



1 & 2DM

CONFERENCE & EXHIBITION

TOKYO (JAPAN) - JANUARY 28-29, 2020

TENTATIVE PROGRAM (as of 17/01/2020)

P: Plenary / K: Keynote lecture / I: Invited Lecture / O: Oral contribution



Tuesday (28/01/2020)

08:30 – 09:00: *Registration*

09:00 – 09:10: *Opening Ceremony- Welcome and Introduction.*

09:10 – 09:40: **Hiroki Ago** (Kyushu University, Japan) K

Controlled synthesis and processing of 2D materials for future applications

09:40 – 10:00: **Hasegawa Masataka** (AIST, Japan) I

Synthesis and commercialization of graphene and related materials by plasma CVD

10:00 – 10:40: **Zhongfan Liu** (Peking University/BGI, China) P

Graphene Industry: Synthesis Determines Its Future

10:40– 11:30: *Coffee Break / Poster Session & Exhibition*

11:30 – 12:00: **Arben Merkoçi** (ICREA-ICN2, Spain) K

Graphene-based biosensors for diagnostics applications

12:00 – 12:20: **Kenzo Maehashi** (Tokyo University, Japan) I

Development of graphene-based highly sensitive sensors

12:20 – 12:35: **Bao-Hua Zhu** (Kwangwoon University, South Korea) O

Cost effective and highly ordered nanopillar array meta-surface for optical biosensing application

12:35 – 14:00: *Lunch*

14:00 – 14:30: **Stephan Roche** (ICREA/ICN2, Spain) K

Predictive Computational Modelling for Guiding Industrial Research & Development in 2D materials-based materials & devices

14:30 – 14:50: **Shintaro Sato** (Fujitsu Laboratories Ltd., Japan) I

Application of 1 & 2D nanocarbon materials to heat dissipation and sensing

14:50 – 15:10: **Shinpei Ogawa** (Mitsubishi Electric Corporation, Japan) I

High responsivity graphene infrared sensors

15:10 – 15:30: **Yukio Kawano** (Tokyo Institute of Technology, Japan) I

Nano-carbon Bendable Terahertz Camera: a Tool for Multi-view Inspection

15:30 – 15:50: **Takeshi Hashimoto** (Meijo Nano Carbon, Japan) I

MEIJO ARC and MEIJO eDIPS

15:50 – 16:40: *Coffee Break / Poster Session & Exhibition*

16:40 – 17:10: **Yoshihiro Iwasa** (University of Tokyo, Japan) K

Emergent Transport in van der Waals heterostructures

17:10 – 17:30: **Yasumitsu Miyata** (Tokyo Metropolitan University, Japan) I

Growth and characterization of in-plane heterostructures based on layered chalcogenides

17:30 – 17:45: **Geunsiik Lee** (Ulsan National Institute of Science and Technology, South Korea) O

Theoretical Study of Electronic Structure for Heterogeneous Nanostructures



Wednesday (29/01/2020)

- 09:00 – 09:20: **Takashi Uchihashi** (NIMS, Japan) I
Atomic-layer Rashba superconductor protected by dynamic spin-momentum locking
- 09:20 – 09:40: **Michihisa Yamamoto** (RIKEN Center for Emergent Matter Science, Japan) I
Spin-valleytronics in bilayer graphene
- 09:40 – 10:00: **Tomoki Machida** (University of Tokyo, Japan) I
Quantum transport in van der Waals junctions of graphene and hexagonal boron nitride
- 10:00 – 10:40: **Takashi Taniguchi** (NIMS, Japan) P
Hexagonal Boron Nitride single crystal as a two-dimensional wide band gap material
- 10:40 – 11:10: *Coffee Break*
- 11:10 – 11:40: **Pedro Gomez-Romero** (CSIC/ICN2, Spain) K
Nanopipes: From Polymers to Nanocarbons. From 1D to 2D Hybrid Electrode Materials
- 11:40 – 12:10: **Suguru Noda** (Waseda University, Japan) K
Conducting and Insulating Nanotubes as Platform for Rechargeable Batteries
- 12:10– 12:25: **Yanwen Yuan** (National University of Singapore, Singapore) O
Giant streaming currents in 2D nanopores
- 12:25 – 12:45: **Rezal Khairi Ahmad** (NanoMalaysia Berhad, Malaysia) I
Graphene Products Commercialization in Malaysia
- 12:45 – 14:00: *Lunch*
- 14:00 – 14:20: **Cesar Moreno** (ICN2, Spain) I
Atomically precise 1D and 2D graphene nanoarchitectures
- 14:20 – 14:40: **Junji Haruyama** (Aoyama Gakuin University, Japan) I
Creation of 2D topological insulating states on graphene and few-layer MoS₂
- 14:40 – 15:00: **Taishi Takenobu** (Nagoya University, Japan) I
Giant Power Factors in Large-Area Graphene Films on a Flexible Plastic Substrate
- 15:00 – 15:15: **Toshihiro Taen** (The University of Tokyo, Japan) O
Thickness dependent phase diagram up to B = 60 T in graphite
- 15:15 – 15:30: **Marcio Lima** (Lintec of America, USA) O
Solid State Actuators based on Helical CNT yarns: structure, properties and applications
- 15:30 – 15:50: **Slaven Garaj** (NUS, Singapore) I
Curious interaction of graphene with water and molecules
- 15:50 – 16:05: **Andres Granados del Aguila** (Nanyang Technological University, Singapore) O
Optical Properties of Atomically-thin MoS₂ Semiconductor Nanocrystals: Effects of Lateral Quantum-Confinement
- 16:05 – 16:35: **Kazutomo Suenaga** (AIST, Japan) K
Nanoscale Investigation of Local optical Properties from Low-dimensional Materials using Electron Energy-loss Spectroscopy
- 16:35: Closing and 1and2DM2021 announcement