## Scientific Programme – Monday, 25 September 2017

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>07:30 – 17:00</td>
<td>Registration, <em>Ilissos Foyer</em></td>
</tr>
<tr>
<td>10:00 – 18:30</td>
<td>Exhibition, <em>Olympia Foyer</em></td>
</tr>
<tr>
<td>09:00 – 09:35</td>
<td>Opening Ceremony, <em>Olympia Hall</em></td>
</tr>
<tr>
<td>09:40 – 12:55</td>
<td>Plenary Session, <em>Olympia Hall</em></td>
</tr>
<tr>
<td>13:00 – 15:00</td>
<td>Lunch, <em>Amalia and Olympia Foyer</em></td>
</tr>
<tr>
<td>14:00 – 15:00</td>
<td>Fringe Session I: Open Forum, <em>Ilissos</em></td>
</tr>
<tr>
<td>15:00 – 18:00</td>
<td>Parallel Sessions</td>
</tr>
<tr>
<td>-</td>
<td>Fundamental science of graphene/2DM and their heterostructures, <em>Olympia A</em></td>
</tr>
<tr>
<td>-</td>
<td>Electronics, optoelectronics and photonics using graphene and other 2DM, <em>Olympia B</em></td>
</tr>
<tr>
<td>-</td>
<td>Synthesis and functionalisation of graphene and other 2DM, <em>Pella</em></td>
</tr>
<tr>
<td>-</td>
<td>Innovation Forum I: Roadmaps leading the way/Harvesting from research, <em>Ilissos</em></td>
</tr>
<tr>
<td>18:00 – 19:30</td>
<td>Poster Session I, <em>Ilissos Foyer and Ilissos</em></td>
</tr>
<tr>
<td>20:00 – 22:30</td>
<td>Welcome Reception, <em>New Acropolis Museum</em></td>
</tr>
</tbody>
</table>

### Plenary Session, *Olympia Hall*

<table>
<thead>
<tr>
<th>Time</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00 - 09:35</td>
<td><strong>Opening Ceremony</strong>&lt;br&gt;Costas Galiotis, Conference Chair, Greece&lt;br&gt;Thomas Skordas, Director for Digital Excellence and Science Infrastructure at the European Commission, Belgium&lt;br&gt;Costas Fotakis, Greek Minister for Research &amp; Innovation, Greece&lt;br&gt;Vincenzo Palermo, Vice-Director of the Graphene Flagship</td>
</tr>
<tr>
<td>09:40 - 10:15</td>
<td><strong>Kostya Novoselov</strong>, The University of Manchester, UK&lt;br&gt;Progress in van der Waals heterostructures</td>
</tr>
<tr>
<td>10:15 - 10:35</td>
<td>Coffee break</td>
</tr>
<tr>
<td>10:35 - 11:10</td>
<td><strong>Sang Ouk Kim</strong>, KAIST - Korea Advanced Institute of Science &amp; Technology, Republic of Korea&lt;br&gt;Graphene Oxide Liquid Crystal Based Novel Functional Nanomaterials</td>
</tr>
<tr>
<td>11:10 - 11:45</td>
<td><strong>Harold Zandvliet</strong>, University of Twente, The Netherlands&lt;br&gt;Germanene: the germanium analogue of graphene</td>
</tr>
<tr>
<td>11:45 - 12:20</td>
<td><strong>Jong-Hyun Ahn</strong>, Yonsei University, Republic of Korea&lt;br&gt;2D material based soft electronics</td>
</tr>
<tr>
<td>12:20 - 12:55</td>
<td><strong>Rahul Raveendran-Nair</strong>, The University of Manchester, UK&lt;br&gt;Tunable graphene-based membranes</td>
</tr>
</tbody>
</table>
Fringe Session I: Open Forum, Ilissos

14:00 - 14:45 Vincenzo Palermo, Vice-Director of the Graphene Flagship
The Graphene Flagship: status and next steps

14:45 - 15:00 Mónica Pérez Cabero, COST Association, Belgium
COST Programme

Parallel Sessions

Fundamental science of graphene/2DM and their heterostructures, Olympia A

15:00 - 15:20 Mengjian Zhu, The University of Manchester, UK
Edge currents shunt the insulating bulk in gapped graphene

15:20 - 15:40 Cristiano Fantini, Universidade Federal de Minas Gerais, Brazil
Exciton-phonon coupling and double-resonance Raman scattering in MX2-type layered materials

15:40 - 16:00 Tomasz Kazimierczuk, University of Warsaw, Poland
Time-resolved magneto-Raman study of the carrier dynamics at low Landau-levels in graphene

16:00 - 16:20 Peter Makk, University of Basel, Dept of Physics, Switzerland
Towards valley physics in graphene pn-junctions

16:20 - 16:40 Coffee break

16:40 - 17:00 Ioanna Demeridou, Foundation for Research and Technology-Hellas, Institute of Electronic Structure and Laser, Greece
Photochemical Doping in exfoliated TMDs Monolayers

17:00 - 17:20 Teemu Elo, Aalto University, Finland
Noise Correlations in Characterization of Graphene Transport

17:20 - 17:40 Pawel Michalowski, Institute of Electronic Materials Technology, Poland
Copper-free graphene growth process evaluated by Graphene Enhanced Secondary Ion Mass Spectroscopy (GESIMS)

17:40 - 18:00 Marcin Szalkowski, Nicolaus Copernicus University, Poland
Graphene photosynthesis: from energy transfer to solar energy conversion in Photosystem I complexes assembled on graphene

Electronics, optoelectronics and photonics using graphene and other 2DM, Olympia B

15:00 - 15:20 Pablo Alonso-González, University of Oviedo - CIC nanoGUNE, Spain
Tunable Hyperbolic Nanoantennas and Waveguides Made of Graphene on h-BN Metamaterial

15:20 - 15:40 Michael Thompson, Lancaster University, UK
DC SQUIDs with graphene Josephson junctions.

15:40 - 16:00 Dhiren Kara, University of Cambridge, UK
Deterministic creation and electrical driving of quantum emitters in atomically thin semiconductors

16:00 - 16:20 Maja Feierabend, Chalmers University of Technology, Sweden
Out of the dark and into the light: proposal for dark exciton based chemical sensors

16:20 - 16:40 Coffee break
16:40 - 17:00 Aleksey Kozikov, The University of Manchester, UK
Electroluminescence of spatially indirect excitons in van der Waals heterostructures

17:00 - 17:20 Hee Chul Park, Institute for Basic Science, Republic of Korea
Geometric Effects of Quantum Hall Graphene

17:20 - 17:40 Sarah Riazi Mehr, RWTH Aachen University, Germany
The origin of high photocurrent in Graphene/Silicon photodiodes

17:40 - 18:00 Dmitry Svintsov, Moscow Institute of Physics and Technology, Russia
Photodetectors based on multi-graphene layer heterostructures

Nanocomposites based on graphene and other 2DM, Vergina

15:00 - 15:20 Yarjan Samad, Cambridge Graphene Centre Cambridge, UK
Selective chemiresistive sensing using graphene/polymer aerogels

15:20 - 15:40 Gloria Guidetti, University of Bologna, Italy
High efficiency photocatalytic surfaces incorporating graphene and related materials

15:40 - 16:00 Israel Gago, Technical University of Cartagena, Spain
Graphene-based nanocomposite for body armour: tensile, impact and bulletproof properties

16:00 - 16:20 Karolina Gaska, Chalmers University of Technology, Sweden
The influence of the manufacturing process on thermal and electrical properties of graphene LDPE nanocomposites

16:20 - 16:40 Coffee break

16:40 - 17:00 Christina Kostagiannakopoulou, University of Patras, Greece
Effects of graphene nano-filler aspect ratio and specific surface area on the damage tolerance of multi-scale reinforced epoxy composites

17:00 - 17:20 Priyadarshini Ghosh, Indian Institute of Science, India
Facile synthesis of SLG separated plasmonic dimers with high SERS activity

17:20 - 17:40 Daniel P. O’Driscoll, Trinity College Dublin, Ireland
Connectivity and mobility of graphene sheets in viscoelastic nanocomposite sensing materials.

