APCOW
ASIA PACIFIC CONFERENCE ON OFFSHORE WIND TECHNOLOGY

INHA UNIVERSITY

The 3rd Asia-Pacific Conference on Offshore Wind

APCOW 2026

(Preliminary 2nd)

PROGRAMME

13 – 17 December 2026

Inha University, Incheon,

Republic of Korea

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SCHEDULE AT A GLANCE

Date	Time	Duration (min)	Incheon Airport Hall (1st floor)	Room number 231 (2nd floor)
Dec 13 (Sun)	*16:00-20:00*	240	**Registration & Reception (Incheon Airport Hall Lobby)**	
Dec 14 (Mon)	*09:00-*		**Registration (Incheon Airport Hall Lobby)**	
	10:00-10:10	10	**VIP introduction & Welcome Speech by INHA University President (Incheon Airport Hall)**	
	10:10-10:40	30	**Plenary Speech by Incheon City (Incheon Airport Hall)**	
	10:40-11:10	30	**Keynote Speech by Orsted Korea (Incheon Airport Hall)**	
	11:10-11:40	30	**Keynote Speech by National University of Singapore (Incheon Airport Hall)**	
	11:40-13:00	80	**Lunch (Honestar building)**	
	13:00-14:40	100	**1-1. Wake & Farm Layout I**	**2-1. Turbine Design & Control**
	14:40-15:00	20	**Break**	
	15:00-16:40	100	**1-2. Mooring & Power Cable I**	**2-2. Wind Resource Assessment**
	16:40-17:00	20	**Break**	
	17:00-18:00	60	**1-3. Platform Design & Optimization I**	**2-3. Foundation & Geotechnical I**
Dec 15 (Tue)	*09:00-10:40*	100	**1-4. Wake & Farm Layout II**	**2-4. Foundation & Geotechnical II**
	10:40-11:00	20	**Break**	
	11:00-12:20	80	**1-5. Wake & Farm Layout III**	**2-5. Integrated Load Analysis I**
	12:20-14:00	100	**Lunch (Honestar building)**	
	14:00-15:20	80	**1-6. Platform Design & Optimization II**	**2-6. Structural Dynamics & Integrity**
	15:20-15:40	20	**Break**	
	15:40-17:00	80	**1-7. Mooring & Power Cable II**	**2-7. O&M, Digital Twin & AI**
	18:00-		**Banquet (Holiday Inn Ballroom Hall)**	
Dec 16 (Wed)	*09:00-10:40*	100	**1-8. Wake & Farm Layout IV**	**2-8. MetOcean & Asset Assessment**
	10:40-11:00	20	**Break**	
	11:00-12:20	80	**1-9. Mooring & Power Cable III**	**2-9. Integrated Load Analysis II**
	12:20-14:00	100	**Lunch (Honestar building)**	
	14:00-15:40	100	**1-10. Hydrodynamics**	**2-10. Installation, O&M & Economics**
	16:20-		**Awards & Lucky Draw Events (Incheon Airport Hall)**	
Dec 17 (Thu)	*09:00-12:00*	180	**Technical Tour**	

SESSIONS IN ALPHABETICAL ORDER

Foundation & Geotechnical I — Dec 14 (Mon), Session 2-3, 17:00-18:00, Room: R232

Foundation & Geotechnical II — Dec 15 (Tue), Session 2-4, 09:00-10:40, Room: R232

Hydrodynamics — Dec 16 (Wed), Session 1-10, 14:00-15:40, Room: R231

Installation, O&M & Economics — Dec 16 (Wed), Session 2-10, 14:00-15:40, Room: R232

Integrated Load Analysis I — Dec 15 (Tue), Session 2-5, 11:10-12:30, Room: R232

Integrated Load Analysis II — Dec 16 (Wed), Session 2-9, 11:10-12:30, Room: R232

MetOcean & Asset Assessment — Dec 16 (Wed), Session 2-8, 09:00-10:40, Room: R232

Mooring & Power Cable I — Dec 14 (Mon), Session 1-2, 15:00-16:40, Room: R231

Mooring & Power Cable II — Dec 15 (Tue), Session 1-7, 15:50-17:10, Room: R231

Mooring & Power Cable III — Dec 16 (Wed), Session 1-9, 11:10-12:30, Room: R231

O&M, Digital Twin & AI — Dec 15 (Tue), Session 2-7, 15:50-17:10, Room: R232

Platform Design & Optimization I — Dec 14 (Mon), Session 1-3, 17:00-18:00, Room: R231

Platform Design & Optimization II — Dec 15 (Tue), Session 1-6, 14:00-15:20, Room: R231

Structural Dynamics & Integrity — Dec 15 (Tue), Session 2-6, 14:00-15:20, Room: R232

Turbine Design & Control — Dec 14 (Mon), Session 2-1, 13:00-14:40, Room: R232

Wake & Farm Layout I — Dec 14 (Mon), Session 1-1, 13:00-14:40, Room: R231

Wake & Farm Layout II — Dec 15 (Tue), Session 1-4, 09:00-10:40, Room: R231

Wake & Farm Layout III — Dec 15 (Tue), Session 1-5, 11:10-12:30, Room: R231

Wake & Farm Layout IV — Dec 16 (Wed), Session 1-8, 09:00-10:40, Room: R231

Wind Resource Assessment — Dec 14 (Mon), Session 2-2, 15:00-16:40, Room: R232

DETAILED PROGRAMME

Sunday, 13 December 2026

16:00-20:00
Registration & Reception

Monday, 14 December 2026

09:00-	
Registration (Incheon Airport Hall Lobby)	
10:00-10:10	
VIP introduction & Welcome Speech by INHA University President (Incheon Airport Hall)	
10:10-10:40	
Plenary Speech by Incheon City (Incheon Airport Hall)	
10:40-11:10	
Keynote Speech by Orsted Korea (Incheon Airport Hall)	
11:10-11:40	
Keynote Speech by National University of Singapore (Incheon Airport Hall)	
11:40-13:00	
Lunch (Honestar building)	
13:00-14:40	
Incheon Airport Hall **1-1. Wake & Farm Layout I** Session Chairs: Takanori Uchida	R231 **2-1. Turbine Design & Control** Session Chairs: Jae-Ho Jeong
Experimental and numerical study on wake interaction between two pitching floating wind turbines *Koichiro Shibuya*[1], Masaki Inui[1], Shoki Ohgi[2], Tadasuke Yoshida[1], Yoshihiro Taniyama[2], Takanori Uchida[3]* [1] Kanadevia Corporation [2] Toshiba Corporation [3] Kyushu University **Evaluation of a POD-based reduced-order model for spatial reconstruction of wind turbine wake flow field from limited observations** *Shoki Ohgi*[1], Yasuhiro Kanishima[1], Yuki Fukatani[1], Keita Saito[1], Yoshihiro Taniyama[1], Hironori Hayashi[2], Susumu Shimada[3]* [1] Toshiba Corporation [2] Japan Weather Association [3] National Institute of Advanced Industrial Science and Technology (AIST) **Large-eddy simulations of an offshore wind farm considering the effects of swell propagation**	**Wind tunnel experiments for evaluating aerodynamic characteristics of multiple ducted porous disk models** *Koichi Watanabe*[1], Takanori Uchida[1], Shigeo Yoshida[1]* [1] Kyushu University **DMST-based coupled analysis of a floating VAWT with blade pitch control** *Jeongbin Kim*[1], Yushin Kim[1], Jisoo Jeong[1]* [1] Marine Tech-In **Leveraging virtual camber morphing to reduce torque fluctuation in vertical axis wind turbine** *Ezedin Yimam[1], Buyung Kosasih*[1], Andrew Johnstone[1]* [1] University of Wollongong **Pareto-optimized multi-objective adaptive control for floating offshore wind turbines** *Yarong Zhou[1], Ye Li*[1]*

