

Future Prospective of 2D Materials and Device Study | SRC_vdWMRC (YSU)

Date & Time Dec. 6 (Wed) 13:00~17:30

Place 8F, Ora Hall [\[On & Off Hybrid Session\]](#)

Organized by SRC-Van der Waals Materials Research Center, Yonsei University

Time(Korea Time)	Presenter	Title-Research field
Dec. 6 (Wed) 13:00~14:20 Session 1 Chair: Kwanpyo Kim (Yonsei University, Korea)		
13:00-13:45	Seongil Im (Yonsei University)	Vertical Electron Devices Utilizing 2D-layered van der Waals Materials for GHz RF Applications
13:45-14:20	Kyusang Lee (University of Virginia)	Mixed-Dimensional Heterostructures : Growth of compound semiconductors on van der Waals materials
Dec. 6 (Wed) 14:30~16:00 Session 2 Chair: Keun Su Kim (Yonsei University, Korea)		
14:30-15:00	Gwan-Hyoung Lee (Seoul National University)	Heterointerface Engineering in van der Waals Heterostructures of 2D Materials by Interlayer Interaction
15:00-15:30	Sanghoon Chae (Nanyang Technological University)	Ultra-low loss electro-optic modulation in 2D semiconductor-SiN composite photonic platform
15:30-16:00	Kwanpyo Kim (Yonsei University)	Exploration of interlayer stacking configurations and new polymorphs in van der Waals crystals using transmission electron microscopy
Dec. 6 (Wed) 16:00~17:30 Session 3 Chair: Gwan-Hyoung Lee (Seoul National University, Korea)		
16:00-16:30	Jae Hoon Kim (Yonsei University)	Zhang-Rice excitons and electromagnons in the van der Waals antiferromagnetic insulator NiI ₂
16:30-17:00	Keun Su Kim (Yonsei University)	Pseudogap and dark states in quantum materials
17:00-17:30	Chul-Ho Lee (Seoul National University)	Interface Band Engineering for High-Performance 2D Field-Effect Transistors