17:40 - 18:00 Sotirios Kopsidas, Imperial College London, UK
Multifunctional Epoxy Nanocomposites with Graphene Nanoplatelets and Carbon Nanotubes

Synthesis and functionalisation of graphene and other 2DM, Pella

15:00 - 15:20 Vincenzo Palermo, Chalmers University of Technology/CNR-ISO, Sweden/Italy
Tunable conductivity and surface chemistry of Graphene Oxide for enhanced electrochemical detection of analytes of biological interest

15:20 - 15:40 Gerd Bacher, University Duisburg-Essen, Germany
Optimizing photoluminescence efficiency in MOCVD-grown MoS2 monolayers

15:40 - 16:00 Jose Angel Martin-Gago, Institute of Materials Science of Madrid, ICMM-CSIC, Spain
Highly selective covalent organic functionalization of epitaxial graphene

16:00 - 16:20 Nilanthi Balakrishnan, The University of Nottingham, UK
From the growth to the exploitation of two-dimensional InxSey

16:20 - 16:40 Coffee break
16:40 - 17:00  Guang Wang, National University of Defense Technology, China
Molecular Beam Epitaxy Growth of MoTe2 Lateral Heterojunctions and Novel Mo6Te6 Nanotube phases

17:00 - 17:20  Cian Bartlam, The University of Manchester, UK
Nanoscale infrared spectroscopy mapping of chemical functional groups on two-dimensional surfaces

17:20 - 17:40  Demetrios Chronopoulos, Regional Centre for Advanced Technologies and Materials, Palacky University in Olomouc, Greece
Nucleophilic Substitution onto Fluorographene: Alkylation and Amination of Graphene by Grignard Reagents

17:40 - 18:00  Barry Brennan, National Physical Laboratory, UK
ToF-SIMS Characterisation of Graphene – Exploring the Impact of Contamination in Growth and Material Properties

Innovation Forum I

Roadmaps leading the way, Ilissos

15:00 - 15:40  Thomas Reiss, Fraunhofer Institute for Systems and Innovation Research ISI, Germany
Graphene Flagship roadmap and its methods

15:40 - 16:00  Mallika Bohm, Talga Technologies Ltd, UK
Advances in developments of industrial products applications for graphene and its derivatives.

16:00 - 16:20  Alvaro Jara, Airbus, Spain
Airbus - an industrial perspective on the roadmap

16:20 - 16:40  Coffee break

Harvesting from research, Ilissos

16:40 - 17:00  Salvatore Majorana, Italian Institute of Technology (IIT), Italy
Innovation at IIT

17:00 - 17:20  Erik Ashjari-Hansson, Chalmers Industriteknik, Sweden
Commercial development of early-stage research results

17:20 - 17:40  Tapani Ryhänen, Emberion OY, Finland
Spinning off an idea

17:40 - 18:00  Kari Hjelt, Stiftelsen Chalmers Industriteknik, Sweden
Business developers

Poster Session I, Ilissos Foyer and Ilissos
Monday 25 – Tuesday 26 September 2017. 18:00 – 19:30

1. Jesús Madrigal-Melchor, Universidad Autónoma de Zacatecas, Mexico
M and TE plasmonic modes in dielectric-graphene-dielectric superlattice

2. Ireri Aydée Sustaita Torres, Universidad Autónoma de Zacatecas, Mexico
Optical Properties for Quasi-Periodic Structures Dielectric-Graphene-Dielectric: comparison of Thue-Morse and Period-Doubling

3. Szabolcs Csonka, Budapest University of Technology and Economics (BME), Hungary
Single quantum dot charging in graphene nanoribbons in the Quantum Hall Regime
4. I.V. Sankar, SKKU Advanced Institute of Nanotechnology, Sungkyunkwan University, Republic of Korea
   Poloronic effects in the Kane-Mele model

5. Evgeniy Ponomarev, University of Geneva, Switzerland
   Strong electron-hole asymmetry of the electron-phonon coupling in semiconducting TMDCs

6. Luc Henrard, University of Namur, Belgium
   Electrodynamics of 2D heterostructures

7. Henri Prevost, ONERA-CNRS, France
   Heterostructures of CVD grown graphene and hBN on metallic substrates

8. Joshua Thompson, University of Bath, UK
   Valley-Polarised Tunnelling Currents in a Vertical Heterostructure of Monolayer and Bilayer Graphene

9. Nikolaos Papadopoulos, Kavli Institute, The Netherlands
   Quantum transport in hexagonal boron nitride encapsulated bilayer MoS2

10. YoungGyu YOU, Konkuk University, Republic of Korea
    Effect of remote interfacial phonon on the resistivity of graphene

11. Christoph Tyborski, Technische Universität Berlin, Germany
    UV Raman spectroscopy of graphene, graphite, carbon nanotubes, and diamondoid dimers

12. Denis Kochan, University of Regensburg, Germany
    Resonant to bound state transitions in superconducting graphene: roles of local magnetic moments and spin-orbit coupling.

13. Luis Rosales, Universidad Tecnica Federico Santa Maria, Chile
    Stacking change in MoS2 bilayer induced by interstitial Mo impurity

14. Siyu Li, Beijing Normal University, China
    Observation of Jahn-Teller effect at Van Hove singularities of a graphene Moiré superlattice

15. Wenxiao Wang, Beijing Normal University, China
    Imaging the dynamics of individual hydrogen atom intercalated between two graphene sheets

16. Gen Long, The Hong Kong University of Science and Technology, Hong Kong SAR
    Quantum transport in ambipolar few-layer black phosphorus

17. Abdulmenaf Altintas, Izmir Institute of Technology, Turkey
    Optical properties of disordered graphene quantum dots

18. Zhang Yu, Beijing Normal University, China
    Magnetism in Graphene

19. Pavel Sorokin, National University of Science and Technology MISIS, Russia
    2D monolayered transition metal oxide films family. Theoretical predictions and experimental evidences

20. Aitor Garcia-Ruiz, University of Bath, UK
    Electronic contribution to Raman spectrum of superconducting monolayer graphene

21. Leonor Chico, ICMM-CSIC, Spain
    Spin caloritronics in bilayer graphene flakes

22. Jinshu Li, Sungkyunkwan University, Republic of Korea
    Quasiparticle interference (QPI) in twisted bilayer graphene