*Sung Goon Park**[1]
[1] Seoul National University of Science and Technology

Reproduction of floating offshore wind turbine wakes using porous disks in the boundary layer wind tunnel
*Soshi Nishii**[1], *Ao Takada*[2], *Keiji Matsushima*[2], *Koichi Watanabe*[2], *Takanori Uchida*[2]
[1] Kyushu University [2] Research Institute for Applied Mechanics

Wind tunnel reproduction of cluster wake flows using porous disks
*Ryoma Nawta**[1], *Ao Takada*[2], *Keiji Matsushima*[2], *Koichi Watanabe*[2], *Takanori Uchida*[2]
[1] Kyushu University [2] Research Institute for Applied Mechanics

[1] Southern University of Science and Technology

Modification of inflow conditions of Beddoes-Leishman dynamic stall model for actuator line model
Koji Matsuoka[1], *Shigeo Yoshida**[1]
[1] Saga University

Investigation of Unsteady Characteristics and Frequency Property of Wind Turbine Blunt Airfoils Near Stall Region
Guangxing Guo[1], *Yunpeng Xu*[1], *Li Xue*[2], *Lei Zhang*[3,4], *Ye Li**[1]
[1] Southern University of Science and Technology [2] Rensselaer Polytechnic Institute [3] Goldwind Science & Technology Co., Ltd. [4] Institute of Engineering Thermophysics, Chinese Academy of Sciences

14:40-15:00

Coffee Break
(Incheon Airport Hall Lobby)

15:00-16:40

Incheon Airport Hall
1-2. Mooring & Power Cable I
Session Chairs: Hyun-Kook Kim

Equivalent stress-based time-domain fatigue strength assessment of inter-array dynamic cables for FOWTs
Tri-Hoang Nguyen[1], *Hyun Kyung Kim*[2], *Joonmo Choung**[1]
[1] Inha University [2] Taihan Cable & Solution

Numerical investigation of slack-to-taut tendon response in a 15 MW tension-leg platform floating wind turbine
Niu Qicai1[1], *Hongzhong Zhu*[2], *Changhong Hu**[2]
[1] Kyushu University [2] Research Institute for Applied Mechanics

Development of a disconnectable mooring system for a 10MW-class floating offshore wind turbine
Hyun-Kook Kim[1], *Chan-Il Park*[1], *Sang-Ho Cha*[1], *Soon Bin Park**[1],
[1] Inc. KOMS

Peak mooring load mitigation for floating offshore wind turbines using a passive tension-triggered winch mechanism
Yeonbin Lee[1], *Jeongbin Kim*[2], *Eungsoo Kim*[3], *Kwang-il Son*[4], *Yoon Hyeok Bae**[1]
[1] Hongik University [2] Marine Tech-In Co. [3] POSCO [4] Offshore Mooring System Co.

Submarine power cables for Taiwan's offshore wind: life cycle engineering considerations, local capability and research needs
Chi-Yen Lee[1], *Yang-Kai Fan*[1], *Chun-Cheng Wang*[1], *Yu-En Ke*[1], *Shun-Han Yang**[1],
[1] National Taiwan University

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2-2. Wind Resource Assessment
Session Chairs: Garlapati Nagababu

A study of wind speed field non-uniformity due to topography using CFD with LES at offshore wind sites near the coast
*Susumu Takakuwa**[1], *Takanori Uchida*[2]
[1] ENEOS Renewable Energy Corporation [2] Kyushu University

Hybrid statistical-machine learning bias correction for offshore wind climate projections in the Indian offshore region
*Garlapati Nagababu**[1], *Surendra Singh Kachhwaha*[1], *Harish Puppala*[2], *Surisetty V V Arun Kumar*[3]
[1] Pandit Deendayal Energy University [2] SRM University AP [3] Space Applications Centre

A reanalysis-based multi-reference machine learning strategy for measure-correlate-predict
*Sabin Stefanov**[1], *Daniel Gallacher*[2], *Alasdair McDonald*[1], *Ajit C. Pillai*[3], *Michael Togneri*[4]
[1] University of Edinburgh [2] John Wood Group PLC [3] University of Exeter [4] University of Swansea

A hybrid QDMW-QRF framework for bias correction of CMIP6 offshore wind speed projections over the Indian offshore region
Preksha Patwa[1], *Surendra Singh Kachhwaha*[1], *Harish Puppala*[2], *MVV Prasad Kantipudi*[3], *Surisetty V V Arun Kumar*[4], *Garlapati Nagababu**[1]
[1] Pandit Deendayal Energy University [2] SRM University AP [3] Symbiosis Institute of Technology [4] Space Applications Centre

Offshore high-wind corridors induced by coastal terrain in the northern south china sea revealed by high-resolution WRF downscaling
Yu Wang[1], *Ye Li**[1],
[1] Southern University of Science and Technology

16:40-17:00

Coffee Break
(Incheon Airport Hall Lobby)

