



## The 36<sup>th</sup> School of Engineering Distinguished Lecture Series

Co-sponsor : Integrated Green-niX Seminar Series

### “Semiconductor Technology Trend and Thin Film Deposition Technology”

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#### Abstract :

The semiconductor industry is experiencing a tremendous upsurge with the spread and development of AI, smart phones, self-driving cars, robotics, and other technologies. Semiconductor devices have been miniaturized in two dimensions in accordance with Moore's Law in order to meet the trend toward more compact devices, but two-dimensional miniaturization has already reached its limits and three-dimensional miniaturization is now underway. A prime example of this is NAND flash memory. NAND flash memory has already been commercialized in 3D, with production of 3D-NAND with more than 300 layers imminent, and research and development are underway aiming for over 1000 layers. The most advanced technology in creating three-dimensional semiconductor devices is film deposition technology. DRAM is already seriously considering 3D integration, and Logic is also already developing towards 3D integration.

In this presentation, the latest various deposition technologies for 3D structured semiconductor devices will be introduced. In addition, the speaker will introduce his know-how for an enjoyable life as an engineer through his life experience as an engineer.

Date : Dec. 20 (Wed.) 16 : 45-17 : 45 @ West 9. Digital Multi-purpose Hall and Zoom

18 : 00- Opinion Exchange Meeting (Student Welcome!!) @Tubame Terrace

Sponsored by School of Engineering, Co-sponsored by Integrated Green-niX

Registration: Deadline Dec. 8

<https://www.knc.titech.ac.jp/registration/>

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