



SUNG KYUNKWAN UNIVERSITY (SKKU)

# ACS Nano Summit 2024

## THE 22ND INTERNATIONAL NANOTECH SYMPOSIUM & EXHIBITION

July 3(Wed), 2024 Sungkyunkwan University, Samsung Library Auditorium

Time	Title	Speaker
10:00 – 10:10	Opening remarks	TBA
<b>Session I . Bio-Nanotechnology</b>		<b>Chair: Miso kim   SKKU</b>
10:10 – 10:25	Integrated Plant-electronics Interface	ACS Nano_Editor in Chief, Xiaodong Chen   NTU
10:25 – 10:40	Sers-Based Sensing and Imaging in 3D Tumor Models	ACS Nano_Executive Editor, Luis M. Liz-Marzán   CIC biomaGUNE
10:40 – 10:55	Chirality as a stargate for peptide self-assembly into functional nanostructures	ACS Nano_Topic Editor, Silvia Marchesan   Univ.of Trieste
10:55 – 11:10	Precision Diagnosis of Tuberculosis: Empowering Personalized Healthcare with Nano and Micro Technologies	ACS Nano_Associate Editor, Tony Y. Hu   Tulane Univ.
11:10 – 11:25	Self-healing, Stretchable, and Tissue-adhesive Materials for Stable Bioelectronics	Donghee Son   SKKU
11:25 – 11:40	Metasurfaces for Biosensing, Molecular Diagnostics, and Biomedical Imaging	Inki Kim   SKKU
11:40 – 11:55	Curvature-sensing peptide therapeutics for biomedical applications	Jackman Joshua A   SKKU
11:55 – 12:10	Systematic Design of 3D Corona Phase Interfaces to Accelerate Sensor Development Time	Sooyeon Cho   SKKU
12:10 – 13:30	Lunch & Break	
<b>Session II. Nanotechnology I : Energy &amp; Catalyst</b>		<b>Chair: TBA</b>
13:30 – 13:45	2D Perovskite Optoelectronic and Solar Cell Research at the University of Sydney	ACS Nano_Associate Editor, Antia Ho-Baillie   Univ. of Sydney
13:45 – 14:00	Understanding the Evolution of Materials and Interfaces in Solid-State Batteries	ACS Nano_Associate Editor, Matthew T. McDowell   Georgia Tech.
14:00 – 14:15	Solar-to-Fuel Conversion: from Photocatalysis to Photothermal Catalysis	ACS Nano_Associate Editor, Jinhua Ye   Hebei Univ.
14:15 – 14:30	Structure Controlled Synthesis of Single-Walled Carbon Nanotubes	ACS Nano_Associate Editor, Yan Li   Peking Univ.
14:30 – 14:45	TBA	Doo Hyun Ko   SKKU
14:45 – 15:00	De Novo Synthetic Approaches of Electronic Macromolecules for Emerging Electronics and Energy Applications	Bo Seok Kang   SKKU
15:00 – 15:15	Electrospinning piezoelectric fibers and yarns for wearable and biomedical self-powered sensing applications	Miso Kim   SKKU
15:15 – 15:30	Certified NO <sub>2</sub> Sensing Performance at Lower Temperature by Semiconducting Ratio Control of Single-Walled Carbon Nanotubes	Il Jeon   SKKU
15:30 – 15:45	TBA	Jung Heon Lee   SKKU
15:45 – 16:00	Coffee break	
<b>Session III. Nanotechnology II : Device &amp; Others</b>		<b>Chair: TBA</b>
16:00 – 16:15	Exploring the Biological Behavior and Fate of Nanomedicines by Advanced Light Source Analytical Techniques	ACS Nano_Executive Editor, Chunying Chen   NCNST
16:15 – 16:30	Nanostructuring in highly concentrated electrolytes and its impact on electrochemical devices	ACS Nano_Associate Editor, Mathieu Salanne   Sorbonne Univ.
16:30 – 16:45	Quantitative Interaction of colloids with cells	ACS Nano_Associate Editor, Wolfgang J. Parak   Univ. of Hamburg
16:45 – 17:00	Hexagonal and amorphous boron nitride thin films grown by chemical vapor deposition	Hyeon Suk Shin   SKKU
17:00 – 17:15	Solution-based processing of 2D materials for scalable electronics	Joo Hoon Kang   SKKU
17:15 – 17:30	Next-generation neural network devices integrated with functional 2D materials	Sung Joo Lee   SKKU
17:30 – 17:45	Work Function Engineering of Copper Sulfides for 2D Electronics	Seung Nam Cha   SKKU
17:45 – 18:00	Electrical characterization of 2D ferromagnets	Chang Gu Lee   SKKU
18:00 – 18:15	Morphology-dependent electron dynamics and acoustic vibrations of Au nanostructures	Taeyeon Kim   SKKU
18:15	Dinner	