17:00-18:00

Incheon Airport Hall **1-3. Platform Design & Optimization I** Session Chairs: Daewon, Seo	R231 **2-3. Foundation & Geotechnical I** Session Chairs: Jae-Ho Jeong
Preliminary design of conceptual 25 MW semisubmersible FOWT platform using an upscaling approach *Salim Abdullah Bazher[1], Woongshik Nam[1], Jackyou Noh[1], Jungkeun Oh[1], Daewon, Seo*[1]* [1] Kunsan National University **Substructure design optimization of a 15 MW FOWT for the Ulsan offshore area** *HyunJung Park[1], Kwang Hyo Jung*[1], Yun Suk Chung[2], Dong Woo Jung[3]* [1] Pusan National University [2] Bureau Veritas M&O Korea [3] Korea Research Institute of Ships and Ocean Engineering **Systematic upscaling and surrogate-based multi-objective design optimization of a semi-submersible floating offshore wind platform** *Soobin Lee*[1], Hyeok-Jun Koh[1], Ji-su Lim[1], Young Hoon Shin[1], Kwansu Kim[1]* [1] Institute for Advanced Engineering	**Assessment of depth-varying ground motion effects in offshore wind turbine design using a fully integrated simulation tool** *Sigurd Jensen Corydon*[1], Armando Alexandre[2], Ali Bakhshandeh[2], Ko Matias Adrian Kosasih[3], Aswin Nagarajan Sivakumarr[4]* [1] DNV Denmark A/S [2] DNV Services UK Limited [3] DNV AS Japan Branch [4] DNV Renewable Certification GmbH **Numerical investigation on natural frequency phenomena for a 4.2 MW Offshore wind turbine suction bucket using bladed system code** *Jun-Young Lee[1], Dong-Ho Cho[2], Jae-Ho Jeong*[1]* [1] Chung-Ang University [2] KEPCO Research Institute **Drilling solutions for bottom-fixed offshore wind foundations and export cable landfalls** *Marc Peters*[1]* [1] Herrenknecht AG

Tuesday, 15 December 2026

09:00-10:40

Incheon Airport Hall **1-4. Wake & Farm Layout II** Session Chairs: Shiu-Wu Chau	R231 **2-4. Foundation & Geotechnical II** Session Chairs: Yun Wook Choo
Reproduction of wind turbine wake characteristics using porous disks in the thermally stratified wind tunnel and its application to wind farms *Taiyu Yamamoto[1], Ao Takada[2], Keiji Matsushima[2], Koichi Watanabe[2], Takanori Uchida*[2]* [1] Kyushu University [2] Research Institute for Applied Mechanics **Physics-aware LLM-guided equation discovery for wind turbine wake modeling** *Kenji Ono*[1], Takanori Uchida[1]* [1] Kyushu University **Numerical prediction of wake development downstream of a 2-MW floating offshore wind turbine under varying wind speeds** *Chun-Liang Tan[1], Shiu-Wu Chau*[1]* [1] National Taiwan University **Techno-economic offshore wind farm layout optimization in India using the heat transfer search algorithm** *Garlapati Nagababu*[1], Jaydeep Patel[1], Harish Puppala[2], MVV Prasad Kantipudi[3], Surisetty V V Arun Kumar[4]* [1] Pandit Deendayal Energy University [2] SRM University AP [3] Symbiosis Institute of Technology [4] Space Applications Centre **Effectiveness of wake steering in relation to turbine distance** *Shotaro Watanabe*[1], Susumu Takakuwa[1], Keiichiro Watanabe[1], Takanori Uchida[1]* [1] ENEOS Renewable Energy Corporation	**Reliability-based pile running prediction for large-diameter monopiles using CPT-SRD and GAMLSS** *Junhao Huang[1], Yong Fu*[1], Shi He[2], Zhenghong Su[1]* [1] Southern University of Science and Technology [2] Shanghai Investigation **Assessment of pisa reliability for monopile design in sand beyond its original calibration range using HSSMALL model** *Amin Ghotbi*[1], Farid Fazel Mojtahedi[1], Amin Barari[1,2], Hadi Ajorlou[3], Dilan Robert[1], Mohammad Aminpour[1]* [1] RMIT University [2] Aalborg University [3] Kleinfelder **CPT-based shear-wave velocity prediction in low-I_{pzo} offshore soils: regional correlations and data-driven modelling** *Farid Fazel Mojtahedi[1], Amin Barari[2], Amin Ghotbi[1], Dilan Robert[1], Mohammad Aminpour*[1]* [1] RMIT University [2] Aalborg University **Seismic response of fixed jacket substructure for offshore wind turbine** *Angelica Gilo[1], Yun Wook Choo*[1]* [1] Kongju National University

10:40-11:10

Coffee Break
(Incheon Airport Hall Lobby)

11:10-12:30

Incheon Airport Hall
1-5. Wake & Farm Layout III
Session Chairs: Changhong Hu

Study on wake stability of flexible blades of the floating offshore wind turbine in platform pitching motion
Bofeng Xu[*1], *Dingwen Fan*[1], *Zihao Song*[1], *Qiyuan Liang*[1]
[1] Hohai University

Wind turbine wake simulations using the GPU-accelerated lattice Boltzmann Solver LBGX
Seiya Watanabe[*1], *Changhong Hu*[1]
[1] Research Institute for Applied Mechanics

Lattice Boltzmann method simulation of the wake interaction between two wind turbines and a symmetrical hill
Yousef Hussein[*1], *Seiya Watanabe*[2], *Changhong Hu*[2], *Takanori Uchida*[2]
[1] Kyushu University [2] Research Institute for Applied Mechanics

A coupled lattice Boltzmann–OpenFAST framework for aerodynamic load and wake prediction of floating offshore wind turbines
Changhong Hu[*1], *Haibo Sun*[2], *Seiya Watanabe*[1]
[1] Kyushu University [2] Research Institute for Applied Mechanics

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2-5. Integrated Load Analysis I
Session Chairs: Beomil Kim

An active learning kriging method for maximum fatigue damage estimation of floating wind turbines considering wind-wave misalignment
Chao Ren[*1], *Xiaosen Xu*[2], *Yihan Xing*[3]
[1] South China University of Technology [2] Jiangsu University of Science and Technology [3] University of Stavanger

Fatigue load and dynamic responses of a 15-MW floating wind turbine under realistic typhoon
Jia-Kai Lam[1], *Nan-You Lu*[*1]
[1] National Taiwan University

A comparative study on fully-coupled load-stress analysis and load component-based stress combination methods for FOWT floaters
DongHo Yoon[1], *Joonmo Choung*[*1]
[1] Inha University

Time-domain structural analysis of FOWT substructures using stress composition
Gi-young Jeon[*1], *Beomil Kim*[1], *Kyoungtea Kim*[1], *Jeongbin Kim*[2]
[1] Korean Register [2] Marin Tech-In

12:30-14:00

Lunch
(Honestar building)

14:00-15:20

Incheon Airport Hall
1-6. Platform Design & Optimization II
Session Chairs: Youngjae Yu

Numerical modeling and stability analysis of floating dual-rotor VAWT
Xiangqian Zhu[*1], *MD ATIUR RAHMAN*[1], *Qing'an Li*[2], *Zhigang Zhang*[1], *Ruiyang Cao*[1], *Jin-Hwan Choi*[3], *Wan-Suk Yoo*[4]
[1] Shandong University [2] Chinese Academy of Sciences [3] Kyunghee University [4] Pusan National University

Stability optimization and dynamic response analysis of a novel counter-rotating axis floating turbine in the Taiwan strait
Zi-Yi Lee[*1], *Yi-Jia, Shih*[1], *Chin-Pao, Chu*[2], *Shang-Hua, Yu*[2]
[1] National Kaohsiung University of Science and Technology [2] Metal Industries Research & Development Centre

