Conditions	
			9:30-9:45	Yongkang Zhang	Research on key technologies and equipment for deepwater fixed-rod installation of large-capacity fixed-farm wind turbines	
			9:45-10:00	Jin Wang	Model Tests of a Novel Multi-Column Self-Installation Spar-type FOWT	
			10:00-10:15	Songxiang Wu	Nonlinear Vibrations of Flexible Monopile-Foundation Wind Turbines in Regular Waves	

Chair	Co-Chair	Time	Reporter	Report Title	Location	
12/17	Binrong Wen	Yuta Fukunaga	10:35-10:50	Mingxin Li	A novel maintenance strategy for offshore wind turbines considering turbine-specific heterogeneity in crack growth and failure probability	406
			10:50-11:05	Yuta Fukunaga	Fundamental Research on Stability of a Double-Donut Type Spar	
			11:05-11:20	Binrong Wen	Progress of Model Testing Technology for Floating Wind Turbines in SJTU	
			11:20-11:35	Erhu Hou	Numerical Analysis of Wave Field Disturbance Induced by an Oscillating Wave Energy Converter	

Wind Resource Session

Chair	Co-Chair	Time	Reporter	Report Title	Location		
12/16	Yong Yook Kim	Yanji Wei	9:00-9:25	Kyong-Hwan Kim	Technical Trends and KRISO's R&Ds on FOWT	407/408	
			9:25-9:40	Dachuan Feng	Lidar-measurement-assimilated LES of Atmospheric Gravity Waves		
			9:40-9:55	Zixiao He	A data-driven framework of wind resource assessment and wind turbine wake prediction		
			9:55-10:10	Yu Wang	Layout Analysis for Large Wind Farms Considering Atmospheric Conditions		
	12/16	Kyong-Hwan Kim	Dachuan Feng	10:35-10:50	Yong Yook Kim		Application of the Lattice Boltzmann Method to Analyse Turbulence Intensity in a Mountainous Wind Farm
				10:50-11:05	Yi Wen		Global offshore renewable resources and their complementary investigation
				11:05-11:20	Yanji Wei		Investigation of Wind-Sea Complementarity in the Northwest Pacific
				11:20-11:35	Xixian Yu		A Non-Gaussian Dynamic Wake Model for Accurate Power Prediction under Dynamic Wind Condition

Operational Strategies Session

Chair	Co-Chair	Time	Reporter	Report Title	Location		
12/16	Zhiqiang Hu	Yuming Yuan	9:00-9:25	Hongzhou	A Study on Dynamic Positioning Control of a Triangular Three-Thruster Craft for Assisting Multi-Bucket Jacket Wind Turbine Installation	406	
			9:25-9:40	Jie Liu	An active learning method Integrating hybrid neural network for remaining life prediction of offshore wind turbines		
			9:40-9:55	Hojin Yoon	Design of a Shared Suction Anchor under High Uplift Forces		
			9:55-10:10	Yuqing Hao	Design of a Pitch Angle Oscillation Control System for Wind Turbine Blade Dynamic Stall Simulation in Wind Tunnel		
	12/16	Hongzhuo Zhu	Yoon Hyeok Bae	10:35-10:50	Yoon Hyeok Bae		Comparative Study on Blade Pitch and Nacelle Yaw Control for Enhancing Weathervaning Performance of Floating Offshore Multi-Wind Turbines
				10:50-11:05	Shouxiang Xu		Explainable Artificial Intelligence-Based Analysis of Power Generation Influencing Factors for Offshore Wind Power
				11:05-11:20	Xiaoqing Nie		Wake Prediction in the Free Rotor Wake Method of Wind Turbines Based on BP Neural Network
				11:20-11:35	Boxuan Chen		Nonlinear Model Predictive Control of Hybrid Wave-Compensated Boarding Platforms for Efficient Offshore Wind Turbine Maintenance
			11:35-11:50	Jiangyuan Fang	Position And Posture Measurement Technology for Floating Offshore Wind Turbine Platform		

Chinese-Language Presentation

Chair	Co-Chair	Time	Reporter	Report Title	Location	
12/17	夏英凯	崔俊男	10:20-10:35	赵子祯	海上漂浮式风力机叶片调谐质量阻尼器惯性圈动力学建模及其优化设计	405
			10:35-10:50	杨宝鑫	“明阳天成号”漂浮式风机基础创新设计	
			10:50-11:05	郭浩宁	基于海上风电场实测数据的尾流解析模型适应性规律分析	
			11:05-11:20	陈紫薇	管缆绑扎状态态下脐带缆涡激振动响应分析	
			11:20-11:35	夏英凯	面向海洋风电场巡检的 UAV 路径规划与运动控制研究	
			11:35-11:50	陈凡	漂浮式海上风电动态海缆系统设计及关键技术	

Chair	Co-Chair	Time	Reporter	Report Title	Location	
12/17	夏英凯	崔俊男	13:30-13:45	吴思远	风电机组长柔叶片功率特性-轻量化-结构可靠性多目标优化设计	405
			13:45-14:00	崔俊男	基于非线性薛定谔方程高阶 Peregrine 解的极端波浪非线性演化与高次谐波研究	
			14:00-14:15	张培珍	阳江南鹏岛海域风电场运营期水下噪声分布特性	
			14:15-14:30	陈凡	不同悬挂点位置下动态海缆水动力仿真计算研究	
			14:30-14:45	刘威	水轮机运行不同步对风-流能源集成系统	
			14:45-15:00	陈紫薇	考虑海生物影响下的动态缆运动响应研究	