23. Alexander Pearce, University of Konstanz, Germany
    Electron Spin Relaxation in a Transition-Metal Dichalcogenide Quantum Dot

24. Natalia Rostkowska, Institute of Physical Chemistry, Polish Academy of Sciences, Poland
    Nitrogen-doped high-quality graphenes for electrochemical determination of dihydroxybenzene isomers
<table>
<thead>
<tr>
<th>No.</th>
<th>Authors</th>
<th>Institution(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>25.</td>
<td>Eric Suarez Morell</td>
<td>Universidad Tecnica Federico Santa Maria, Chile</td>
<td>Circular Dichroism in two rotated graphene layers</td>
</tr>
<tr>
<td>26.</td>
<td>Lucian Covaci</td>
<td>Universiteit Antwerpen, Belgium</td>
<td>DC conductivity of twisted bilayer graphene: Angle-dependent transport properties and effects of disorder</td>
</tr>
<tr>
<td>27.</td>
<td>Nojoon Myoung</td>
<td>Institute for Basic Science, Republic of Korea</td>
<td>Strain-induced quantum Hall conductance oscillation in graphene</td>
</tr>
<tr>
<td>28.</td>
<td>Christos Melios</td>
<td>National Physical Laboratory, UK</td>
<td>Substrate and environmental effects in epitaxial graphene/SiC(0001)</td>
</tr>
<tr>
<td>29.</td>
<td>Iaroslav Lutsyk</td>
<td>University of Lodz, Poland</td>
<td>Electronic properties of 1T-TaS2 studied by ARPES/STM/STS/LEED/Raman and DFT methods</td>
</tr>
<tr>
<td>30.</td>
<td>Marta Pelc</td>
<td>Donostia International Physics Centre, Spain</td>
<td>Controlling the localization of topological gapless states in bilayer graphene with a gate voltage</td>
</tr>
<tr>
<td>31.</td>
<td>Marcin Mucha-Kruczynski</td>
<td>University of Bath, UK</td>
<td>Electronic band structure and van der Waals coupling of ReSe2 revealed by high-resolution angle-resolved photoemission spectroscopy</td>
</tr>
<tr>
<td>32.</td>
<td>Franco Tardani</td>
<td>Centre de Recherche Paul Pascal, France</td>
<td>Control of wrinkling in graphene oxide drying films</td>
</tr>
<tr>
<td>34.</td>
<td>Javier Bartolome</td>
<td>Instituto de Ciencia de Materiales - Consejo Superior de Investigaciones Científicas, Spain</td>
<td>The role of crystallographic orientation of Cu under graphene on copper oxide formation and on graphene properties</td>
</tr>
<tr>
<td>35.</td>
<td>Jin Hye-Jin</td>
<td>Ewha Womans University, Republic of Korea</td>
<td>Out-of-plane electromechanical and reduced resistive properties of MoS2 layers on piezoelectric PbTiO3</td>
</tr>
<tr>
<td>36.</td>
<td>Jin Hye-Jin</td>
<td>Ewha Womans University, Republic of Korea</td>
<td>Modulation of work function of MoS2 with ferroelectric polarization states</td>
</tr>
<tr>
<td>37.</td>
<td>Philipp Eickholt</td>
<td>Westfälische Wilhelms-Universität, Germany</td>
<td>Single-layer TMDC's on Au(111): dispersion and spin structure of conduction bands</td>
</tr>
<tr>
<td>38.</td>
<td>Bojja Aditya Reddy</td>
<td>University of Geneva, Switzerland</td>
<td>Electroluminescence from indirect band gap semiconductor ReS2</td>
</tr>
<tr>
<td>39.</td>
<td>Johannes Jobst</td>
<td>Leiden University, The Netherlands</td>
<td>The effect of stacking domains in epitaxial graphene studied with low-energy electron microscopy</td>
</tr>
<tr>
<td>40.</td>
<td>Youngwook Kim</td>
<td>Max-Planck-Institut für Festkörperforschung, Germany</td>
<td>Charge Inversion and Topological Phase Transition at a Twist Angle Induced van Hove Singularity of Bilayer Graphene</td>
</tr>
<tr>
<td>41.</td>
<td>Péter Kun</td>
<td>Centre for Energy Research, Institute of Technical Physics and Materials Science, Hungary</td>
<td>Measuring the scattering of graphene's charge carriers on strain fluctuations via Raman spectroscopy</td>
</tr>
<tr>
<td>42.</td>
<td>Michael Beconcini</td>
<td>NEST, Scuola Normale Superiore, Italy</td>
<td>The impact of valley Coulomb drag on topological valley transport</td>
</tr>
<tr>
<td>43.</td>
<td>Argiris Laskarakis</td>
<td>Nanotechnology Lab LTFN, Aristotle University of Thessaloniki, Greece</td>
<td>Graphene Layers: Production, Characterization, Integration &amp; Devices (EU Project GLADIATOR)</td>
</tr>
</tbody>
</table>
44. Seiji Obata, The University of Tokyo, Japan
*High degree reduction and restoration of graphene oxide by Cu-assisted CH₄/H₂ plasma treatment*

45. Andreas Winter, Friedrich Schiller University Jena, Germany
*Perforated nanomembranes and lateral heterostructures of 2D carbon materials*

46. Michael Schmitz, 2nd Institute of Physics A - RWTH AACHEN University, Germany
*High-quality dry transferred CVD bilayer graphene*

47. Ghosh Priyadarshini, Indian Institute of Science, India
*Addition of reaction products to source to modulate supersaturation for controlling nucleation density and island sizes of monolayer MoS₂*

48. Dacheng Wei, Fudan University, China
*Low-Temperature Catalyst-Free Growth of Two-Dimensional Crystals on Dielectrics for Nanodevices*

49. Dapeng Wei, Chongqing Institute of Green and Intelligent Technology, Chinese Academy of Sciences, China
*Direct Growth of Conformal Graphene Films on 3D Quartz Substrate for High-Performance Pressure-Sensitive Sensors*

50. Wataru Norimatsu, Nagoya University, Japan
*Graphene growth by thermal decomposition of Al₄C₃ on SiC*

51. Keita Matsuda, Nagoya University, Japan
*Nano-graphene formation by thermal decomposition of sea-island structured SiC/B₄C nanocomposite*

52. Gabriela Copetti, Universidade Federal do Rio Grande do Sul/Physics Institute, Brazil
*Reversible doping of graphene by photochemical chlorination*

53. Liviu Cosmin Cotet, Babes-Bolyai University, Romania
*Printed graphene electrodes by the selective reduction of graphene oxide films*

54. Pawel Ciepulewski, ITME, Poland
*Graphene nanoflakes from hemp bast fiber*

55. Petar Pervan, Institute of Physics, Croatia
*Adsorbed or intercalated: Na on Gr/Ir(111)*

56. Lucian Baia, “Babes-Bolyai” University, Faculty of Physics & Institute for Interdisciplinary Research on Bio-Nano-Sciences, Romania
*Self-assembly behaviour of an isopycnic sorted water-ethanol graphene oxide suspension at air-liquid interface*

