# 2025 Korea-Finland Chip Design Symposium

## "Chips Shaping the Future"

**When:** Friday, September 12, 2025
09:00 ~ 17:30

**Where:** Aalto University
H304, Otakaari 1, 02150 Espoo, Finland

**Host:** Embassy of the Republic of Korea in Finland
Aalto University
Aalto Microelectronics Research Center (METKA)

**Organizer:**
Prof. Kwantae Kim
Aalto University, Finland

| Time | Topic | Speaker |
|---|---|---|
| 08:30 | Reception / Morning Coffee | |
| **Session 1:** Opening | | |
| 9:00 | Introduction to the Symposium | **Prof. Kwantae Kim**<br>Aalto University, Finland |
| 9:15 | Congratulatory Remarks | **Ambassador Jung-Ha Kim**<br>Embassy of the Republic of Korea in Finland |
| 9:20 | IC Design Research at Aalto University | **Prof. Jussi Ryynänen**<br>Aalto University, Finland |
| **Session 2:** Innovations in Sensor Interfaces | | |
| 9:40 | Analog Circuits Beyond the Believed Fundamental Limits | **Prof. Taekwang Jang**<br>ETH Zurich, Switzerland |
| 10:00 | From Single-Function Sensors to Smart Sensor Systems | **Markus Hiienkari**<br>Bosch Sensortec, Finland |
| 10:20 | Break / Networking | |
| 10:30 | Analog/Mixed-Signal ICs for Next Generation Integrated System | **Prof. Dong-Woo Jee**<br>Ajou University, South Korea |
| 10:50 | Towards Future Sensor Integration | **Dr. Jerry Lemberg**<br>Saab Finland, Finland |
| 11:10 | Break / Networking | |
| **Session 3:** AI Accelerators and Systems | | |
| 11:20 | Automotive System, Computing-in-Memory | **Prof. Kyuho Lee**<br>Yonsei University, South Korea |
| 11:40 | Mixing Deep-Neural-Networks and Spiking-Neural-Networks for the Best of Both Worlds | **Prof. Sangyeob Kim**<br>Yonsei University, South Korea |
| 12:00 | Lunch at Silinteri (Restaurant Alvari) | Otakaari 1 D, 02150 Espoo |

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| **Session 4:** Highlights on Microelectronics and Automatic Generation of Analog ICs | | |
| 13:00 | Microelectronics in Finland Today - and How We Got Here | **Dr. Toni Mattila**<br>Business Finland, Finland |
| 13:20 | Programmatic Design Methodologies for Mixed-Mode Systems and Analog Circuits | **Prof. Marko Kosunen**<br>Aalto University, Finland |
| 13:40 | Automatic Generation of High-Performance Circuits | **Prof. Jaeduk Han**<br>Hanyang University, South Korea |
| 14:00 | Break | |
| **Session 5:** ICs for Telecommunication, Neural Recording, and Neuromorphic Applications | | |
| 14:10 | Novel Microprocessor Architectures for Telecom — Challenges and Enablers | **Matthew Goode**<br>Nokia, Finland |
| 14:30 | High-Density Neural Recording ICs for Next-Generation Neurotechnology | **Dr. Yoontae Jung**<br>imec, Belgium |
| 14:50 | Analog Neuromorphic ICs for Extreme Edge AI | **Dr. Jacek Flak**<br>VTT, Finland |
| 15:10 | Break | |
| **Session 6:** Innovations in mmWave ICs | | |
| 15:20 | Progress in Design and Integration for Near-THz Wireless Communications Systems | **Dr. Yves Baeyens**<br>Nokia Bell Labs, United States |
| 15:40 | mmWave/sub-THz Transceivers for Advanced 5G/6G Applications | **Prof. Aarno Pärssinen**<br>University of Oulu, Finland |
| 16:00 | Break | |
| **Session 7:** Advances in Quantum Circuits and System | | |
| 16:10 | KQCircuits – Open-Source Layout Library for Designing Chips with Super Conducting Qubits. | **Pavel Smirnov-Ylikangas**<br>IQM, Finland |
| 16:30 | (TBD) | **Dr. Leif Roschier**<br>Bluefors, Finland |
| 16:50 | Quantum Technology at VTT | **Dr. Jae-Wung Lee**<br>VTT, Finland |
| **Session 8:** Closing | | |
| 17:10 | Closing Remarks / Group Photo | **Prof. Kwantae Kim**<br>Aalto University, Finland |
| 17:30 | Banquet at Fat Lizard | Tietotie 1, 02150 Espoo |

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