

# THE 12th NanoSquare Workshop

November 16 9:00-15:00

Bldg. C1, Conference Hall, Nakamozu Campus  
Osaka Prefecture University

9:00 Opening  
**Minoru ISHII**  
Executive Director, Vice President (Education and Research)

9:05 Construction of Pinpoint Cell Separation Systems  
and Their Applications  
**Chie KOJIMA**  
Dept. Applied Chemistry

9:20 Pioneering Nanofluidics for New Chemistry,  
Biology, and Materials Science  
**Yan XU**  
Dept. Chemical Engineering

9:35 Spatio-Temporal Remodeling of Cellular  
Microenvironment Regulates the Directionality of  
Collective Cell Migration  
**Masaya HAGIWARA**  
Organization for Research and Promotion, OPU

9:50 Interfacial Nanocrafting of Molecular Building  
Blocks into Crystalline Porous Nanosheets  
**Rie MAKIURA**  
Dept. Materials Science

10:05 Development of Photonic Crystal High-Q  
Nanocavity Devices  
**Yasushi TAKAHASHI**  
Dept. Physics and Electronics

10:30 Development of Intracellular Delivery System  
Based on Functional Peptide-Modified Exosomes  
**Ikuhiko NAKASE**  
Dept. Biological Science / RILACS

10:45 Development of Thermoelectric Materials Toward  
Energy Harvesting Applications  
**Atsuko KOSUGA**  
Dept. Physical Science

11:00 Gate-Controlled Chemical Reactions at Surfaces  
of Two-Dimensional Atomic Sheets  
**Ryo NOUCHI**  
Dept. Physics and Electronics

11:15 Density Functional Studies on Oxygen Evolution  
Reactions of a Quadruple-Perovskite Oxide  
Catalyst  
**Hidekazu IKENO**  
Dept. Materials Science

11:30 Pioneering Rapid and Sensitive Detection  
Method of Bacteria Cells Based on Nano  
Microspace  
**Shiho TOKONAMI**  
Dept. Applied Chemistry / RILACS

11:45 Light-Induced Acceleration System of Various  
Biochemical Reactions for Interdisciplinary and  
Industrial Collaborations  
**Takuya IIDA**  
Dept. Physical Science / RILACS

## 13:00 Poster Session

14:20 Concluding Remarks  
External Advisory Members

14:45 Closing Address  
**Takekazu ISHIDA**  
Former Program Officer

14:50 Closing  
**Hisao KIKUTA**  
Program Officer