57. Maren Kasischke, Ruhr Universität Bochum, Germany
*Femtosecond lasers as micro-machining tool for graphene structuring and graphene oxide reduction*

58. Rasa Pauliukaitė, Center for Physical Sciences and Technology, Lithuania
*Innovation in graphene oxide reduction using different reducing agents for application in the development of supercapacitors*

59. Mukesh Tripathi, University of Vienna, Austria
*Cleaning graphene: comparing heat treatments in air and in vacuum*

60. Klaus Pierz, Physikalisch-Technische Bundesanstalt PTB, Germany
*Large-area quasi-free-standing graphene on SiC: improved buffer layer growth by argon flux optimization*

61. Ji-Yong Park, Ajou University, Republic of Korea
*Facile synthesis of carbon nanotube/MoS₂ hybrids by chemical vapor deposition*

62. Davood Momeni Pakdehi, Physikalisch-Technische Bundesanstalt, Germany
*High quality epitaxial monolayer graphene by polymer-assisted sublimation growth on SiC*

63. Aristides Bakandritsos, Palacky University, Czech Republic
*Fluorographene as a substrate for new graphene derivatives*
64. Bilge Bekdüz, University of Duisburg-Essen, Germany  
   CVD growth of graphene at reduced temperatures

65. Grigory Skoblin, Chalmers University of Technology, Sweden  
   Encapsulation of graphene in Parylene

66. Jolita Jablonskiene, SRI Center for Physical Sciences and Technology, Lithuania  
   Microwave-assisted synthesis of graphene supported PtCo and PtCoRu catalysts and their  
   application for methanol oxidation

67. Maria Iliut, The University of Manchester, UK  
   Graphene and water-based elastomers ultra-thin-film composites

68. Zhongzheng Fang, National University of Defense Technology, China  
   Principle research of pressure sensor based on suspended graphene/hexagonal boron nitride  
   heterostructures

69. Sandra Paszkiewicz, West Pomeranian University of Technology in Szczecin, Poland  
   Preparation and characterization of thin foils based on poly(trimethylene furanodicarboxylate)  
   and few layer graphene

70. Mahabub Alam Bhuiyan, University of Nottingham, UK  
   Magnetic and non-magnetic two-dimensional van der Waals InSe crystals

71. Farzaneh Peymanirad, Shahid Rajaee Teacher Training University, Iran  
   The rotational motion of graphene flake on graphene

72. Zixin Wang, The University of Manchester, UK  
   The enhancement of multi-functionality of nano-composites

73. Han Zhang, Queen Mary University of London, UK  
   Filtration Effects of Graphene Nanoplatelets in Liquid Moulding of Composites: Problems and  
   Possible Solutions

74. Reyes Mario, Grupo Avance, Chile  
   Crossing the frontier: Use of graphene, copper powder doped with rare earth, as substitute of  
   catalysts in the pre-ignition of petroleum.

75. Asimina Manta, School of Materials, The University of Manchester, UK  
   A multiscale finite element model for the thermal response of a graphene/polymer nanocomposite

76. Theodore Tsoufis, University of Crete, Greece  
   Graphene as 2D platform for the in-situ development of ZIF-type nanocrystals

77. Ijaz Ahmad, Allama Iqbal Open University Islamabad, Pakistan  
   Synthesis, Characterization of Graphene Oxide and Reduced Graphene Using Modified Hummer's  
   Method and Fabrication of Graphene Nanocomposites.

78. Benjamin Weise, Institut fuer Textiltechnik, Germany  
   Melt-spinning and weaving of graphene-modified polyamide 6 fibres- a new route towards smart  
   textile materials

79. Claire Murtala, Manchester Metropolitan University, UK  
   Graphene Compound Topography and Size after Preparation in Commonly Used Cell Culture  
   Solutions

80. Sharali Malik, Karlsruhe Institute of Technology (KIT), Germany  
   Graphene for potential dental-polymer applications

81. Laura Fusco, University of Trieste, Italy  
   Mechanisms of mitochondrial damage induced by graphene and graphene oxide in skin  
   keratinocytes

82. André F. Girão, University of Aveiro, Portugal  
   An adaptive biomimetic graphene-oxide-collagen scaffold for tissue engineering applications
83. Aravind Vijayaraghavan, The University of Manchester, UK
Adsorption and binding dynamics of graphene-supported biomimetic phospholipid membranes using the QCM-D technique

84. Philip Thomas, The University of Manchester, UK
Phase-sensitive detection of HT-2 mycotoxin using graphene-protected copper plasmonics

85. Yolanda Belaustegui, Tecnalia, Spain
Capacitive deionization with graphene electrodes vs reverse osmosis for water desalination

86. Usuma Naknikham, Aalborg University, Denmark
Enhanced bonding between TiO2-Graphene oxide

87. Takakazu Seki, Tokyo Institute of Technology, Japan
Electrochemical control of peptides self-assembling behavior on 2D nanomaterials

88. Sharali Malik, Karlsruhe Institute of Technology, Germany
Nanocomposites of graphene for potential dental applications

WITHDRAWN

91. Stephanie Hernandez Santos, Abalonyx AS, Norway
Water Treatment: Adsorption Mechanism of Pb(II) on Graphene Oxide Nano-Sheets

92. Tanveer Ahmad Tabish, University of Exeter, UK
Fabrication of three-dimensional graphene foam for use in regenerative neural stem cell culture

93. Dmitry Kireev, Forschungszentrum Julich, Germany
Neuroelectronics & graphene devices

94. Awan Shakil, University of Plymouth, UK
Sensitive and label-free Graphene FET immunosensors for detection of Clusterin Protein Biomarker for Alzheimer's Disorder

95. Yury Stebunov, Moscow Institute of Physics and Technology, Russia
Graphene oxide-based SPR interfaces: analysis of molecular interactions

96. Artur Filipe Rodrigues, The University of Manchester, UK
Protein coating determines the cellular responses in the abdominal cavity after graphene oxide administration

97. Wangyang Fu, Leiden University, The Netherlands
Tracking a chemical reaction in real time with a graphene-copper(I) hybrid material

98. Henry Giddens, Queen Mary University London, UK
Graphene enabled reconfigurable reflect-array antennas

99. Monica Pacheco, Universidad Santa Maria, Chile
Optical properties of pentagraphene ribbons

100. Wei-Hua Wang, Academia Sinica, Taiwan
Transport properties of high-performance InSe field-effect transistors on self-assembled-monolayer-functionalized substrates

101. Gwang Hyuk Shin, KAIST, Republic of Korea
Tunnelling field effect transistor based on highly p-doped silicon and MoS2 heterostructure

102. Appalakondaiah Samudrala, Sungkyunkwan University, Republic of Korea
Semiconductor to metallic transition and possible superconductivity in WS2: An ab initio study

103. Charalampos Mavidis, University of Crete, Greece
Graphene-Dielectric-Metal tunable THz perfect absorber

104. Rakesh Kumar, The University of Manchester, UK
Array-based monolayer graphene membranes device for gas and biosensing applications
105. Slavisa Milovanovic, University of Antwerp, Belgium
Strain controlled valley filtering in multi-terminal graphene structures

