

International Symposium

of the Graduate School of Engineering,
Osaka Metropolitan University

World-Leading Engineering Research

2023 **9/20** 9:20-20:00 [Wed] - **21** 9:00-16:20 [Thu]

Osaka International Convention Center (Event Hall on 3rd floor)

Advance
Registration

Registration Fee:

Free

* A fee (5,000 yen per person) is required
if you wish to participate in the Banquet.
Banquet Fee: 5,000 JPY / person

Maximum
capacity: **400**
persons

Organizer: Graduate School of Engineering,
Osaka Metropolitan University

Co-Organizers: Industry-Academia-Government Joint Research Group, OMU
Osaka International Convention Center

Program

9/20 [Wed]

- 8:50-9:20 ● **Registration** [Event Hall, 3rd floor, Osaka International Convention Center]
- 9:20-12:10 ● **Opening ceremony, plenary session**
- **Lunch break**
- 13:30-16:00 ● **Session ① [Life Science]**
- 16:15-17:55 ● **Poster Session**
- 18:00-20:00 ● **Banquet**

9/21 [Thu]

- 9:00-9:10 ● **Opening**
- 9:10-12:20 ● **Session ② [Materials]**
- **Lunch break**
- 13:30-16:20 ● **Session ③ [Energy & Environment]**

Registration Form

https://docs.google.com/forms/d/130A7DrRZdLuQuPtQYo2ZkKw4x32A0CFIavljc1y_374/viwwform?edit_requested=true#settings



Application Deadline

September 19 (Tue), 2023

Plenary Session



Speaker①

Dr. Akira Yoshino

- Nobel Laureate in Chemistry, 2019
- President, Lithium Ion Battery Technology and Evaluation Center (LIBTEC)
- Honorary Fellow, Asahi Kasei Corp.

Speaker②

Prof. Enrico Traversa

Science and Technology Counsellor, Embassy of Italy in Japan

Speaker③

Prof. Plinio Innocenzi

Professor, Department of Biomedical Sciences,
University of Sassari, Italy

Speaker④

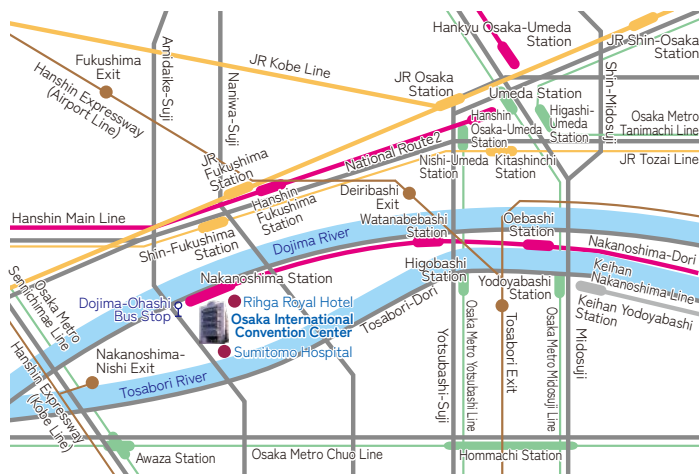
Dr. Giuseppe Mazza

Co-Founder and CEO, Engitix Therapeutics in U.K.

Access to Venue

Osaka International Convention Center

5-3-51, Nakanoshima, Kita-ku, Osaka 530-0005, Japan <https://www.gco.co.jp/access/>



[By train] • Near Exit No. 2 of Nakanoshima (Osaka International Convention Center) Station on Keihan Nakanoshima Line
• 15-Minute walk from Fukushima Station on JR Osaka Loop Line

[By bus] • Approx. 15 minutes by free shuttle bus from JR Osaka Station (Ringa Royal Hotel shuttle bus)



For inquiries, contact

Secretariate of Industry-Academia-Government Joint Research Group
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Email: gr-eng-n-supportcenter[at]omu.ac.jp * Replace [at] with @.



大阪公立大学
Osaka Metropolitan University

9/20 [Wed]

9:20-12:10 Opening · Plenary session

Speaker① **Dr. Akira Yoshino** • Nobel Laureate in Chemistry, 2019 • President, Lithium Ion Battery Technology and Evaluation Center (LIBTEC) • Honorary Fellow, Asahi Kasei Corp.