Development of an integrated design-analysis-optimization framework for large-class floating offshore wind turbine floaters
Youngjae Yu[*1], *Sanglae Lee*[1]
[1] Korean Register

Development of optimization software for fixed offshore wind turbine jacket substructures

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2-6. Structural Dynamics & Integrity
Session Chairs: Jae Hoon Seo

partitioned fluid–structure interaction modelling of construction-stage cross-wind response of a wind-turbine tower
Kun Fu[1], *Bin Lu*[1], *Qiusheng Li*[*1]
[1] City University of Hong Kong

Evaluation of intact and damage stability of a 15MW semi-submersible floating offshore wind turbine considering ship collision
Sang-Hyun Park[1], *Young-Jae Yu*[2], *Sang-Rai Cho*[*1]
[1] UlsanLab Inc. [2] Korean Register

Ship collision safety assessment of 15MW floating offshore wind turbines based on collision limit curve
Jongchan Lee[1], *Eungsoo Kim*[2], *Joonmo Choung*[*1]
[1] Inha University [2] Steel Solution R&D Center

Floquet-based modal analysis of floating wind turbines and the bias of multi-blade-coordinate averaging
Jae Hoon Seo[*1]
[1] Inha University

Hyeongsu Lee[1], *Joonmo Choung**[1] [1] Inha university	
15:20-15:50	
Coffee Break (Incheon Airport Hall Lobby)	
15:50-17:10	
Incheon Airport Hall **1-7. Mooring & Power Cable II** Session Chairs: Soonseok Song	R231 **2-7. O&M, Digital Twin & AI** Session Chairs: Hyungyu Kim
Per-wire fatigue assessment of a dynamic power cable across a sea-state scatter using the open cross-section framework CableXsec *Jae Hoon Seo**[1] [1] Inha University **Characterization of catenary mooring systems for a 15 MW FOWT under Ulsan metocean conditions** *Min Jun Lee*[2], *Seung Jae Lee**[1], *Hae Young Lim*[1], *Kwan Woo Park*[1] [1] Tsinghua University [2] Korea Maritime and Ocean University **Stability analysis of a moored floating spar using a global lumped-mass formulation** *Wenyan Gu*[1], *Xiangqian Zhu**[1], *Xinming Wei*[1], *Wan-Suk Yoo*[2] [1] Shandong University [2] Pusan National University **Coupled CFD-MoorDyn Simulations for floating offshore wind turbines** *Younguk Do*[1], *Gyeongseo Min*[1], *Haechan Yun*[1], *Kangmin Kim*[1], *KeoungHyun Jung*[1], *Mingi Kim*[1], *Seunghee Song*[1], *Soonseok Song**[1] [1] Inha University	**Validation of a nacelle-mounted lidar and assessment of SCADA-based inflow measurement** *Hiroyo Mochizuki**[1], *Rintaro Fujikawa*[1], *Keiichiro Watanabe*[1], *Takanori Uchida*[2] [1] ENEOS Renewable Energy Corporation [2] Kyushu University **Effects of SCADA wind direction measurement error on wind turbine loads and virtual main bearing model-based state prediction** *Hyungyu Kim**[1], *Taehong Min*[1] [1] Institute for Advanced Engineering **Stress-field inference for floating offshore wind turbine platforms based on dominant modal reconstruction and residual POD compensation** *Jingwen Lu*[1], *Yuchao Yuan**[1], *Li Guo*[1], *Wenyong Tang*[1] [1] Shanghai Jiao Tong University **Real-time time-series stress reconstruction of a 3MW offshore wind turbine substructure using the virtual sparse sensing method** *Na-Yeong Han*[1], *Ye-Jin Kim*[1], *Minsung Chun*[2], *Chanhyun Park*[2], *Hyun-Sung Kim*[2], *Seung-Hwan Boo**[1] [1] National Korea Maritime & Ocean University [2] Samsung Heavy Industries Co.
18:00-	
Banquet **(Holiday Inn Ballroom Hall)**	

Wednesday, 16 December 2026

09:00-10:40	
Incheon Airport Hall **1-8. Wake & Farm Layout IV** Session Chairs: Kanghee Lee	R231 **2-8. MetOcean & Asset Assessment** Session Chairs: Moonok Kim
Floating offshore wind turbine repositioning using wave energy converters connected to mooring lines *Hongzhong Zhu**[1], *Changhong Hu*[1], *Takanori Uchida*[1], *Ye Li*[2] [1] Kyushu University [2] Southern University of Science and Technology **Motion-coupled wake analysis of floating offshore wind turbines** *Ching-Yeh Hsin**[1], *Ping-Sen Chou*[1], *Zheng-Zhung Huang*[2], *Shang-Sheng Chin*[2] [1] National Taiwan Ocean University [2] Ship and Ocean Industries R&D Center	**Sensor-data-based remaining life prediction of operating structures with analytical validation** *Moonok Kim**[1], *Beomsik Kim*[1], *Sungsoo Lim*[2] [1] SPEC Engineering Y&P Co. [2] TAESUNG S&E **Analysis of typhoon-induced waves at offshore wind farm sites using WRF-SWAN coupled modeling** *Po-Hsun Feng*[1], *Nan-You Lu**[1] [1] National Taiwan University **Metocean conditions for Ulsan offshore wind farm** *Syed Hasan*[1], *Danny Golden**[1], *Tom Doyle*[1] [1] Dublin Offshore Technology

A CFD framework for efficient wind turbine wake prediction using advanced actuator methods and turbulence calibration
Woobeom Han[1], Dahye Choi[1], Kanghee Lee[*1]*
[1] Korea Marine Equipment Research Institute

Effects of six-degree-of-freedom platform motion on annual energy production and layout optimization of floating offshore wind farms
You-Ni Xu[1], Cheng-Je Chu[1], Yi-Hsiang Yu[*1]*
[1] National Yang Ming Chiao Tung University

Coupled Effects of Relative Turbine Position and Platform Motion on Downstream Aerodynamics in Floating Offshore Wind Farms
Yihai Lu[12], Xuanlin Zhao[1], Xiaoxia Gao[*1], Zhonghe Han[1]*
[1] North China Electric Power University [2] Hebei Construction & Investment Offshore Wind Power Co., Ltd.

