

The 19th KIM-JIM Symposium

Conference Hall (3F), October 25 (Thu), 09:00~17:30

Time	Session	Speaker	Affiliation	Title	Chair Person
09:00~09:10	Welcome Address	KIM & JIM Presidents			Seog-hyeon Ryu (Doosan), Yuhki Tsukada (Nagoya Univ.)
09:10~09:35	Morning Session	Hyoung Seop Kim	POSTECH	An Efficient Machine Learning Approach to Establish Virtual Structure-Property Linkages	
09:35~10:00		Yoshitaka Adachi	Nagoya Univ.	Steel Informatics	
10:00~10:25		Seungwu Han	Seoul National Univ.	Classical Neural Network Potential Learning DFT Results: A New Frontier in Material Science	
10:25~10:50		Motoki Shiga	Gifu Univ.	Statistical Machine Learning for Spectrum Image Data Analysis	
10:50~11:15		Sang Soo Han	KIST	Design of Novel Catalysts: From First-Principles to Machine-Learning	
11:15~11:40		Teruyasu Mizoguchi	Univ. of Tokyo	Machine Learning for Interface and Spectrum	
11:40~12:05		Youngsoo Yoo	KIMS	Development of Superalloy Using Artificial Neural Network	
12:05~13:00	Lunch Break (Grand Ballroom (2F))				
13:00~13:25	Afternoon Session(1)	Kee-Sun Sohn	Sejong Univ.	Deep Learning Technologies for Materials Science	Youngsoo Yoo (KIMS)
13:25~13:50		Yoichi Takagishi	Kobelco Research Institute	Machine Learning Approaches for Designing Meso-Scale Structure of Porous Materials	
13:50~14:15		Kentaro Kutsukake	RIKEN	Adaptive Mapping for Quick Material Evaluation	
14:15~14:40		Nam Hoon Goo	Hyundai-Steel	Generative Adversarial Network Model for the Generation of Microstructures Supervised by Phase Field Model	
14:40~15:00	Coffee Break				
15:00~15:25	Afternoon Session(2)	Yuhki Tsukada	Nagoya Univ.	Prediction of Martensite Microstructure in Steel by Phase-Field Simulation and Machine Learning	Yoon Suk Choi (Pusan National Univ.), Junya Inoue (Univ. of Tokyo)
15:25~15:50		Juseok Kang	POSCO	Prediction of Tensile and Charpy Impact Properties by Machine Learning	
15:50~16:15		Junya Inoue	Univ. of Tokyo	Data-Driven Approach to Predicting Microstructure and Properties of Polycrystalline Materials	
16:15~16:40		B.O.Kong	Doosan Heavy Industries	Artificial Neural Network Data Modeling for Mechanical and Physical Properties in Heat Resistance Steels	
16:40~17:05		Manabu Enoki	Univ. of Tokyo	Prediction of Fatigue Behavior in Steels by Data Driven Approach	
17:05~17:30		Seog-hyeon Ryu	Doosan Heavy Industries	AI Applications and Business Strategies in the Materials Industries	