

## 5th EU-Japan Workshop on Graphene and Related 2D Materials (2021)

October 25th, 2021 (zoom)

CEST (EU)	JST (JP)	Opening session Session chair: Tomoki Machida (University of Tokyo)
8:30	15:30	Opening address Taiichi Otsuji (Tohoku University, Japan) Christoph Stampfer (RWTH Aachen University, Germany)

CEST (EU)	JST (JP)	Scientific session 1 Session chair: Mikito Koshino (Osaka University, Japan)
8:40	15:40	Nonlinear optical response of two-dimensional materials Giulio Cerullo Dipartimento di Fisica, Politecnico di Milano, Italy
9:00	16:00	Intrinsic photovoltaic response in symmetry-engineered van der Waals Toshiya Ideue Quantum-Phase Electronics Center (QPEC) and Department of Applied Physics, the University of Tokyo, Japan.
9:20	16:20	Spin Communication on 2D Material Devices and Circuits Saroj Prasad Dash Chalmers University of Technology, Sweden
9:40	16:40	Generation of orbital angular moment at van Hove singularity in rotationally aligned graphene/h-BN moiré superlattice Rai Moriya Institute of Industrial Science, University of Tokyo, Japan

10:00	10:20	20 minutes break
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CEST (EU)	JST (JP)	Scientific session 2 Session chair: Christoph Stampfer (RWTH Aachen University, Germany)
10:20	17:20	The Universe of Disordered and Amorphous Two-dimensional Materials: Scientific Challenges & Technology Opportunities Stephan Roche ICREA and Fundacio Institut Catala de Nanociencia i Nanotecnologia (ICN2), Spain
10:40	17:40	Creation of a 2D electronic system with 1D wired materials Yasumitsu Miyata Department of Physics, Tokyo Metropolitan University, Japan
11:00	18:00	Direct observation of the layer-number-dependent electronic structure in few-layer WTe <sub>2</sub> Masato Sakano Quantum-Phase Electronics Center and Department of Applied Physics, The University of Tokyo, Japan
11:20	18:20	Towards super-resolution lithographic bandgap engineering of graphene Peter Bøggild Centre for Nanostructured Graphene (CNG), Technical University of Denmark,

11:40	18:40	20 minutes break
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CEST (EU)	JST (JP)	Scientific session 3 Session chair: Rai Moriya
12:00	19:00	Phase transitions in the quantum Hall magnet of bilayer graphene Michihisa Yamamoto RIKEN Center for Emergent Matter Science, Japan
12:20	19:20	Synthesis and properties of quantum materials: from twisted graphene to monolayer 1T'-MoTe <sub>2</sub> Camilla Coletti Istituto Italiano di Tecnologia, Italy

CEST (EU)	JST (JP)	General discussion Session chair: Riichiro Saito (Tohoku University, Japan)
12:40	19:40	Current status of "Graphene Flagship" Jari Kinaret (Chalmers University of Technology, Sweden)
12:50	19:50	Launching "Science of 2.5 Dimensional Materials" Hiroki Ago (Kyushu University, Japan)
12:55	19:55	Current status of "CREST 2D" Atsushi Kurobe (Japan Science and Technology Agency, Japan)
13:00	20:00	Discussion

CEST (EU)	JST (JP)	Closing session Session chair: Tomoki Machida (University of Tokyo, Japan)
13:30	20:30	Closing remark Toshiaki Enoki (Tokyo Institute of Technology, Japan) Camilla Coletti (Istituto Italiano di Tecnologia, Italy)