

KEIT Forum

KEIT GATC Funding Opportunities for Global R&D Collaboration

Thursday, Aug 6 3:15 am - 5:00pm Colonial A



Chairs



Yonggon Cho

Director General
of KEIT



Yong Kyu Yoon

President of KSEA



KyeongChan Moon

Senior Researcher
of KEIT

This session provides an overview of the Global Advanced Technology Center (GATC) Program, including its funding opportunities, collaboration framework, and participation process for U.S. researchers and organizations. It also offers an opportunity to discuss the research interests, collaboration needs, and potential participation of U.S. researchers, fostering meaningful dialogue toward future joint R&D collaboration.

• KEIT : Korea Planning & Evaluation Institute of Industrial Technology

• KSEA : Korean-American Scientists and Engineers Association

Co-Chairs



Joseph Kim

Vice President 2
of KSEA



Sangyoon Han

Professor, Michigan
Technological
University



Jaekeun Kim

Director, KEIT US
Office



Gihwan Nam

Director
KEIT US Office

Time	Title and Speaker
3:15 - 3:20	Welcoming Remarks Yonggon Cho (Director General, KEIT)
3:20 - 3:25	Welcoming Remarks Yong Kyu Yoon (President, KSEA)
3:25 - 3:35	Introduction to the GATC Program Kyeongchan Moon (Senior Researcher of KEIT)
3:35 - 4:25	Brief Presentations on Korean Companies' Technology Needs for GATC Proposals • Development of 800VDC-1VDC Power Conversion System and WBG-Based High-Speed Switching Power Semiconductor Technology for AI Data Servers (DONGYANG E&P) • Development of AI-based, world-class building materials for carbon-neutral and sustainable construction (SILKROAD C&T) • Development of a 50 kW-Class Wireless Power Transfer System for Electric Vehicles and a Wireless Charging Infrastructure Management System (Korea Testing Certification Institute) • AI BMS Semiconductor Development for Battery Safety Diagnosis in SDV Based EVs (Airpoint co., Ltd.) • Development of AI-Based Integrated Operation Technologies for Autonomous Firefighting Robots in Fire and Disaster Response (Korea Fire Protection UBIS Co., Ltd)
4:25 - 5:00	Technology Exchange and Partnership Meetings between Korean Companies and US Researcher

Overview of Korean Companies and Their Technology Needs

Please find below an overview of the participating companies and their technology needs for your reference.

Company	Core Technologies	Technology Need	R&D goal
DONG YANG EnP	Analog and digital power control, high-capacity power conversion, power supply manufacturing	800VDC-to-1VDC power conversion and WBG-based high-speed switching technologies for AI data servers	- Develop an 800VDC-to-1VDC power conversion system - Apply high-speed WBG switching technology - Improve power efficiency, density, and reliability
SILKROAD C&T	Development of advanced precision chemical materials for construction safety and achieving a carbon-neutral society	Development of AI-based, world-class building materials for carbon-neutral and sustainable construction	- Develop a viscosity-reducing admixture - Develop a segregation-reducing admixture - Enable low-carbon and sustainable concrete
Korea Testing Certification institute	Test and Certification, R&D for standards, about EV Charger-Management system, Wireless Power, Power Supply	Development of a 50 kW-Class Wireless Power Transfer System for Electric Vehicles and a Wireless Charging Infrastructure Management System	- Develop a 50 kW wireless power receiver - Develop a 50 kW transmitter and power conversion system - Demonstrate a wireless charging management platform
Airpoint co., Ltd.	AI Based Battery Management System (BMS) Algorithm & System Semiconductor Development	AI BMS Semiconductor Development for Battery Safety Diagnosis in SDV Based EVs	- Develop AI-based BMS algorithms - Develop a BMS system semiconductor - Enable real-time battery safety diagnosis
Korea Fire Protection UBIS Co., Ltd	Fire & Disaster Safety Engineering, AI-based Disaster Safety Technologies, Digital Twin & Simulation, Fire Safety Big Data, and Disaster Response Technologies	Development of AI-Based Integrated Operation Technologies for Autonomous Firefighting Robots in Fire and Disaster Response	- Develop autonomous firefighting robot technologies - Integrate AI-based operation and control technologies - Establish an operational framework for Korea's firefighting environments and efficiency of disaster response.