Characterization of typhoon-induced wind profiles for floating offshore wind turbines in the sea of Japan: a case study of typhoon Songda (2004)
Ebsa Berhanu Hateu[*1], Chikako Fujiyama[1], Jiaqi Wang[1], Khin Myat Wai[1]*
[1] Yokohama National University

Early lightning warning for coastal wind farms: thundercloud localization by fusing two electric field mills with wind direction
Jeong-Min Woo[*1]*
[1] Incheon National University

10:40-11:10

Coffee Break
(Incheon Airport Hall Lobby)

11:10-12:30

Incheon Airport Hall
1-9. Mooring & Power Cable III
Session Chairs: Hedy Yang

Ultimate limit state analysis of a hybrid taut-mooring system with synthetic fiber ropes for a wind-wave energy system
Yang-Kai Fan[1], Yu-En Ke[1], Hao-Wei Sun[1], Ting-Jung Kuo[2], Wei-Ting Zhoa[3], Shun-Han Yang[*1]*
[1] National Taiwan University [2] Ming Chuan University [3] National Kaohsiung University

Numerical assessment of bend restrictor effects on dynamic cable fatigue
Chun-Cheng Wang[1], Yi-Huei Huang[*2], Shun-Han Yang*[*1], Wei-Te Chen[2]*
[1] National Taiwan University [2] Metal Industries Research & Development Centre

Design refinement of shared mooring and shared anchor systems for floating offshore wind turbine arrays at intermediate water depths
Hao Huang[1], Yi-Hsiang Yu[*1], Yan-Lin Chen[1]*
[1] National Yang Ming Chiao Tung University

Mooring system–seabed interaction: new insights into novel anchors
Shengjie Rui[*1]*
[1] National University of Singapore

R231
2-9. Integrated Load Analysis II
Session Chairs: Yoon Hyeok Bae

Development of an aerodynamic response database for real-time hybrid testing of floating vertical-axis wind turbines
Jaehoon Kim[1], Yeonbin Lee[1], Yoon Jin Ha[2], Jeong-Seok Kim[2], Sewan Park[3], Yoon Hyeok Bae[*1]*
[1] Hongik University [2] Korea Research Institute of Ships and Ocean Engineering (KRISO)

Time-domain reconstruction of sectional loads in semi-submersible floating wind turbine substructures using hierarchical measurable responses
Junfeng Qiu[1], Shuxin Wang[1], Huajun Li[1], Shuaishuai Wang[*1]*
[1] Ocean University of China

A hydroelastic dynamic analysis method for floating offshore wind turbines
Sungjun Park[*1], Youjin Yim[2], Hyungtae Lee[2], Johyun Kyoung[2], Jang Kim[2], Hyebin Lee[1], Minhan Oh[1], Jaemin Jung[1]*
[1] HD Hyundai Heavy Industries [2] Front Energies

Implementation and Numerical Verification of an OpenFAST–WECSim Coupling Framework for Floating Offshore Wind Turbines
Yunpeng Xu[1], Ye Li[*1]*
[1] Southern University of Science and Technology

12:30-14:00

Lunch
(Honestar building)

14:00-15:40

Incheon Airport Hall
1-10. Hydrodynamics
Session Chairs: Yoon-Jin Ha

R231
2-10. Installation, O&M & Economics
Session Chairs: Young-Ho Lee

CFD study on the nonlinear motion characteristics of a tension-leg floating offshore wind platform
Yoon-Jin Ha[1], *Jeong-Seok Kim*[1], *Kyong-Hwan Kim**[1]
[1] Korea Research Institute of Ships and Ocean Engineering

Numerical investigation of green water effects on the motion responses of a 5-MW floating offshore wind turbine in extreme sea states
Po-Yun Pai[1], *Shiu-Wu Chau**[1]
[1] National Taiwan University

Experiment on motion responses of semi-submersible floating wind turbine platform under severe Stochastic Waves
Pin-Yuan Huang[1], *Tsung-Yueh Lin**[1], *Hao-Cheng Hsueh*[1]
[1] National Taiwan University

A time-domain framework for baseline global and local motion prediction of a suspension-equipped crew transfer vessel
*Jialin Han**[1], *Motohiko Murai*[1]
[1] Yokohama National University

Effect of heave plate size on the hydrodynamic response of a 15 MW semi-submersible floating offshore wind turbine
Kangsoo Cho[1], *Weoncheol Koo**[1], *Sanghwan Heo*[1]
[1] Inha University

Effects of towing schemes on the wet-towing performance of two semi-submersible floating offshore wind turbines
Min-Ju Tsai[1], *Shiu-Wu Chau**[1]
[1] National Taiwan University

A fundamental study on the response characteristics of a double-donut-type spar buoy in waves during the lowering of LT
*Sora Yoneda**[1], *Motohiko Murai*[1], *Jialin Han*[1], *Hajime Miyazaki*[1]
[1] Yokohama National University

Dynamic displacement reduction and mooring line load trade-off of the ChuTieCell mooring system: a numerical study on a UMaine 15MW floating offshore wind turbine
*Ho-seong Yang**[1], *Young-Ho Lee*[1], *Woo-chul Jung*[1], *Ho-keun Kang*[1]
[1] Korea Maritime and Ocean University

Design of floating offshore wind energy hub functions as energy and O&M hub
*Yong Yook Kim**[1], *Dongmyung Im*[1], *Jungeun An*[1], *Miho Park*[1], *Taejoong Kwon*[2], *SangGil Lee*[3], *Sangsung Shin*[4], *Joonhyuk Bae*[5]
[1] Institute for Advanced Engineering [2] Dong Yang Engnineering
[3] ZenTech E&C [4] Seho Engineering [5] Green Energy Institute

16:20-

Awards & Lucky draws

Awards

Best paper award	Best presentation award



Apple Watch SE3



Apple AirPods 5

Lucky draws

1st prize (1 winner)	2nd prize (2 winners)	3rd prize (2 winners)



Apple iPAD Air



Apple Watch SE3



Apple AirPods 5

Thursday, 17 December 2026

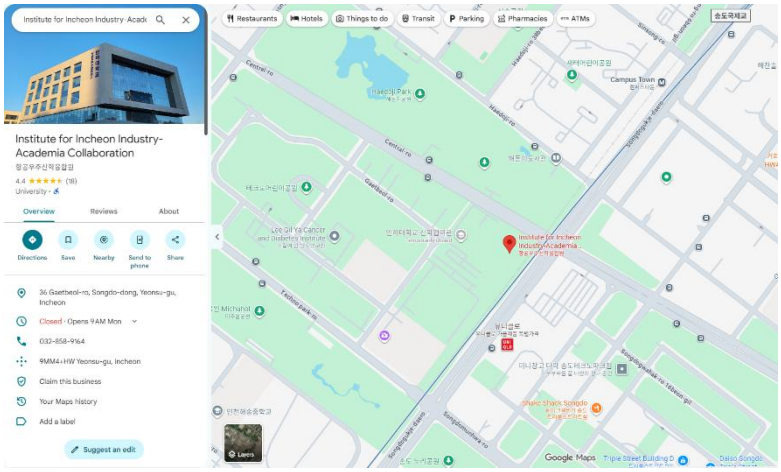
09:00-12:00
Technical Tour (Sihwa tidal power plant & Hanhwa Ocean towing tank)

*Please be advised that the presentations in grey-color are currently unregistered as of October 10th. Those are subject to cancellation unless early bird registration by 15th October or standard online registration by the end of October is completed.

