

Updated on January 5, 2023

# Daily Program

## The 26th SANKEN International Symposium Daily Program Wednesday, January 11, 2023

| Wednesday, January 11, 2023  |             |   |
|--|-------------|---|
| Lecture Hall   |             |   |
| <b>Session 1   9:30-12:00</b>  |             |   |
| Chair: Yuki YAMADA (SANKEN, Osaka University, Japan)   |             |   |
| 1-01   | 9:30-10:10  | [Invited] Operando Spectroscopy: Revealing the Mechanisms of Electrochemical Carbon Dioxide Reduction<br>Yu KATAYAMA (SANKEN, Osaka University, Japan)  |
| 1-02<br>(online)   | 10:10-10:50 | [Invited] Sol-Gel Synthesis of Porous Monolithic Materials ~Pore Control and Applications~<br>George HASEGAWA (Institute of Materials and Systems for Sustainability, Nagoya University)  |
|  | 10:50-11:00 | Coffee Break  |
| 1-03   | 11:00-12:00 | [Keynote] Photon upconverting molecular materials<br>Nobuhiro YANAI (Kyusyu University, Japan)  |
|  | 12:00-13:00 | Lunch   |
| <b>Opening Ceremony   13:00-14:10</b>  |             |   |
| Chair: Yuki YAMADA (SANKEN, Osaka University, Japan), Kazutomo SUENAGA (SANKEN, Osaka University, Japan) |             |   |
|  | 13:00-13:10 | [Opening Address]<br>Tohru SEKINO (SANKEN, Osaka University, Japan)   |
|  | 13:10-14:10 | [Plenary] Common themes in electrocatalysis: what can battery science teach us about electrolysis and vice versa?<br>Ifan E. L. Stephens (Imperial College London, United Kingdom)  |
|  | 14:10-14:30 | Coffee Break  |
| <b>Session 2   14:30-17:00</b>   |             |   |
| Chair: Tsuyoshi SEKITANI (SANKEN, Osaka University, Japan)   |             |   |
| 2-01   | 14:30-15:30 | [Keynote] Sensing-of-Everything (SoX)<br>Xiaodong CHEN (School of Materials Science and Engineering, Nanyang Technological University (NTU), Singapore, Institute of Materials Research and Engineering, The Agency for Science, Technology and Research (A*STAR), Singapore) |
| 2-02   | 15:30-16:30 | [Keynote] Integrated Green-niX Consortium for Research and Human-Resource Development (Green-niX) to make LSI industry Greener<br>Hitoshi WAKABAYASHI (School of Engineering, Tokyo Institute of Technology, Japan)   |
| 2-03   | 16:30-17:00 | [Invited] Material Development of Flexible Electronics for Environmental Friendly and its Sensor Application<br>Teppei ARAKI (SANKEN, Osaka University, Japan)  |
|  | 17:00-17:15 | Coffee Break  |
| <b>Poster Session   17:15-18:30</b>  |             |   |
| <b>Poster Session</b><br>(CREA)  |             |   |

# Thursday, January 12, 2023

| Thursday, January 12, 2023                                  |                    |  |
|---|--------------------|--|
| Lecture Hall  |                    |  |
| <b>Session 3   9:30-12:30</b>                               |                    |  |
| Chair: Kazuhiko NAKATANI (SANKEN, Osaka University, Japan)  |                    |  |
| 3 - 01  | 9:30-10:10         | <b>[Keynote]</b> Japan's climate change mitigation strategy and carbon management system for a nation<br>Yoshiyuki SHIMODA (Division of Sustainable Energy and Environmental Engineering, Osaka University)  |
| 3 - 02  | 10:10-10:40        | <b>[Invited]</b> Development of glowing plants as an electrical powerless lightning device for future sustainable society<br>Takeharu NAGAI (SANKEN, Osaka University, Japan)  |
|   | <b>10:40-10:50</b> | <b>Coffe Break</b>   |
| 3 - 03  | 10:50-11:30        | <b>[Keynote]</b> Development of Environmentally Friendly Chemical Conversion Method Combining Microwave Irradiation and Continuous Flow Equipment<br>Hironao SAJIKI (GIFU Pharmaceutical University, Japan)  |
| 3 - 04  | 11:30-12:00        | <b>[Invited]</b> Controlling Chemoselectivity by Functional Group Targeted Catalyst<br>Takashi OHSHIMA (Graduate School of Pharmaceutical Sciences, Kyushu University, Japan)  |
| 3 - 05  | 12:00-12:30        | <b>[Invited]</b> Contribution from Pharmaceutical Process Chemistry to Green Chemistry and Molecular Diversity<br>Hideya MIZUFUNE (SPERA PHARMA, Inc., Japan)  |
| <b>Poster Session (reserved date)</b><br>(CReA) 12:30-13:30 |                    |  |
| <b>Session 4   13:30- 16:00</b>                             |                    |  |
| Chair: Kazutomo SUENAGA (SANKEN, Osaka University, Japan)   |                    |  |
| 4 - 01<br>(online)  | 13:30-14:30        | <b>[Keynote]</b> Electron microscopy studies of batteries<br>Jianyu HUANG (Clean Nano Energy Center, State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, Qinhuangdao, China)  |
| 4 - 02  | 14:30-15:00        | <b>[Invited]</b> Relationship between structural characteristics and thermal conductivity in covalent amorphous solids<br>Emi MINAMITANI (SANKEN, Osaka University, Japan)   |
| 4 - 03<br>(online)  | 15:00-16:00        | <b>[Keynote]</b> Engineering the structure and properties of 2D materials by defect creation and intercalation<br>Arkady KRASHENINNIKOV (Institute of Ion Beam Physics and Materials Research, Helmholtz-Zentrum Dresden-Rossendorf, Germany Department of Applied Physics, Aalto University, Finland) |
|   | <b>16:00-16:15</b> | <b>Coffee Break</b>  |
| <b>Farewell Session   16:15-17:45</b>                       |                    |  |
| Closing Remarks and Poster Award Announcement               |                    |  |