106. Ersoy Subasi, Electronic Materials and Nanoelectronics, Germany
Solution-processed bottom-contact metal-oxide thin-film transistors with transparent graphene electrodes

107. Dapeng Wei, Chinese Academy of Sciences, China
3D conformal graphene film for flexible transparent electrode

108. Juan Antonio Casao Perez, University of Zaragoza, Spain
Voltage and Current Waves for TM Plasmons in Graphene

109. Amedeo Bellunato, Leiden University, The Netherlands
Dynamic single carbon-carbon tunneling nanogaps for biomolecular detection

110. Samuel Brem, Chalmers University of Technology, Sweden
Microscopic Modeling of Tunable Graphene-Based Terahertz Landau-Level Lasers

111. Mircea Dragoman, National Institute for Research and Development in Microtechnology (IMT), Romania
Room temperature on Wafer Quantum Gates based on Graphene Monolayers

112. Soo Yeon Lim, Sogang university, Republic of Korea
Polypotypes of 2-dimensional GaSe studied by Raman spectroscopy

113. Elias Koumoulos, RNanolab, National Technical University of Athens, Greece
Integrity and performance of graphene based sprayed electrodes for high performance supercapacitors

114. Alina Mrenca-Kolasinska, AGH University of Science and Technology, Poland
Conductance microscopy of carrier scattering by n-p junctions induced in graphene by a floating probe potential

115. Suk-Ho Choi, Kyung Hee University, Republic of Korea
Device characterization of graphene-based low-dimensional nano-junctions fabricated by metal-assisted chemical etching

116. Jérémy Brun-Picard, Laboratoire National de Métrologie et d’Essais, France
Investigating low-dissipative electron transport in quantum Hall devices based on graphene grown by CVD on SiC in view of improving the electrical resistance standard

117. Yijin Zhang, Max Planck Institute for Solid State Research, Germany
Field-induced p-n junction in transition-metal dichalcogenides

118. Nikolaos Matthaiakakis, University of Southampton, UK
Tuneable Total Optical Absorption in a Triply Resonant Metal-Insulator-Graphene Hetero-Structure Plasmonic Device

119. Yeonchoo Cho, Samsung Advanced Institute of Technology, Republic of Korea
Inserting two-dimensional materials to reduce contact resistivity in semiconductor devices

120. Ilmin Lee, Sungkyunkwan University, Republic of Korea
Short channel Field-Effect Transistor based on graphene electrodes with low short-channel effect

121. Martin Rejchon, Charles University, Faculty of Physics and Mathematics, Czech Republic
Electroluminescent properties of Graphene/SiC

122. Roland Jago, Chalmers University of Technology, Sweden
Current enhancement due to field-induced dark carrier multiplication in graphene

123. Andrei Vorobiev, Chalmers University of Technology, Sweden
Delay analysis for evaluation of carrier velocity in graphene field-effect transistors

124. Oihana Txoperena, Graphenea, Spain
Graphene for flexible and transparent conductive electrodes

125. Ioanna Zergioti, National Technical University of Athens, Greece
Simultaneous pulsed laser printing and laser reduction of graphene oxide
August Yurgens, Chalmers University of Technology, Sweden  
Thermoelectric readout of electronic temperature in graphene

M. Suha Yazici, TUBITAK/ Marmara Research Centre, Turkey  
CVD graphene as catalyst for oxygen reduction in PEM fuel cells

Maria Arnaiz, CIC energiGUNE, Spain  
All graphene based lithium ion capacitor with high gravimetric energy and power densities

Ausrine Zabielaite, SRI Center for Physical Sciences and Technology, Lithuania  
Graphene monolayers modified with gold or platinum nanoparticles as electrocatalyst for borohydride electro-oxidation

Hankwon Chang, Korea Institute of Geoscience and Mineral Resources, Republic of Korea  
Construction of 3D Network-Structured Crumpled Graphene/Carbon Nanotube/Polyaniline Composites for Supercapacitors with High Electrochemical Performance

Otakar Frank; Zdenka Hajkova, Institute of Physics of the CAS, Czech Republic  
Characterization of photovoltaic properties of graphene-silicon Schottky junctions at nanometre scale

Loreta Tamaseskaite-Tamasiaute, SRI Center for Physical Sciences and Technology, Lithuania  
One-pot synthesis of graphene supported Pt-M (M = Co, Fe, Ce) catalysts and their application for methanol oxidation and oxygen reduction

Igor Baburin, Technische Universität Dresden, Germany  
Hydrogen storage by physisorption in graphene-based materials: from simulations and experiments to practical aspects

Suk-Ho Choi, Kyung Hee University, Republic of Korea  
Triethylenetetramine-doped graphene/Si heterojunction solar cells employing polymethylmethacrylate antireflection layer

Suk-Ho Choi, Kyung Hee University, Republic of Korea  
Optical and electrical characterization of perovskites on graphene transparent conductive electrodes for flexible solar cells

Naebong Jeong, Konkuk University, Republic of Korea  
Contact Resistance of WS2, Depending on a Number of Layers

Do-hyun Park, Konkuk university, Republic of Korea  
Mechanical cleaning for chemical sensor with contact mode

Sung Won Kim, Konkuk University, Republic of Korea  
Patternning of periodic ripples in monolayer MoS2 by using laser irradiation

Andrea Latge  
Defect-enhanced Rashba spin-polarized currents in carbon nanotubes and graphene nanoribbons

A Dagkil  
Modeling of surface enhanced Raman spectroscopy in monolayer graphene on top of plasmonic substrates

Spyros Doukas  
Spectrometer free sensors based on graphene nanoribbons

Artur Pinto  
Biocompatibility of silicone rubber/graphene-nanoplatelets composites with improved mechanical properties

V Pellegrini  
Fractals Plasmonics in Graphene

Aideen Griffin, Trinity College Dublin, University of Dublin, Ireland  
Chemical physics of low dimensional nanostructures
145. Georgios Oikonomou, National Technical University of Athens, Greece
Development of anticorrosive and more hydrophobic coatings using graphene oxide as corrosion inhibitor.

146. Cian Gabbett, Trinity College Dublin, Ireland
Mechanical Percolation in 1D:2D Nanocomposites

147. A. Lyuleeva, Institute for Nanoelectronics, Munich, Germany
Modified 2D Silicon Nanosheets in Electronics: From Synthesis to Application
### SCIENTIFIC PROGRAMME – TUESDAY, 26 SEPTEMBER 2017

