



"Informatics Applications and Prospects in the Development and Manufacturing of Devices and Related Materials"

Friday, May 30, 2025, 13:00 - 17:10
ES Hall, Higashiyama Campus, Nagoya University
<https://www.engg.nagoya-u.ac.jp/access/>

The requirements for devices and related materials are becoming more diverse and sophisticated, and their development speed is expected to be shortened. To further accelerate material exploration and process development, the utilization of cyberspace has become essential. In addition to simulations, the use of machine learning and optimization algorithms has made it possible to derive optimal solutions in a short time. This time, we aim to provide a forum to broadly learn and discuss the basics, applications, and future prospects of informatics across materials and processes.

[Program]

13:00 - 13:05 Opening Remarks

13:05 - 13:50 Four Types of Informatics in Materials Development and Autonomous Materials Exploration - Yuma Iwasaki (NIMS)

13:50 - 14:35 Development of SiC Solution Growth Process by Digital Twin and its Applications - Toru Ujihara (Nagoya University)

14:35 - 15:20 Simulation and Informatics in GaN Crystal Growth to Device Processes - Yoshihiro Kangawa (Kyushu University)

15:20 - 15:35 Break

15:35 - 16:20 Utilization of Process Informatics in Silicon Wafer Manufacturing - Yuta Nagai (GWJ)

16:20 - 17:05 Examples of Informatics Applications in Semiconductor Device Manufacturing Processes - Yoshitsugu Yamamoto (Mitsubishi Electric)

17:05 - 17:10 Closing Remarks

[Registration and Information]

■ Registration: Please register and pay the registration fee online via the WEB Registration System ([click here*]). Since seats are limited, registration may close early. The materials for the day will be in PDF format.

*If this notice is printed, please access: <http://annex.jsap.or.jp/adps/pdf/kenkyuukai30.pdf>

■ Participation Fee (Tax included): Advanced Power Semiconductors Division Members*: 4,000 yen, Division Student Members: Free, General: 6,000 yen, General Students: 1,000 yen.

*Employees of Supporting Members of the Advanced Power Semiconductors Division will be treated as Division Members.

■ COVID-19/Health Notice for On-site Attendance: Please refrain from attending on the day if you have a fever. Wearing a mask at the venue is optional.

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