

**ICFPE2025 Program (tentative) 27 Aug**  
**September 17 (Wed)**

Opening Remark Kuramae Hall

11:00-11:10

Conference Chair: Prof. Takaaki Manaka

Plenary Kuramae Hall

11:10-12:00 PL-1

Sustainable High-Throughput Foundry for Sticker-Like Computer via Roll-to-Roll Gravure  
Printing System

Gyoujin Cho

Lunch

Special session 1 (Prof. Pandey) Kuramae Hall

Recent Development in Functional Optoelectronic Devices and Systems

13:00-15:00

13:00 S1-I1 (invited)

Synergistic Interface Engineering of NiOx/Perovskite Heterojunction via Multifunctional  
Organic Molecule for Efficient and Stable Inverted Solar Cells

Parameswar Krishnan Iyer

13:30 S1-I2 (invited)

TBD

Prof. Vipul Singh

14:00 S1-O1

PFO-DBT/PCBM Blend-Based High-Performance OFETs for Optoelectronic Applications  
Sidhi G Ramer

14:20 S1-O2

An investigation on the performance of Quaternary NiTi-SMA Bimorph Integrated Optical  
Fiber Sensor

Navneet Chauhan

14:40 S1-O3

Unraveling the role of charge carrier mobility for the fabrication of OFET-based integrated  
sensing devices

Harshita Rai

Break

Special session 2 (Prof. Kitamura)      Kuramae Hall

Smart, Wearable, and Flexible Sensor Devices

15:10-17:10

15:10 S2-I1 (invited)

Wearable Respiration Sensor Fit on Skin and Fine Patterning Technique Using Flexible Film

Minoru Sasaki

15:40 S2-I2 (invited)

Organic Floating-Gate Transistors for Printed Nonvolatile Optoelectronic Memory and Image Sensor Applications

Takashi Nagase

16:10 S2-I3 (invited)

Development of a Chemiresistive Sensor Based on Metal-Oxide-Semiconductor Nanostructures for Wearable Detection of Ions in Solutions

Yoshinari Kimura

16:40 S2-O1

RF-Controlled Resistance Modulation in Ag<sub>2</sub>Te Films for Neuromorphic Electronics

Jun Yamasawa

16:55 S2-O2

Skin-Adhesive Organic Transistors for Long-Term Wearable Electronics

Chika Okuda

Regular session 1

Royal Blue Hall

13:00-14:30

13:00 R1-I1 (invited)

Laser-Induced Conductive Patterns on Flexible and Eco-Friendly Substrates

Ying-Chih Liao

13:30 R1-O1

Fabrication of Transparent Heater using Inkjet - Printed sacrificial layer

Kyung-Tae Kang

13:45 R1-O2

Selective Semiconducting Carbon Nanotube Extraction with Cellulose Acetate

Kazuhiro Yoshida

14:00 R1-O3

A Hybrid Inkjet Printhead with Piezo and EHD Technology for 200 cP Viscosity Ink Ejection

Jaeyong Choi

14:15 R1-O4

Plasma-Enhanced g-C<sub>3</sub>N<sub>4</sub>/BC-Derived LIG Electrodes for AChE Assisted Pesticide Detection

Saranvignesh Alagarsamy

Break

Special session 4 (Prof. Kajii)

Royal Blue Hall

Analysis and Electronic and Optical Materials for Future IoT

15:10-17:10

15:10 S4-I1 (invited)

Ultrathin Photonic Devices and Integrated Systems for Bio-Interfacing

Kenjiro Fukuda

15:40 S4-I2 (invited)

Light intensity dependence of equivalent circuit parameters of organic photovoltaic cell:

Evaluation with Bayesian estimation

Kazuya Tada

16:10 S4-I3 (invited)

Organic Luminescent Radical Materials for Organic Electronics

Ken Albrecht

16:40 S4-O1

Effect of buffer layer insertion at the interface between the printed ZnOx electron transport layer and the emissive layer for application to printed light-emitting devices

Yuki Nagase

16:55 S4-O2

Electrical Polarization Characteristics of AC-driven Insulated Organic Electroluminescent Devices with Printed Inorganic/Organic Hybrid Ferroelectric Dielectric Film Towards the Application in Non-Volatile Optical Memory

Hirotake Kajii

OE-A session (Dr. Klaus Hecker)      Bldg W9, W933 Lecture Room

Flexible and Printed Electronics: Materials, Production, and Applications

presented by OE A at ICFPE 2025, Tokyo, Japan

13:00-17:10

13:00 OE-A-1

Flexible and printed electronics enabling innovation and industrialization

Klaus Hecker

13:20 OE-A-2

3D Kirigami lighting enable by 2D printed electronics

Hylke Akkerman

13:40 OE-A-3

Organic photovoltaic cells and modules for harvesting indoor light to power IoT devices