VENUE & DIRECTIONS

Institute for Incheon Industry-Academia Collaboration, Inha University

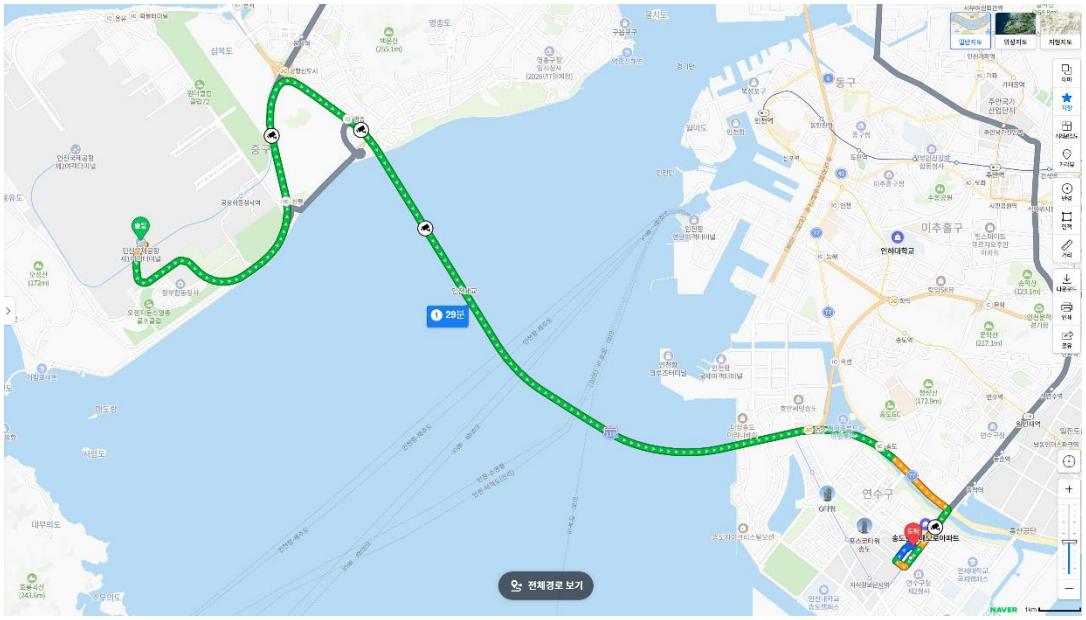
36 Gaetbeol-ro, Yeonsu-gu, Incheon, Republic of Korea



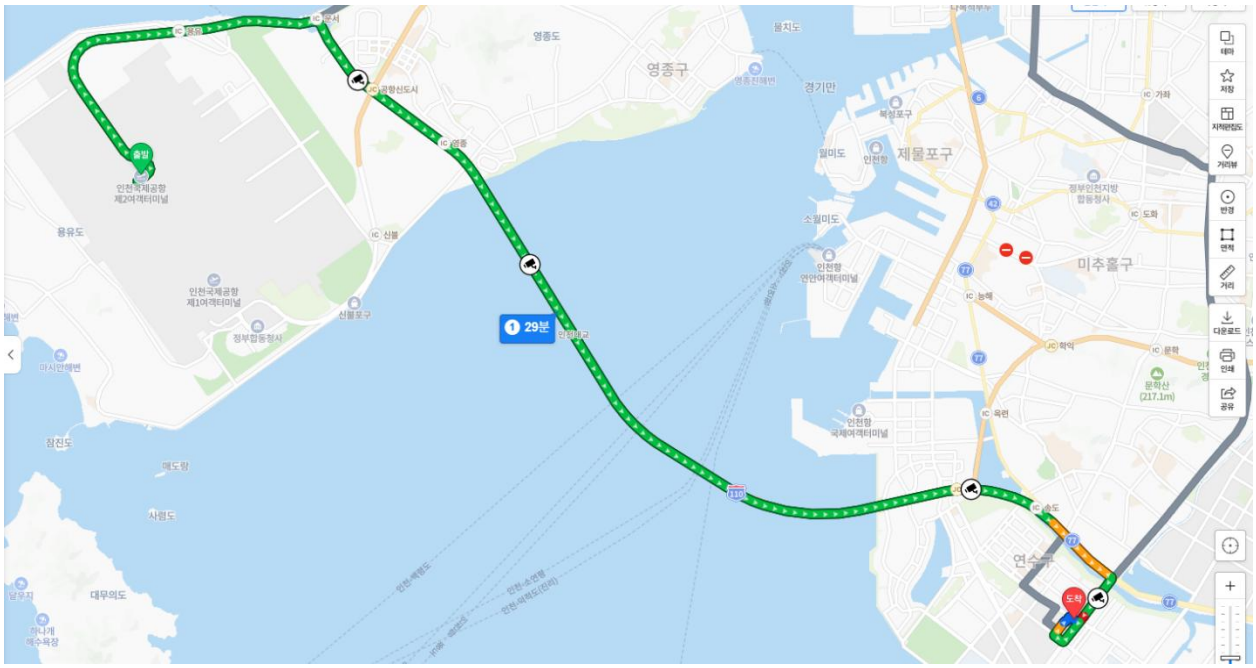
From the Airports

From Incheon International Airport (ICN) T1 & T2

- ✓ 30 minutes by car/taxi from T1 and T2 with costs 20~25 USD
- ✓ 1 hour and 1.5hour by city bus from T1 and T2 (City buses allow to take only cabin bags)
- ✓ Metro is not recommended



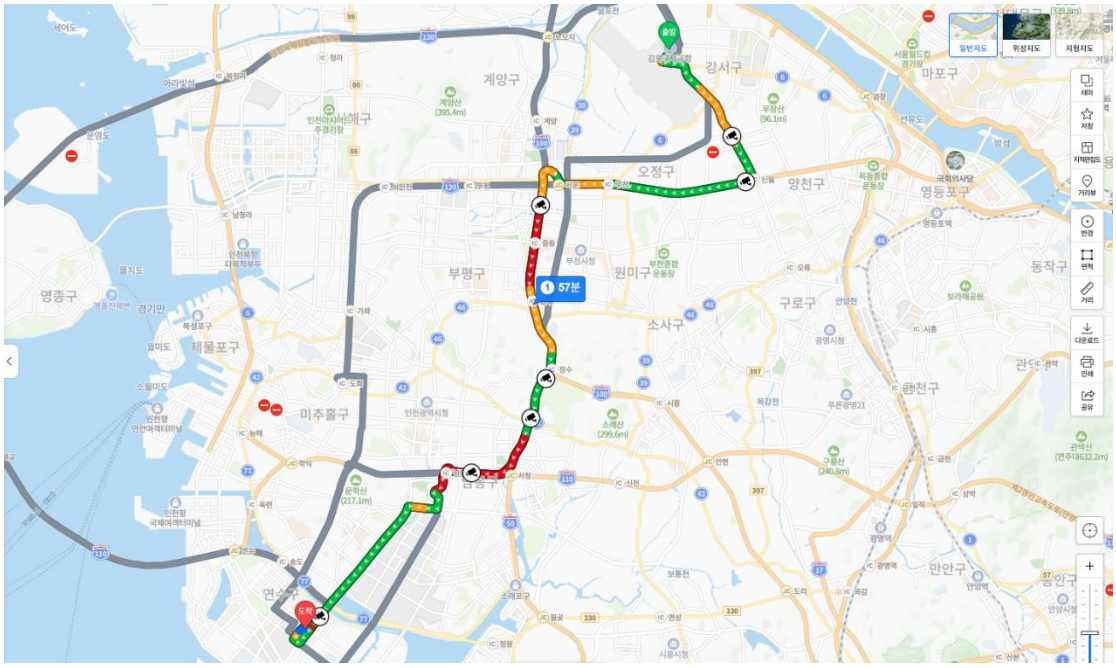
From Incheon International Airport (ICN) T1



