

Program

Day 1, November 24

11:30~ Check-in/Registration at Reception Desk

Opening Session

Chair: Toru Aoki, Shizuoka University

12:40~12:45 **Opening Remarks:** Kazuyuki Hizume, President, Shizuoka University

12:45~12:50 **Greeting:** Yoshiaki Ishida, Director - University Research Facilitation
Division, Research Promotion Bureau, MEXT

12:50~13:00 **Introduction of Research Center for Biomedical Engineering:**
Takamitsu Hosoya, Director of Laboratory for Biomaterials and
Bioengineering, Institute of Science Tokyo

Session A

Chair: Yoshikazu Nakajima, Institute of Science Tokyo

13:00~13:30 "Immune-instructive materials for tissue regeneration and healing (tentative)"
Amir M Ghaemmaghami, University of Nottingham

13:30~14:00 "Design of Biomaterials based on molecular rheology"
Takuya Katashima, The University of Tokyo

14:00~14:30 "Peptide-Mediated Biomolecular Delivery in Plants: Lessons from Plant-Animal
Cellular Barrier Differences"
Takaaki Miyamoto, Institute of Science Tokyo

14:30~15:00 **Photo Session**

15:00~16:30 **Poster Session 1 & Coffee Break**

15:00~16:00 Poster Session 1

Session B

Chair: Hang Song, Hiroshima University

16:30~17:00 "DNA-based Nanonetworks for Medical Applications"
Stefan Fischer, University of Luebeck, Germany

17:00~17:30 "Engineering Artificial Cell Systems on Semiconductor Micro/Nanostructures
for Biosensing Applications"
Koji Sumitomo, University of Hyogo

17:30~18:00 "CMOS Imaging Devices for Multi-Ion and Chemical Sensing: From Plant
Physiology Monitoring to Digital Olfaction"
Toshihiko Noda, Hiroshima University

Networking

Chair: Masanori Koshimizu, Shizuoka University

18:30~20:00 @Act City Hamamatsu Congress Center Room 43 & 44

Day 2, November 25

8:30~ Check-in/Registration at Reception Desk

Session C

Chair: Shin Usuki, Shizuoka University

9:00~ 9:30 “Rapid fresh H&E pathology platform enables real-time histopathologic diagnosis without tissue loss”

Chi-Kuang Sun, National Taiwan University

9:30~10:00 “Circularly Polarized Light Scattering Imaging for Measuring the Depth Distribution of Cancer Tissue”

Nozomi Nishizawa, Kitasato University

10:00 ~ 10:30 “Lock-in Pixel CMOS Image Sensors: From High-Precision Time-of-Flight Ranging to Non-Contact Heart Rate Sensing”

Keita Yasutomi, Shizuoka University

10:30~13:30 Poster Session 2 & 3 + Lunch Break

10:45~11:45 Poster Session 2

11:55~12:55 Poster Session 3

Session D

Chair: Masato Sone, Institute of Science Tokyo

13:30~14:00 “From Miniaturized Rigid Platforms to Soft, Transient Bioelectronics: Cleanroom-Enabled Nanostructured Electrodes for Electro (chemical) Sensing across Applications”

Irene Taurino, KU Leuven

14:00~14:30 “Recent Research on MEMS using Self-Assembled Electrets”

Daisuke Yamane, Ritsumeikan University

14:30~15:00 “Advanced Techniques for the Detection and Quantification of Ultra-Trace Metal Dissolution”

Azusa Ooi, Institute of Science Tokyo

Closing Session

Chair: Masanori Koshimizu, Shizuoka University

15:00~15:15 Award Ceremony

Closing Remarks: Akinobu Teramoto, Director of Research Institute for

Takayanagi Memorial Hall Tour

15:45～ Moving to Shizuoka University
16:00～17:00 Takayanagi Memorial Hall Tour

Day 3, November 26

9:00～ Check-in/Registration at Reception Desk

9:30～9:40 **Opening Remarks:** Toru Aoki, Director of Research Institute of Electronics,
Shizuoka University

Plenary Talks

Chair: Masanori Koshimizu, Shizuoka University

9:40～10:20 “Development of Medical AI Based on Biomedical Signal Processing”
Koichi Fujiwara, Hokkaido University
10:20～11:00 “The Flow of Life: Visualizing Plant Nutrition with Radioisotope Imaging”
Ryohei Sugita, Nagoya University

11:00～11:10 **Short Break**

Plenary Talks

Chair: Masanori Koshimizu, Shizuoka University

11:10～11:50 “Advances in Ion Track Imaging for Radiation Dosimetry”
Satoshi Kodaira, National Institutes for Quantum Science and Technology (QST)
11:50～12:30 “Advancing Tumor Cytology by Integrating Medicine, light, and AI Technologies”
Yoichiro Hosokawa, Nara Institute of Science and Technology (NAIST)

12:30～13:30 **Lunch Break**

Lectures by Takayanagi Prize Winners 1 Chair: Hiroya Ikeda, Shizuoka University

13:30～14:10 “Studies on Silicide-Based Semiconductors and Related Materials: Exploratory
Synthesis of Novel Materials, Their Physical Properties and Applications”
Hirokazu Tatsuoka, Shizuoka University
14:10～14:40 “Development of a Process for Fabricating Nitride Thin Films at Room Temperature
and Atmospheric Pressure”
Shoichi Kikuchi, Shizuoka University

14:40~15:10 “Synthesis of quantum dots and their applications in optoelectronic devices”
Satoshi Tsukuda, Shizuoka Institute of Science and Technology

15:10~15:30 Coffee Break

Lectures by Takayanagi Prize Winners 2 Chair: Daniel Moraru, Shizuoka University

15:30~16:00 “Establishment of optical measurement and manipulation of bioelectrical signals”
Yuki Bando, Shimane University

16:00~16:30 “Label-free deep imaging of cellular tissue through scattering correction using refractive index distribution”
Osamu Yasuhiko, HAMAMATSU PHOTONICS K.K.

16:30~17:00 “Direct digital RF transceiver technology for compact wireless transceiver”
Mizuki Motoyoshi, Shizuoka Institute of Science and Technology

Closing Session Chair: Masanori Koshimizu, Shizuoka University

17:00 Closing Remarks

17:10 Photo Session

Networking Chair: Masanori Koshimizu, Shizuoka University

17:30~ @North Cafeteria, Hamamatsu Campus, Shizuoka University