– upscaling and long-term stability

Sadok Ben Dkhil

14:00 OE-A-4

Electroactive polymers for flexible and printable innovative sensors and actuators

Tong Huang

14:20 OE-A-5

Fully printable biosensors enabled by biofunctionalized 2D-material based inks

Sina Azad

14:40 OE-A-6

Empowering Scalable Innovation in Functional Surfaces

Fabien Resweber

Break

15:10 OE-A-7

Advanced screen-printing process for functional textiles

Paul Brook

15:30 OE-A-8

Additive manufacturing platform for freeform 3D microelectronics and packaging

Darragh Walsh

15:50 OE-A-9

Scaling up organic photovoltaics: The path to industrial mass production of integrated PVs  
in buildings & agriculture

Stergios Logothetidis

16:10 OE-A-10

Expanding the boundaries of printed electronics for volume manufacturing of  
PCB-replacements

Ashok Sridhar

16:30 OE-A-11

Why reliability is a crucial element to scale printed flexible electronics products

Wolfgang Mildner

16:50 OE-A-12

Next-gen in-line metrology & quality control for reliable fabrication of defect-free flexible  
organic & printed electronics

Argiris Laskarakis

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**September 18 (Thu)**

ICFPE Keynote

Kuramae Hall

10:00-10:50 KL-1

Software defined functions – Opportunities for Printed Electronics  
Alain Schumacher

Break

Special session 7 (Prof. Kimura)

Kuramae Hall

Intelligent Textile-based Devices

11:00-12:30

11:00 S7-I1 (invited)

Cellulose Nanofiber/Poly(acrylic acid)-based Hydrogel for Colorimetric Biomarker Sensors  
Nichaphat Passornraprasit

11:30 S7-I2 (invited)

Thermally-drawn microelectronic fibers as intelligent textile interfaces  
Yuanyuan Guo

12:00 S7-I3 (invited)

Flexible and Stretchable Devices for Smart Textiles  
Atsushi Takei

Lunch

Special session 8 (Prof. Hasegawa)

Kuramae Hall

Crystal Engineering and Charge Transport in Organic Semiconductors

13:30-15:30

13:30 S8-I1 (invited)

Monolayer organic transistors: from fabrications to applications  
Paddy K. L. Chan

14:00 S8-O1

Control of Carrier Injection in Bottom-Gate Bottom-Contact-Type Single-Crystal Organic Transistors  
Keito Murata

- 14:15 S8-O2  
Formation of mixing-induced polar molecular order and carrier transport in piezoelectric organic semiconductors  
Kiyoshi Nikaido
- 14:30 S8-I2 (invited)  
High-Performance, Robust Organic Semiconductors  
Toshihiro Okamoto
- 15:00 S8-O3  
Nitrogen-Containing Perylene Diimides with Cyclohexyl-Type Side Chains for n-Type Organic Semiconductors  
Shohei Kumagai
- 15:15 S8-O4  
Role of Substituted Alkyl Chains in Layered Organic Semiconductor Crystals: mono-Cn-BTNT  
Satoru Inoue

Regular session 2

Royal Blue Hall

11:00-12:15

- 11:00 R2-O1  
Nanomaterials-Enabled Functional Wearables for Sustainable and Intelligent Healthcare  
Po Kang Yang
- 11:15 R2-O2  
Controlled Alignment of Organic thin films for flexible and efficient phototransistor application  
Radhe Shyam
- 11:30 R2-O3  
Maskless Ultra-Precise Dispensing: Micro-Manufacturing for Flexible and Printed Electronics  
Filip Granek
- 11:45 R2-O4  
A Flexible and Recyclable Biomechanical Sensor Design based on Triboelectrification  
Shih-Min Huang
- 12:00 R2-O5  
Silent Speech Interface Using Soft EMG Sensors with Deep Learning  
Yuta Kurotaki

Lunch

Special session 10 (Prof. Yokokura and Prof. Shimada)      Royal Blue Hall

Crystallization and Self-Organization in Flexible, Organic, or Printed Electronics

13:30-15:30

13:30 S10-I1 (invited)

Structural and Electronic Characterization of Single-crystalline Organic Semiconductors  
and These Interfaces

Yasuo Nakayama

13:55 S10-I2 (invited)

Solution-Processed Organic Thin-films Growth on Hf<sub>0.5</sub>Zr<sub>0.5</sub>O<sub>2</sub> Gate Insulators  
Toward Printed Memory

Nobuya Hiroshiba

14:20 S10-I3 (invited)

Real-time analysis of vacuum-deposited organic thin-film growth using quartz crystal  
microbalance

Ryosuke Matsubara

14:45 S10-I4 (invited)

Spontaneous Orientation Polarization of Natural Polar Molecules  
Kouki Akaike (AIST)

