



## Current status, challenges, and future prospects of power semiconductors that contribute to carbon neutrality

♪ Date and time: Monday, August 22, 2022 13:00-17:40 ♪ Location:

Tokyo Institute of Technology Ookayama Campus Digital Multipurpose Hall

<https://www.dst.titech.ac.jp/outline/facility/hall.html>

Demand for power semiconductors is expected to increase in order to realize a carbon-neutral world, and performance requirements for power semiconductors are also increasing. This study group aims to understand the current status of Si (silicon) and SiC power semiconductors, issues and future prospects for accelerating their practical application, as well as the macro environment and global trends surrounding the semiconductor market, including power semiconductors. We will

deepen our understanding and discuss future initiatives. \_\_\_\_\_ Program \_\_\_\_\_

**13:00~13:05** Opening remarks

**13:05~13:50** " The semiconductor industry and Japan's position entering the next growth period with **DX/GX** "

Akira Minamikawa (OMDIA (Informa Intelligence LLC))

**13:50~14:35** "About the expanding **SiC** market and the proper use of **Si** and **SiC** " (tentative)

Seizen Fujimori (Infineon Technologies **Japan Ltd.**)

**14:35~15:20** "Power electronics system value and bonding technology"

Katsuaki Saito (Hitachi Power Devices, Ltd.)

**15:20~15:40** break

**15:40~16:25** " Latest trends in **SiC** power semiconductors"

Yasuhiro Kagawa (Mitsubishi Electric Corporation)

**16:25~17:10** "Past, present, and future of the semiconductor industry"

Tsuyoshi Hattori (**Representative of Hattori Consulting International /**

**The Electrochemical Society (ECS) Fellow/Lifetime Honorary Member**)

**17:10~17:40** Summary

♪ Participation registration: Please register and pay the participation fee online using the WEB registration system (click here\* ). Due to the limited number of seats, registration may end early.

\*If this guide is in print, <http://annex.jsap.or.jp/adps/pdf/kenkyuukai22.pdf> Please access more.

♪ Participation fee: (consumption tax included)

Advanced Power Semiconductor Subcommittee members\* 4,000 yen, Subcommittee student members 1,000 yen, General 6,000 yen, General students 1,000 yen \*Those who belong to the Advanced Power Semiconductors Subcommittee supporting members are treated as members of the Advanced Power Semiconductors Subcommittee.

♪ Infectious Disease Countermeasures: Please cooperate with temperature checks in advance and refrain from participating on the day of the event if you have a fever. Please also cooperate in having your temperature taken again at the entrance to the venue (if your body temperature is over 37.5 degrees, you will not be able to participate). At the venue, please disinfect and wear a mask at all times.

Contact: (For inquiries regarding various procedures, please contact the Japan Society of Applied Physics Secretariat) e-mail:

Takuji Hosoi (Kwansei Gakuin University)

hosoi.takuji@kwansei.ac.jp e-mail: mshimoya@sumcosi.com

Manabu Shimoyama (SUMCO)

Satoko Nakagawa (Global Wafers Japan) e-mail: satoko\_nakagawa@sas-globalwafers.co.jp \* Shiraishi, Secretariat of the Japan Society of Applied Physics e-mail: shiraishi@jsap.or.jp