

# 2025 Korea-Finland Chip Design Symposium

## “Chips Shaping the Future”



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







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






**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)

| 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 Ryyänen<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 Hienkari<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                                       | Various Design Approaches to AI Acceleration: CIM to NPU   | 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 |   |   |

| 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   | BUSINESS<br>FINLAND   |
| 13:20   | Programmatic Design Methodologies for Mixed-Mode Systems and Analog Circuits              | Prof. Marko Kosunen<br>Aalto University, Finland  | A!<br>Aalto University  |
| 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   | NOKIA   |
| 14:30   | High-Density Neural Recording ICs for Next-Generation Neurotechnology                     | Dr. Yoontae Jung<br>imec, Belgium   | imec  |
| 14:50   | Analog Neuromorphic ICs for Extreme Edge AI   | Dr. Jacek Flak<br>VTT, Finland  | VTT   |
| 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  | NOKIA<br>BELL<br>LABS   |
| 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   | IQM   |
| 16:30   | Cryogenic Solutions and Challenges  | Dr. Leif Roschier<br>Bluefors, Finland  | BLUE<br>FORS  |
| 16:50   | Quantum Technology at VTT   | Dr. Jae-Wung Lee<br>VTT, Finland  | VTT   |
| Session 8: Closing  |   |   |   |
| 17:10   | Closing Remarks / Group Photo   | Prof. Kwantae Kim<br>Aalto University, Finland  | A!<br>Aalto University  |
| 17:30   | Banquet at Fat Lizard   |  Tietotie 1, 02150 Espoo |   |



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