From Incheon International Airport (ICN) T2

From Gimpo International Airport (GMP)

- ✓ 60 minutes by car/taxi with costs 25~30 USD
- ✓ 80 minutes by metro including one transfer
- ✓ City buses are not recommended.



From Gimpo International Airport (GMP)

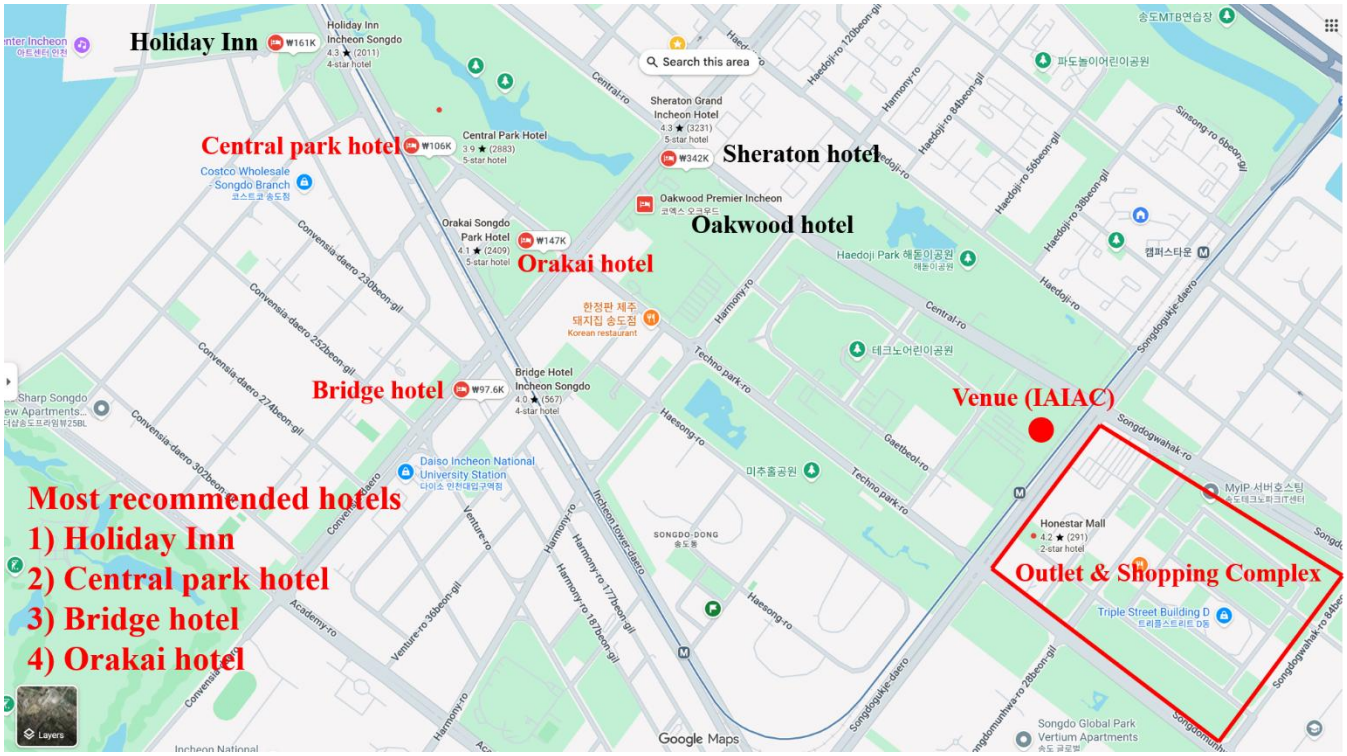
For Taxi Drivers (Korean address)

인천광역시 연수구 갯벌로 36 / 인하대학교 항공우주산학융합원 / 인천공항홀 1 층

Parking

Free parking is available at IAIAC, but it may be difficult to park if the lot is full.