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:00 – 17:00</td>
<td>Registration, <em>Ilissos Foyer</em></td>
</tr>
<tr>
<td>10:00 - 18:30</td>
<td>Exhibition, <em>Olympia Foyer</em></td>
</tr>
<tr>
<td>08:30 – 12:55</td>
<td>Plenary Session, <em>Olympia Hall</em></td>
</tr>
<tr>
<td>13:00 – 15:00</td>
<td>Lunch, <em>Amalia and Olympia Foyer</em></td>
</tr>
<tr>
<td>14:00 – 15:00</td>
<td>Fringe Session II: Ethics Forum, <em>Ilissos</em></td>
</tr>
<tr>
<td>15:00 – 18:00</td>
<td>Parallel Sessions</td>
</tr>
<tr>
<td></td>
<td>- Fundamental science of graphene/2DM and their heterostructures, <em>Olympia A</em></td>
</tr>
<tr>
<td></td>
<td>- Electronics, optoelectronics and photonics using graphene and other 2DM, <em>Olympia B</em></td>
</tr>
<tr>
<td></td>
<td>- Energy applications of graphene and related materials, <em>Vergina</em></td>
</tr>
<tr>
<td></td>
<td>- Graphene Synthesis and Graphene Nanoribbons, <em>Pella</em></td>
</tr>
<tr>
<td></td>
<td>- Innovation forum II: Commercialisation/ Industrial perspective, <em>Ilissos</em></td>
</tr>
<tr>
<td>18:00 – 19:30</td>
<td>Poster Session I, <em>Ilissos Foyer and Ilissos</em></td>
</tr>
<tr>
<td>18:00 – 20:00</td>
<td>Women in Graphene, <em>Horizon</em></td>
</tr>
</tbody>
</table>

#### Plenary Session, *Olympia Hall*

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30 - 09:05</td>
<td><strong>Michael Crommie</strong>, University of California, USA</td>
</tr>
<tr>
<td></td>
<td>Electronic Structure of Impurity-Doped Bottom-Up Graphene Nanoribbon Heterojunctions</td>
</tr>
<tr>
<td>09:05 - 09:40</td>
<td><strong>Marcos Pimenta</strong>, Universidade Federal de Minas Gerais, Brazil</td>
</tr>
<tr>
<td></td>
<td>Inter-valley scattering by acoustic phonons in 2D transition metal dichalcogenides and edge phonons in black phosphorus studied by resonance Raman spectroscopy</td>
</tr>
<tr>
<td>09:40 - 10:15</td>
<td><strong>Helene Bouchiat</strong>, Laboratoire de Physique des Solides Orsay, France</td>
</tr>
<tr>
<td></td>
<td>Inducing and detecting magnetism and spin-orbit interactions in graphene.</td>
</tr>
<tr>
<td>10:15 - 10:35</td>
<td>Coffee break</td>
</tr>
<tr>
<td>10:35 - 11:10</td>
<td><strong>Jeannie Lau</strong>, University of Riverside, USA</td>
</tr>
<tr>
<td></td>
<td>Quantum Transport in High Mobility 2D Membranes</td>
</tr>
<tr>
<td>11:10 - 11:45</td>
<td><strong>Rudolf Bratschitsch</strong>, University of Münster, Germany</td>
</tr>
<tr>
<td></td>
<td>Single-photon emitters in atomically thin semiconductors</td>
</tr>
<tr>
<td>11:45 - 12:20</td>
<td><strong>Heejun Yang</strong>, Sungkyunkwan University (SKKU), Republic of Korea</td>
</tr>
<tr>
<td></td>
<td>Novel 2D interfaces with silicon, graphene, transition metal dichalcogenides and Ca2N</td>
</tr>
<tr>
<td>12:20 - 12:55</td>
<td><strong>Rainer Hillenbrand</strong>, CIC nanoGUNE, Spain</td>
</tr>
<tr>
<td></td>
<td>Graphene Plasmons studies by infrared and terahertz nanoimaging</td>
</tr>
</tbody>
</table>
Fringe Session II: Ethics Forum, Ilissos

14:00 - 15:00  Fringe II: Ethics Forum
Bernadette Bensaude-Vincent, Université Paris, France; Ulrike Felt, University of Vienna, Austria; Philip Macnaghten, Wageningen University & Research, Netherlands
Embedding Ethical and Societal Engagement in Graphene Research

Parallel Sessions

Fundamental science of graphene/2DM and their heterostructures, Olympia A

15:00 - 15:20  Ziwei Dou, University of Cambridge, UK
Imaging bulk and edge transport near the Dirac point in graphene moiré superlattices

15:20 - 15:40  Ioannis Paradisanos, FO.R.T.H., Greece
Spin-valley polarization in WS2 heterostructures

15:40 - 16:00  Antti Laitinen, Aalto University, Finland
Evidence of Wigner crystallization in monolayer graphene

16:00 - 16:20  Hiske Overweg, ETH Zürich, Switzerland
Electrostatically Induced Quantum Point Contact in Bilayer Graphene

16:20 - 16:40  Coffee break

16:40 - 17:00  John Wallbank, The University of Manchester, UK
Dramatically increased resistivity from superlattice umklapp scattering in graphene/BN heterostructures

17:00 - 17:20  Jonathan Eroms, University of Regensburg, Germany
Tunable periodic modulation in high-mobility graphene

17:20 - 17:40  Jacob König-Otto, Helmholtz-Zentrum Dresden-Rossendorf, Germany
Tunable nonlinear optical resonances in Landau-quantized graphene

17:40 - 18:00  Son T. Le, NIST and Theiss Research, USA
Strong equilibration of Landau level edge states at the graphene edge

Electronics, optoelectronics and photonics using graphene and other 2DM, Olympia B

15:00 - 15:20  Lee Khang June, KAIST, Korea
Observation of Wavelength dependent plasmon tunnelling through graphene spacer

15:20 - 15:40  Marc Philippi, Université de Genève, Switzerland
Valley Hall Effect in TMDs from exciton and trion absorption

15:40 - 16:00  Dezhi Tan, Institute of Advanced Energy, Kyoto University, Japan
GeSe/MoS2 heterojunction diode for highly sensitive and broadband photodetectors

16:00 - 16:20  Michele Serri, Italian Institute of Technology, Italy
Few-layer black phosphorous-based inks for printed electronics

16:20 - 16:40  Coffee break

16:40 - 17:00  Engin Durgun, Bilkent University - UNAM, Turkey
Optical properties of single and bilayer arsenene phases
17:00 - 17:20  George Kliros, Hellenic Air-Force Academy, Greece  
Strain Engineering in Graphene Nanoribbon Field Effect Transistors

17:20 - 17:40  Habib Rostami, Istituto Italiano di Tecnologia (IIT), Italy  
Piezoelectricity in hexagonal 2D crystals

17:40 - 18:00  D. Kurt Gaskill, U.S. Naval Research Laboratory, USA  
Potential obstacles to hydrogen intercalation of epitaxial graphene

**Energy applications of graphene and related materials, Vergina**

15:00 - 15:20  George Kakavelakis, TEI of Crete, Greece  
Graphene-related materials for efficient and stable organic and perovskite solar cells

15:20 - 15:40  Cristina Botas, CIC Energigune, Spain  
Graphene based Composites as Anodes for Lithium-Ion Batteries

15:40 - 16:00  Jong Min Kim, Kyung Hee University, Republic of Korea  
Si quantum dots/Si wafer heterojunction solar cells by employing AuCl3- or Ag-nanowires-doped-graphene transparent conductive electrodes

16:00 - 16:20  Martin Jordanov, The University of Manchester, National Graphene Institute, UK  
Graphene as a potential lubricant additive

16:20 - 16:40  Coffee break

16:40 - 17:00  Vito Di Noto, University of Padova, Italy  
Electrocatalysts for the oxygen reduction reaction based on highly defective hierarchical graphene supports and with a low loading of platinum