Speaker② **Prof. Enrico Traversa** Science and Technology Counsellor, Embassy of Italy in Japan

Speaker③ **Prof. Plinio Innocenzi** Professor, Department of Biomedical Sciences, University of Sassari, Italy

Speaker④ **Dr. Giuseppe Mazza** Co-Founder and CEO, Engitix Therapeutics in U.K.

Session ① Life Science

- 13:30-14:30 • **Innovative Microbial Biotechnology for Bio-Industry (Keynote Speech)**
Jian-Jiang Zhong Professor, School of Life Sciences & Biotechnology, Shanghai Jiao Tong University, China
- 14:40-15:00 • **Control Theory of Injured Microorganisms and Its Application for Food Loss Reduction**
Ryoko Asada Assistant Professor, Department of Quantum and Radiation Engineering, Graduate School of Engineering, Osaka Metropolitan University
- 15:00-15:20 • **Machine-Learning-Assisted Gene Expression Optimization for Production of Useful Chemicals**
Ryosuke Yamada Associate Professor, Department of Chemical Engineering, Graduate School of Engineering, Osaka Metropolitan University
- 15:20-15:40 • **Light-Induced Assembly of Living Bacteria for Sensing and Bioelectricity Generation**
Shiho Tokonami Associate Professor, Department of Applied Chemistry, Graduate School of Engineering, Osaka Metropolitan University
- 15:40-16:00 • **Recovery of Metal Ions and Mineralization Using Phosphorylated Yeast**
Yoshihiro Ojima Associate Professor, Department of Chemistry and Bioengineering, Graduate School of Engineering, Osaka Metropolitan University

9/21 [Thu]

Session ② Materials

- 9:00-9:10 • **Opening**
- 9:10-9:40 • **Reconfigurable Intelligent Surface (RIS)-aided Wireless Information and Power Transfer for IoT Applications**
Dong In Kim Professor, Sungkyunkwan University, Korea
- 9:40-10:10 • **Diamond Nanomechanics and Deep Elastic Strain Engineering**
Yang Lu Professor, The University of Hong Kong, People's Republic of China
- 10:10-10:40 • **Multi-Dimensional Manipulation of Solid / Liquid Interaction**
Xu Deng Professor, University of Electronic Science and Technology of China, People's Republic of China
- 10:50-11:20 • **Emergent Materials with Audible Sonochemistry**
Rahul Dev Mukhopadhyay Assistant Professor, Ramananda College, Bankura University
- 11:20-11:50 • **Porous Materials made by Confined Self-Assembly of Colloids for Catalysis and Photonics**
Marco Faustini Professor, Sorbonne University, France
- 11:50-12:20 • **A Concentrated Colloidal Dispersion of Nanometric Hydroxide Crystals as Curable Contrast Agents for Biomedical Imaging**
Yasuaki Tokudome Associate Professor, Department of Materials Science, Graduate School of Engineering, Osaka Metropolitan University

Session ③ Energy & Environment

- 13:30-14:10 • **Role of Research & Innovation in shaping local and national energy policies**
Amer Gaffar Director, Manchester Fuel Cell Innovation Centre, Faculty of Science and Engineering, Manchester Metropolitan University
- 14:10-14:50 • **Development of Large Scale Offshore Wind Turbine Technologies**
Shigeo Yoshida • Professor, Vice-Director, Institute of Ocean Energy, Saga University • Professor, Research Institute for Applied Mechanics, Kyushu University
- 15:00-15:20 • **Leveraging Open Source Software and Open Data in Remote Sensing and Geospatial Analysis**
Venkatesh Raghavan Professor, Department of Geosciences, Graduate School of Science, Osaka Metropolitan University
- 15:20-15:40 • **Marine Energy Potential and Weather Window Characteristics around Japanese Coast**
Tomoki Taniguchi Lecturer, Department of Marine System Engineering, Graduate School of Engineering, Osaka Metropolitan University
- 15:40-16:00 • **Energy Management of Low-Carbon Energy Supply Networks Based on Optimization Approaches**
Tetsuya Wakui Professor, Department of Mechanical Engineering, Graduate School of Engineering, Osaka Metropolitan University
- 16:00-16:20 • **Spatial Analysis of Biomass Power Generation and Heat Utilization Potential from Organic Waste and Paper Waste in Urban Area: Cases of Osaka and Hyogo Prefectures**
Minako Nabeshima Professor, Department of Urban Design and Engineering, Graduate School of Engineering, Osaka Metropolitan University