EU GRAPHENE FLAGSHIP - SINGAPORE WORKSHOP

Research Innovation in 2D materials & beyond

Programme Overview: Day 1 (27th March)

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|---|---|---|---|--|--|
| Time | Event /Theme | Speaker | Subject/Title | | |
| 9:00 am | Opening remarks | I-FIM and EU Graphene | | | |
| Session Chair: Stephan Roche - Catalan Institute of Nanoscience and Nanotechnology (ICN2) | | | | | |
| 9:15 - 9:45 am | Plenary 1 | Jari Kinaret Chalmers University of Technology | Graphene Flagship: a look at its ten years' voyage and the way ahead | | |
| 9:45 - 10:15 am | Plenary 2 | Barbaros Ozyilmaz Institute for Functional Intelligent Materials, NUS | Monolayer Amorphous Carbon and its Applications | | |
| 10:15 - 10:35 am | Scientific Session 1: Health & Medicine | Liu Bin Institute for Functional Intelligent Materials, NUS | Artificial skin for wound healing | | |
| 10:35 - 10:55 am | | Laura Ballerini International School for Advanced Studies (SISSA) | 2D materials to modulate brain networks and synapses | | |
| 11:00 - 11:30 am COFFEE BREAK | | | | | |
| Session Chair: Maciej Koperski - Institute for Functional Intelligent Materials, NUS | | | | | |
| 11:30 - 11:50 am | Scientific Session 2: Industrial Production & Applications of 2DM | Andrea C. Ferrari Cambridge University | Layered Materials for Optoelectronics and Quantum Technologies | | |
| 11:50 - 12:10 pm | | Ken Teo AIXTRON | Wafer scale deposition of Graphene and 2D materials and their integration into devices | | |
| 12:10 - 12:30 pm | | Andrey Uztyuzhanin Institute for Functional Intelligent Materials, NUS | | | |
| 12:30 - 2:00 pm | | LUNCH | | | |
| Session Chair: Aleksandr Rodin - Centre for Advanced 2D Materials, NUS | | | | | |
| 2:00 - 2:20 pm | Scientific Session 3: Fundamental of 2DM | Vladimir Falko University of Manchester, UK | Twistronics of 2D trasition metal dichalcogenides | | |
| 2:20 - 2:40 pm | | Kedar Hippalgaonkar Institute for Functional Intelligent Materials, NUS | Thermoelectric Physics in 2D Materials – Discrete Density of States and Kondo Resonance | | |
| 2:40 - 3:00 pm | | Stephan Roche ICN2 | Two-dimensional materials for spintronics | | |
| 3:00 - 3:20 pm | | Maxim Trushin Institute for Functional Intelligent Materials, NUS | Two-dimensional water: How does it flow?" | | |
| 3:20 - 3:40 pm | | Alexey Berdyugin Institute for Functional Intelligent Materials, NUS | Giant Magnetoresistance of Dirac plasma in high-mobility graphene | | |
| 3:40 - 4:00 pm | | Justin Song School of Physical & Mathematical Sciences, NTU | Quantum non-reciprocity in moiré materials | | |

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Programme Overview: Day 2 (28th March)

| Time | Event /Theme | Speaker | Subject/Title | | |
|---|--|--|--|--|--|
| Session Chair: Alexandra Ines Sarabando de Carvalho - Institute for Functional Intelligent Materials, NUS | | | | | |
| 9:00 - 9:20 am | Scientific Session 4: Industrial Applications | Vincent Bouchiat GRAPHEAL | Graphene-on-polymer for sensors & healthcare applications | | |
| 9:20 - 9:40 am | | Juan Alfredo Guevara Carrio Centre for Advanced 2D Materials, NUS | The use of graphene membranes for hydrogen separation | | |
| 9:40 - 10:00 am | | Francesco Bonaccorso BEDIMENSIONALE | Industrial production of 2D materials for energy | | |
| 10:00 - 10:20 am | | Vincenzo Palermo CNR – National Research Council of Italy | Laser patterning of 2DM-polymer composites for automotive applications: an example of transnational technology within the Graphene Flagship. | | |
| 10:20 – 10:40 am | | Ricardo Keitel Centre for Advanced 2D Materials, NUS | 2D electrolytes and its applications | | |
| 10:40 - 11:10 am | | COFFEE BREAK | | | |
| Session Chair : Johan Ek Weis - CIT, Sweden | | | | | |
| 11:10 - 11:30 am | and new horizons | Guillermo Bazan Institute for Functional Intelligent Materials, NUS | Living Bioelectrochemical Composites | | |
| 11:30 - 11:50 am | | José-Antonio Garrido ICN2 | Graphene technology for neural interfaces | | |
| 11:50 - 12:10 pm | | Daria Andreeva Institute for Functional Intelligent Materials, NUS | 2D composites for biointerfaces. | | |
| 12:10 - 12:30 pm | | Kostas Kostarelos University of Manchester, UK | Clinical Translation Pathway of Advanced Materials: The Graphene Paradigm | | |
| 12:30 – 12:50 pm | | Liu Zheng Institute for Functional Intelligent Materials, NUS | Synthesis of 2D materials via CVD and CVT methods for electronic and optoelectronics | | |
| 12:50 pm | Concluding Remarks | | | | |