17:00 - 17:20  Alberto Ansaldo, Italian Institute of Technology, Italy  
High-power graphene-carbon nanotube hybrid supercapacitors

17:20 - 17:40  Meganne Christian, CNR, Italy  
Energy storage in graphene foam composites

17:40 - 18:00  Hee Dong Jang, Korea Institute of Geoscience and Mineral Resources, Republic of Korea  
Comparison of crumpled graphene loaded with magnetite and hematite nanoparticles for supercapacitors

**Graphene synthesis and graphene nanoribbons, Pella**

15:00 - 15:40  Roman Fasel, Empa, Swiss Federal Laboratories for Materials Science and Technology, Switzerland  
Bottom-up fabrication of graphene nanoribbons: From molecules to devices

15:40 - 16:00  Alex Sinitskii, University of Nebraska, USA  
Atomically Precise Graphene Nanoribbons: From Synthesis to Applications

16:00 - 16:20  Diego Peña, Universidad de Santiago de Compostela, Spain  
An Organic Chemistry Approach Toward Graphene Nanostructures

16:20 - 16:40  Coffee break

16:40 - 17:00  Felix Fischer, University of California Berkeley, USA  
Design, Synthesis, and Exploration of Quantum Confinement Effects in Organic Nanostructures
17:00 - 17:20 Petra Tegeder, Heidelberg University, Germany
Electronic properties of bottom-up fabricated graphene nanoribbons

17:20 - 17:40 Liangbo Liang, Oak Ridge National Laboratory (ORNL), USA
Electron and phonon confinement in graphene nanoribbons

17:40 - 18:00 Jonas Björk, Linköping University, Sweden
Insights into on-surface synthesis of atomically precise graphene nanoribbons from theoretical modeling

**Innovation Forum II**

**Commercialisation, Ilissos**

15:00 - 15:20 James Baker, National Graphene Institute, The University of Manchester, UK
Graphene – the route to commercialisation – the “teenage years”

15:20 - 15:40 Zina Jarrahi Cinker, National Graphene Association, USA
Graphene: A Global Material with the Need for Global Alliances

15:40 - 16:00 Selim Stahl, RISE Research Institutes of Sweden, Sweden
Estimating costs of producing GRM filled polymers

16:00 - 16:20 Burcu Saner Okan, Sabanci University, Turkey
Graphene production from pyrolyzed carbon by mild and recycling technique and its utilization in automotive plastic trim parts

16:20 - 16:40 Coffee break

**Industrial perspective, Ilissos**

16:40 - 17:00 Ana Ballestar, GPNT, S.L., Spain
Graphene for high-performance electronic devices

17:00 - 17:20 Gemma Vall-Llosera, Ericsson Research RA HDE, Sweden
Industrial applications of graphene

17:20 - 17:40 Paolo Bondavalli, Thales, France
Spray-gun deposition method of graphene and carbon based nanomaterials : history of an innovation

17:40 - 18:00 Anna Andersson, ABB, Sweden
GO a new lubricant in industrial applications

**Women in Graphene, Horizon**

18:00 - 20:00 Women in Graphene
Sian Fogden, Nanotech innovator/Graphene Flagship Press Coordinator, UK
Innovating in a tiny world: the bumpy road of nanotech commercialisation

Maria Koutrokoi, Greek National Contact Point Coordinator, Greece
Funding opportunities under Horizon 2020

Emilie Klecha, Scientific and Policy Officer, EC Flagships unit, France
Gender Equity in the ERA

**Poster session I, Ilissos Foyer and Ilissos**
Monday 25 – Tuesday 26 September 2017

See list of posters given below the programme of Monday
SCIENTIFIC PROGRAMME – WEDNESDAY, 27 SEPTEMBER 2017

08:00 – 17:00  Registration, Ilissos Foyer
10:00 - 18:30  Exhibition, Olympia Foyer
08:30 – 12:55  Plenary Session, Olympia Hall
13:00 – 15:00  Lunch, Amalia and Olympia Foyer
14:00 – 15:00  Fringe Session III: Interfaces, Ilissos
15:00 – 18:00  Parallel Sessions
- Fundamental science of graphene/2DM and their heterostructures, Olympia A
- Electronics, optoelectronics and photonics using graphene and other 2DM, Olympia B
- Interfaces in supported/embedded graphene/2DM systems, Vergina
- Innovation Forum III: Industrialisation – Standardisation/Industrialisation - Processing on wafer, Ilissos
18:00 – 19:30  Poster Session II, Ilissos Foyer and Ilissos

Plenary Session, Olympia Hall

08:30 - 09:05  Jose Garrido, ICN2 - Catalan Institute of Nanoscience and Nanotechnology, Spain
Graphene technologies for bioelectronics and neuroprosthetics

09:05 - 09:40  Maurizio Prato, University of Trieste, Italy
Chemistry of Graphene: Opportunities and Challenges.

09:40 - 10:15  Kostas Kostarelos, The University of Manchester, UK
Transformation of Graphene Oxide from a Nanomaterial to a Biomaterial: Pharmacology and Toxicokinetics

10:15 - 10:35  Coffee break

10:35 - 11:10  Irina Grigorieva, The University of Manchester, UK
Graphene as a spacer in magnetic tunnel junctions: more than just a tunneling barrier

11:10 - 11:45  Anna Andersson, ABB, Sweden
Multifunctional metal-graphene composites for electric contact applications

11:45 - 12:20  Paolo Bondavalli, Thales, France
Graphene Based supercapacitors

12:20 - 12:55  Antonio Castro Neto, National University of Singapore, Singapore
2D Materials: science and technology

Fringe Session III: Interfaces, Ilissos  Wrap-up Session

14:00 - 14:15  Marco Romagnoni, CNIT-National Inter-University Consortium for Telecommunications, Italy
Transfer, Fabrication & Interface Effects

14:15 - 14:30  Max Lemme, RWTH Aachen, Germany
Metalic contact interfaces

14:30 - 14:45  Giovanna Pastore, Foundation for Research & Technology-Hellas (FORTH), Greece
Interfaces in Composites

14:45 - 15:00  Mar Garcia Hernandez, Spanish National Research Council (CSIC), Spain
Moderator
Parallel Sessions

Fundamental science of graphene/2DM and their heterostructures, Olympia A

15:00 - 15:20 Johannes Christian Leutenantsmeyer, Physics of Nanodevices, The Netherlands
Proximity induced ferromagnetism and spin orbit interaction in the Graphene/YIG heterostructure

15:20 - 15:40 Andrey Zabolotskiy, Dukhov Research Institute of Automatons (VNIIA), Russia
Many-body effects of Coulomb interaction on Landau levels in graphene

15:40 - 16:00 Lin Jiang, Leiden University, The Netherlands
Quantum and electrochemical interplays in hydrogenated graphene

16:00 - 16:20 Gunnar Berghäuser, Chalmers University of Technology, Sweden
Mapping the dark exciton landscape in transition metal dichalcogenides

16:20 - 16:40 Coffee break

16:40 - 17:00 Philipp Nagler, University of Regensburg, Germany
Giant Zeeman splitting inducing near-unity valley polarization in a van der Waals heterostructure

17:00 - 17:20 Radha Boya, The University of Manchester, UK
Atomically Smooth Angstrom-Scale capillaries

