OU Master Plan Implementation Acceleration Program

UOsaka-X International Symposium for Creating Green Innovation

in Energy Generation, Conversion, Storage, and Utilization

December 2, 2026

at Main Hall, Center for Infectious Diseases Education and Research (CiDER)
Suita Campus, The University of Osaka

Program

8:30 Registration

Opening Remarks

9:00 Welcome greeting: **Takeshi Omasa** (The dean of Graduate School of Engineering)
9:05 Scope of the Program and Symposium: **Shoji Tsushima** (Program Leader)

Energy Generation Session I (9:10~10:20)

9:10 “Floating Offshore Wind in Japan × Floatbase ”
Kazuhiko Iijima (Div. Global Archtecture, GSE, UOsaka)

9:40 “Aura Sul Wind: Investigations on Hydrodynamic Forces, Low-Cost Monitoring Systems and Towing Operations for FOWTs”
André L. C. Fujarra (Universidade Federal de Santa Catarina, Brazil)

Energy Generation Session II (10:30~11:40)

10:30 “Aura Sul Wind - Shaping Brazil’s Offshore Wind Industry through Knowledge”
Rodolfo T. Gonçalves (JB Energy Inc., Japan)

11:10 “Transformation of Ocean Wave Energy into Electricity via a Gyroscope”
Takahito Iida (Div. Global Archtecture, GSE, UOsaka)

LUNCH (11:40~13:10)

Energy Storage Session (13:10~14:20)

13:10 “Electrochemical Engineering for Green Innovation: Challenges and Opportunities”
Shoji Tsushima (Dept. Mechanical Engineering, GSE, UOsaka)

13:40 “Characterising and Controlling Heterogeneity in Polymer Electrolyte Membrane Fuel Cells and Electrolysers”
Thomas S. Miller (University College London, U.K.)

Energy Conversion Session (14:30~15:40)

14:30 “From waste to bioenergy and beyond: Bioplastic Production utilizing Waste Activated Sludge as a Biocatalyst”
Daisuke Inoue (Div. Sustainable Energy and Environmental Engineering, GSE, UOsaka)

15:00 “Journey of a Bio-Inspired Catalyst for CO_2 Reduction”
Zakaria Halime (Centre national de la recherche scientifique ,France)

Comprehensive Perspective Session (15:50~16:50)

15:50 “System Design Approach for Achieving Comprehensive Sustainability”
Hideki Kobayashi (Dept. Mechanical Engineering, GSE, UOsaka)

16:20 “Supporting Decarbonization in Japanese Municipalities: A Model-based Framework for Emission Reduction Planning and Progress Tracking”
Yohei Yamaguchi (Div. Sustainable Energy and Environmental Engineering, GSE, UOsaka)

Closing Remarks (15:50~16:50)

16:50 Gratitude greeting : **Shohji Tsushima** (Program Leader)



UOsaka mascot Dr. Wani
as a member of Engineering

Center for Future Innovation (CFi),
Graduate School of Engineering, The University of Osaka.
Green Innovation Office
green-innovation@cfi.eng.osaka-u.ac.jp