15:10 S10-O1

Crystal Structure and Transistor Characteristic of T-shaped Novel  $\pi$ -conjugated Molecules  
Suo Jeon

Poster session:

Kuramae Hall, Gallery

15:40-17:30

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**September 19 (Fri)**

Plenary Kuramae Hall

10:00-10:50 PL-2

Electronic Structure and Molecular Orientation of Amorphous Organic Films Studied by  
UV Photoemission Spectroscopy and Kelvin Probe  
Hisao Ishii

Break

Special session 13 (Prof. Matsuhisa) Kuramae Hall

Stretchable Electronic Devices

11:00-12:30

11:00 S13-I1 (invited)

Ultraflexible Organic Optoelectronic Devices for Skin-compatible Electronics  
Sungjun Park

11:25 S13-I2 (invited)

Electrochemical Biosensing Interface Engineering for Continuous Biomarker Monitoring  
Systems  
Jayoung Kim

11:50 S13-I3 (invited)

Monitoring, Manipulating and Mimicking Motor Systems  
Pingqiang Cai

12:15 S13-O1

Softness-perceptive e-skin  
Atsushi Nitta

Lunch

Special session 13 (continue) (Prof. Matsuhisa) Kuramae Hall

Stretchable Electronic Devices

13:30-15:30

13:30 S13-I4 (invited)

From Stretchable Polymer to Soft Neuromorphic Electronics  
Wen-Ya Lee

- 13:55 S13-I5 (invited)  
Molecular Dipole Engineering of Polymer Semiconductors for Stretchable Electronics  
Chien-Chung Shih
- 14:20 S13-O2  
A stretchable hole transport layer for high-frequency, soft diodes  
Aki Hiraoka
- 14:35 S13-O3  
Highly reliable stretchable hybrid devices combining stretchable materials and rigid electronic elements  
Yuji Isano
- 14:50 S13-I6 (invited)  
Design and Synthesis of Stretchable and Self-healing Polymers for Electronic Skin Applications  
Ho-Hsiu Chou
- 15:15 S13-O4 Armband-type Hand Motion Capture System Integrating sEMG and IMU Sensors  
S. Yamakoshi

Special session 15 (Prof. Hasegawa) Royal Blue Hall  
Crystal Simulation and Crystal Engineering of Organic Semiconductors

11:00-12:30

- 11:00 S15-I1 (invited)  
Structure-Property Relationships in Thienoacenes for Improved Transport Properties  
Guillaume Schweicher
- 11:30 S15-O1  
A plot of quadrupole moments in organic semiconductors as a phase diagram of the crystal structures  
Takehiko Mori
- 11:50 S15-O2  
Step-by-Step Molecular Arrangements Optimization Approach for Crystal Structure Prediction and Energy Potential Map Analysis  
Ryota Ono
- 12:10 S15-O3  
Flip-Flop Dynamics in Smectic Liquid-Crystal Organic Semiconductors Revealed by Molecular Dynamics Simulations  
Hiroyuki Matsui

Lunch

Special session 16 (Dr. Higuchi)

Royal Blue Hall

Recent Progress on Nonvolatile Display Devices

13:30-15:30

13:30 S16-I1 (invited)

Electronic Tile as Energy-Efficient Reflective Display Units for Walls and 3D Structures

Makoto Omodani

14:00 S16-I2 (invited)

Recent Progress on Electrochromic Devices Using Metallosupramolecular Polymers

Masayoshi Higuchi

14:30 S16-O1

Data-Driven Design of High-Performance Electrochromic Devices

Aiwei Zhao

14:45 S16-O2

Synthesis and Characterization of Ru/Zn-Based Metallosupramolecular Polymer with

Electrochromic and Electrofluorochromic Properties

Tingwei Zhang

15:00 S16-I3 (invited)

Digital information which is invisible under visible light but detectable under infrared light

Shuichi Maeda

Regular session 3

Bldg W9, W933 Lecture Room

11:00-12:15

11:00 R3-O1

Synaptic Transistor Memory Using DPP-based Polymer and Biomass Additive

Waner He

11:15 R3-O2

Exploring Intramolecular Triplet-Triplet Annihilation Upconversion by Double Sensitization

Kenichi Goushi

11:30 R3-O3

Structural variation in semiconducting polymers for organic photovoltaics

Kyohei Nakano

11:45 R3-O4

Operating lifetime dependent on electron injection layer for inverted blue exciplex  
upconversion-type OLEDs

Kenta Usui

12:00 R3-O5

Fabrication of Flexible Organic Thin Film Transistors Using Liquid Crystalline Organic  
Semiconductor Ph-BTBT-10 and Application to Image Sensor Pixels

Issei Suzuki

Closing Remark & Award Ceremony

Kuramae Hall

15:40-15:55

Conference Chair: Prof. Takaaki Manaka