



The 30th International Workshop on Active-Matrix Flatpanel Displays and Devices (AM-FPD '23) will be held at **Ryukoku University Avanti Kyoto Hall**, Kyoto, Japan **from July 4 to 7, 2023**. (<http://www.amfpd.jp/access.html>) Additionally we plan to organize this workshop **in hybrid format with Zoom**.

This workshop has been providing good opportunities to exchange information about advanced research and development.

**Papers are solicited on, but not limited to, the following topics:**

- **Flat Panel Displays (FPD):** LCD, OLED, e-paper, flexible display, printed display, wearable display, 3D display, virtual reality display, augmented reality display, high-resolution display, high-definition display, automotive display, IoT display, memory display, novel display, touch screen technology, in-cell technology, driving technology, circuit technology, display manufacturing, and other FPD technology,
- **TFT Technologies (TFT):** oxide TFTs, organic TFTs, amorphous, microcrystalline and polycrystalline Si-based TFTs, other material TFTs such as graphene, carbon nanotubes, layered transition metal dichalcogenide, and semiconductor nanowires, device modeling, device and circuit simulation, reliability, and other TFT technology,
- **Photovoltaics (PV):** thin-film solar cells (Si-based, compound, organic, and perovskite), amorphous/crystalline Si heterojunction, passivation, transparent conductive oxides and light management, third-generation (quantum dots, interband, plasmon etc.), BIPV, characterization, reliability, and other PV technology,
- **Thin-Film Materials and Devices (TFMD):** thin-film materials (2D materials, and others) and processing, apparatus technology, wearable sensors, thin-film emerging devices (imaging devices, sensors, neuromorphic devices and others), thin film and devices characterizations (structural, optical and electrical properties), substrate materials and passivation technologies, and other TFMD technology.

## Create from SDGs and Metaverse

### ORGANIZING CHAIR

H. Hamada  
Kindai Univ.

### VICE CHAIR

H. Tsutsu  
PVTEC

### STEERING CHAIR

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NAIST

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H. Tanabe  
Tianma Japan

### PROGRAM CHAIR

H. Okada  
Univ. of Toyama

### VICE CHAIR

H. Kajii  
Osaka Univ.

### Keynote Address

“TFT Applications Requirements and Possible Limitations”

Prof. Yue Kuo (*Texas A&M University, USA*)

“Environmentally and Financially Sound Recycling of Silicon Solar Panels”

Prof. Tao Meng (*Arizona State University, USA*)

“Patterned-Liquid-Crystal Planar Optics for Wavefront Control”

Prof. Masanori Ozaki (*Osaka University, Japan*)

### Special Symposium

The chairs have been actively planning the special symposium “*Future Automotive Cockpit Display and Technology Trends*”. Speakers from OEMs, analysts, suppliers, and university researchers will be invited from all over the world.

### Symposia

In addition to the regular sessions, symposia “*Advances in TFT technology for Stretchable/Flexible Devices*”, “*Emerging Trends in R&D on Durability, Circularity and Sustainability of PVs*” and “*Development of Energy Harvesting and Sensing Devices*” etc. are scheduled. Invited speakers will talk about the latest topics regarding these subjects.

### Tutorial in Japanese

This tutorial is aimed at beginners as well as experienced researchers who like to review them. Presentations and documents will be in Japanese. The lecture will be available for an additional fee.

“Technology trend of Si based TFT -From a viewpoint of a comparison with LSI devices-”

Emeritus Prof., Specially appointed Prof. Naoto Matsuo (*University of Hyogo, Japan*)

“Fabrication Processes and Characterization Methods for Thin-Film Solar Cells: from Principles and Fundamentals to Applications”

Prof. Hajime Shirai (*Saitama University, Japan*)

“Fundamentals and Development Trends of Organic Transistors”

Dr. Hiromi Minemawari (*AIST, Japan*)

**4-PAGE CAMERA-READY PAPER DEADLINE : March 27, 2023 (Japan Standard Time)**

**LATE NEWS CAMERA-READY PAPER DEADLINE : May 8, 2023 (Japan Standard Time)**

## PREPARATION AND SUBMISSION OF PAPERS

Authors are required to submit of **2 to 4 pages camera-ready paper** with all figures and tables via website for review.

Please use A4-size PDF file based on the format that is described in the instructions for preparing Camera-Ready Summaries for AM-FPD '23. It is provided at the website (<http://www.amfpd.jp/>).

Category of the work (FPD, TFT, PV, TFMD) and preferred mode of presentation (Oral or Poster) should be selected in the online submission page.

We endorsement to some submitted papers to “IEEE Journal of Electron Device Society (J-EDS)” or “ECS Journal Solid State Science and Technology (JSS)”. Authors must choose either on the online submission page.

*Please follow the instructions:*

- (1) Don't use two byte characters or Asian Fonts.
- (2) The standard font should be used whenever possible, for example, Times-Fonts Family, Helvetica-Fonts Family.
- (3) If you wish to type a symbolic character into the paper, please use Symbol-Fonts Family.

*Papers must be original contributions. The paper is required to include the following points:*

- (1) Objective and backgrounds, describing the goal and the motivation of your work shortly
- (2) Results, describing the specific new results in detail
- (3) Impact and significance of your work, comparing your findings with prior published work(s)
- (4) Prior publications and references

The paper for review in PDF file must be submitted via website.

AM-FPD '23 website: <http://www.amfpd.jp/>

## ACCEPTANCE

Authors of accepted papers will be notified by the **end of April, 2023**. Accepted papers can be presented either by oral or by poster. The program committee, however, reserves the right to consider your paper for either oral or poster presentation. Oral presentations, including questions and answers, are scheduled for 20 minutes.

The accepted paper will appear as it is on the Proceedings of the AM-FPD '23.

*Acceptance is subject to following conditions:*

- (1) All presenting authors are required to complete the advance registration by **May 26, 2023 (including the payment)**.
- (2) The paper submitted to AM-FPD '23 must not be published nor placed on the Web before it is presented at the conference.

## LATE NEWS

A limited number of Late News papers reporting important findings or developments may be accepted. Deadline for receipt of **2-page camera-ready manuscript** is **May 8, 2023** (Japan Standard Time). Late News papers are also submitted via the website. Detailed instruction for preparing the manuscript is available at the website (<http://www.amfpd.jp/>). Authors of accepted Late News papers will be notified by the **end of May, 2023**.

## AWARD(S)

AM-FPD Paper Awards will be given to the best, poster and student papers presented in this workshop and will be honored at the next workshop. And ECS Japan Section (Technical co-sponsor for AM-FPD '23) and AM-FPD Organizing Committee jointly established the high-minded award, “AMFPD-ECS Japan Section Young Researcher Award”.

## IEEE XPLORE

Accepted papers will be submitted for inclusion into IEEE Xplore subject to meeting IEEE Xplore's scope and quality Requirements.

## FURTHER INFORMATION

For further information and submission of papers, please visit:

AM-FPD '23 website (<http://www.amfpd.jp/>)

If you have any questions or inquiries, please contact:

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