The Japan Society of Applied Physics (JSAP)
Advanced Power Semiconductors Division
The 31st Research Meeting (ADPS)

先進パワー半導体分科会
Advanced Power Semiconductors

"Basics to the Forefront of Bulk Crystal Growth in Si, SiC, and GaN"

Thursday, February 5, 2026, 13:00 - 18:00
Plaza F Cattleya (7F) (Yotsuya) https://plaza-f.or.jp/

As the promotion of Green Transformation (GX) becomes an urgent issue, the demand for power devices is increasing further. This program focuses on "bulk," an important factor influencing device performance, to relearn the basics of bulk crystal growth technologies for Si, SiC, and GaN, and to discuss the latest technology trends and future prospects. In the power device industry, due to the impact of US-China tensions, the insourcing of devices and materials in China is progressing at an unprecedented speed. Amidst this, Japan maintains a certain position in Si wafer manufacturing; we will deepen the discussion by focusing on its background. Furthermore, we aim to provide a comprehensive overview of the current status and challenges of next-generation materials such as SiC and GaN, creating a forum to grasp the multifaceted changes in the industrial structure.

[Program]
13:00 - 13:05 Opening Remarks

13:05 - 13:50 Development of Mass Production Technology for SiC Single Crystals by Sublimation Method

Kenji Momose (Resonac)

13:50 - 14:35 20 Years Since Ultra-High Quality SiC Single Crystal Growth — Reconstruction of Sublimation Method and the Challenge of Ultra-High Efficiency Large Crystal Growth

Daisuke Nakamura (Toyota Central R&D Labs.)

14:35 - 15:20 Current Status and Prospects of GaN Crystal Growth by Na Flux Method and OVPE Method

Yusuke Mori (Osaka University)

15:20 - 15:40 Break

15:40 - 16:25 Latest Status of GaN Substrate Development

Kenji Iso (Mitsubishi Chemical)

16:25 - 17:10 Why Japan Can Demonstrate Strength in the Field of Semiconductor Silicon Crystal Wafers

Koji Izumitsuma (GlobalWafers Japan)

17:10 - 17:55 Message to Si, SiC, and GaN Crystals

Shinichi Nishizawa (Kyushu University)

17:55 - 18:00 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: https://annex.jsap.or.jp/adps/pdf/kenkyuukai31.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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