Accommodation



1) Holiday Inn Incheon Songdo

https://www.ihg.com/holidayinn/hotels/gb/en/songdo/jcnis/hoteldetail

2) The Central Park Hotel Songdo

https://www.centralparkhotel.co.kr/en/

3) Bridge Hotel Incheon Songdo

https://en.bridgehotelincheonsongdo.com/

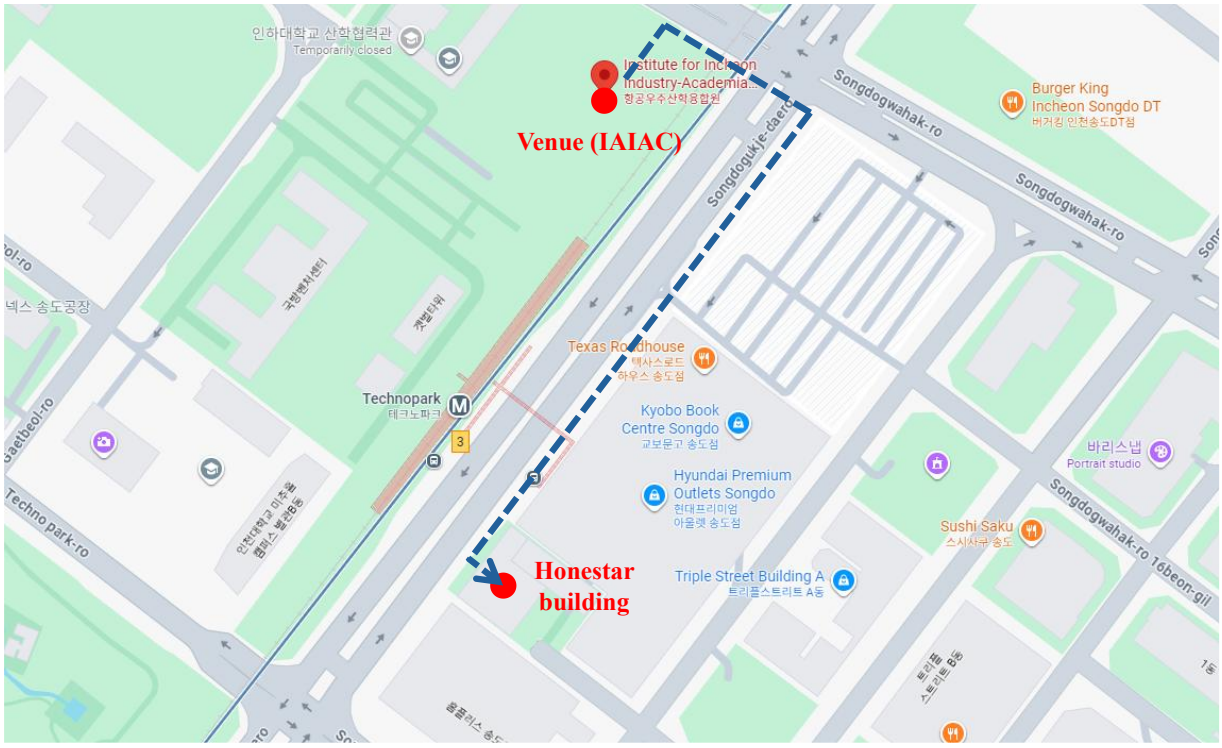
4) Orakai Songdo Park Hotel

https://songdo.orakaihotels.com/eng/

LUNCH

HONESTA building (오네스타)

B1, Building B, Michuhol Tower Annex, 7-50 Songdo-dong, Yeonsu-gu, Incheon, Republic of Korea



Lunch will be served at two restaurants in HONESTAR building during the lunch break on each conference day (Monday 14, Tuesday 15, and Wednesday 16 December) for all registered participants. It takes about 8~10 minutes to walk from the conference venue to the restaurant. **Each should take the meal coupon from name tag.**

Geogung restaurant (거궁, 巨宮), located at 2nd floor, serves a single menu of **Korean Grilled Mackerel Feast Set with assorted side dishes.**

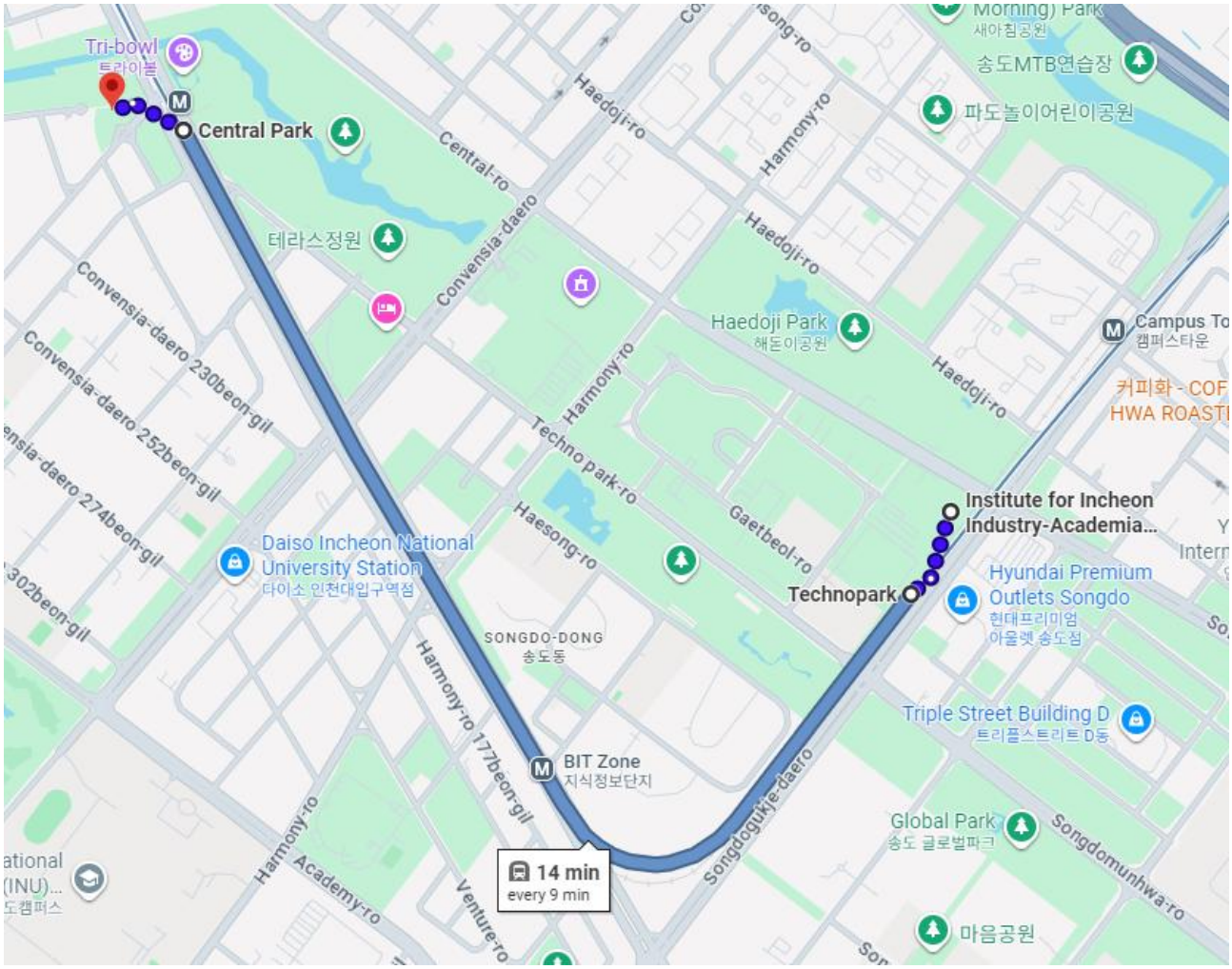
Changgo 43 restaurant (창고 43, 倉庫 43), located at 3rd floor, serves three different menus:

- **Spicy Braised Beef Short Ribs with Rice**
- **Rich King Beef Rib Soup with Rice**
- **Spicy Vegetable Beef Soup with Rice**

BANQUET

Holiday Inn Songdo (Ballroom Hall)

251 Incheon tower-daero, Yeonsu-gu, Incheon



The conference banquet will be held at the Holiday Inn Incheon Songdo Ballroom Hall on Tuesday, 15 December, from 18:00, for all registered participants. The venue is approximately 14 minutes from the conference venue by Metro. Participants can take metro at Technopark Station toward Songdo Moonlight Festival Park and get off at Central Park Station after three stops. From there, the hotel is approximately a 3-minute walk away.

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