17:20 - 17:40 Satoru Masubuchi, Institute of Industrial Science, University of Tokyo, Japan
Automated searching and assembly of atomic layers: a robotic building system of van der Waals superlattices

17:40 - 18:00 Peter Rickhaus, ETH Zürich, Switzerland
Measurement of Valley-isospin oscillations in graphene

Electronics, optoelectronics and photonics using graphene and other 2DM, Olympia B

15:00 - 15:20 Sergey Ganichev, University of Regensburg, Germany
Terahertz ratchet effects in graphene with a lateral superlattice

15:20 - 15:40 Madhushankar Bettadahalli Nandishaiah, University of Groningen, The Netherlands
Electronic properties of germanane field-effect transistors

15:40 - 16:00 Cristina Giusca, National Physical Laboratory, UK
Novel excitonic effects in WS2-graphene heterostructures

16:00 - 16:20 Ivan David Bernal Villamil, Chalmers University of Technology, Sweden
Inverted valley polarization in optically excited transition metal dichalcogenides

16:20 - 16:40 Coffee break

16:40 - 17:00 M. Said Ergoktas, Bilkent University, Turkey
Active tuning of terahertz phase with graphene

17:00 - 17:20 Yi-Ting Liou, Paul-Drude-Institut fuer Festkoerperelektronik, Germany
Acoustoelectric transport in ZnO/MgO-covered graphene on silicon carbide

17:20 - 17:40 Yohta Sata, Institute of Industrial Science, University of Tokyo, Japan
Electric field control of superconducting critical current in NbSe2/graphene van der Waals heterostructure
17:40 - 18:00 Usman Khan, Sungkyunkwan University, Republic of Korea
Graphene tribotronic transistors for touch sensing

**Interfaces in supported/embedded graphene/2DM systems. Vergina**

15:00 - 15:40 Max Lemme, RWTH Aachen, Germany
Metalic contact interfaces

15:40 - 16:00 George Froudakis, University Of Crete, Greece
Molecular Pillared Graphene: a flexible material with tunable electronic properties

16:00 - 16:20 Laura Burk, Material Research Center - University of Freiburg, Germany
Functionalized graphene as highly promising nanofiller for polymer nanocomposites

16:20 - 16:40 Coffee break

16:40 - 17:20 Marco Romagnoli, CNIT - Consorzio Nazionale Interuniversitario per le Telecomunicazioni, Italy
Graphene Photonics for Optical Communications

17:20 - 17:40 Otakar Frank, Institute of Chemical Engineering Sciences, Foundation of Research and Technology-Hellas (FORTH/ICE-HT), Czech Republic
Interfacing graphene to compliant polymer: wrinkles and stress transfer

17:40 - 18:00 Alessandro Kovtun, ISOF-CNR, Italy
A simple and fast protocol to quantify the oxidation degree of graphene-based materials

**Innovation Forum III**

**Industrialisation - Standardisation. Ilissos**

15:00 - 15:20 Andrew Pollard, NPL Management Limited, UK
Advances in Measurement and Standardisation of Graphene and Related 2D Materials

15:20 - 15:40 Ziad Melhem, Oxford Instruments NanoScience, UK
Industrial feasibility test of a graphene quantum Hall resistance standard operating in a cryogen-free table-top system

15:40 - 16:00 Jan Obrzut, National Institute of Standards and Technology, USA
Surface conductance stabilization against environmental doping in epitaxial graphene

16:00 - 16:20 David Mackenzie, Technical University of Denmark, Denmark
Quality Assessment of CVD Graphene: continuity, uniformity and accuracy of mobility measurements

16:20 - 16:40 Coffee break

**Industrialisation – Processing on wafer. Ilissos**

16:40 - 17:00 Maria Kim, Aalto University, Finland
Direct transfer of wafer-scale graphene films

17:00 - 17:20 Ken Verguts, imec, Belgium
Wafer-to-wafer Direct Transfer of High-quality Single-layer Graphene Grown on a Platinum Template

17:20 - 17:40 Sten Vollebregt, Delft University of Technology, The Netherlands
A transfer-free wafer-scale method for the fabrication of suspended graphene beams for squeeze-film pressure sensors
### Poster Session II, Ilissos Foyer and Ilissos

**Wednesday 27 – Thursday 28 September 2017**

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Speaker</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>200.</td>
<td>Quantum transport through MoS2 constrictions defined by photodoping</td>
<td>Alexander Epping</td>
<td>RWTH Aachen University, Germany</td>
</tr>
<tr>
<td>201.</td>
<td>Energy transfer efficiency depends on the thickness of graphene</td>
<td>Kamil Wiwatowski</td>
<td>Nicolaus Copernicus University, Poland</td>
</tr>
<tr>
<td>202.</td>
<td>Spin-orbit interactions in graphene induced by transition metal dichalcogenides substrates</td>
<td>Zhe Wang</td>
<td>University of Geneva, Switzerland</td>
</tr>
<tr>
<td>203.</td>
<td>Low Temperature Thermal Reduction of Graphene Oxide</td>
<td>Yang Shen</td>
<td>Aalborg University, Denmark</td>
</tr>
<tr>
<td>204.</td>
<td>Hetero-junction of MoS2 with p- and n-type binary oxides and its diode characteristics</td>
<td>Woo Young Yoon</td>
<td>Ewha Womans University, Republic of Korea</td>
</tr>
<tr>
<td>205.</td>
<td>Robust Spin Transport Through a Graphene Quantum Hall Antiferromagnet.</td>
<td>Petr Stepanov</td>
<td>The Ohio State University, USA</td>
</tr>
<tr>
<td>206.</td>
<td>CVD graphene mobility enhancement by silanisation</td>
<td>Miika Soikkeli</td>
<td>VTT Technical Research Centre of Finland, Finland</td>
</tr>
<tr>
<td>207.</td>
<td>Temperature dependence on the double-resonance Raman spectra of two dimensional Transition Metal Dichalcogenides</td>
<td>Rafael Gontijo</td>
<td>Universidade Federal de Minas Gerais, Brazil</td>
</tr>
<tr>
<td>208.</td>
<td>The affection of the standard measurements on the chemical and electronic structure of graphene oxide</td>
<td>Pawel Krukowski</td>
<td>University of Lodz, Poland</td>
</tr>
<tr>
<td>209.</td>
<td>Doping-induced phase transitions in single-layer 1T'-TMDs</td>
<td>Jun-Ho Lee</td>
<td>Korea Institute for Advanced Study, Republic of Korea</td>
</tr>
<tr>
<td>210.</td>
<td>Tunnelling transport between monolayer graphene and bilayer graphene in high magnetic fields</td>
<td>Momoko Onodera</td>
<td>University of Tokyo, Japan</td>
</tr>
<tr>
<td>211.</td>
<td>M2X3Y8 crystal as base for new naturally quasi one-dimensional semiconducting nanostructures</td>
<td>Liubov Antipina</td>
<td>NUST MISiS, Russia</td>
</tr>
<tr>
<td>212.</td>
<td>Electronic properties engineering of transition metal dichalcogenide monolayers and nanostructures</td>
<td>Georgios Kopidakis</td>
<td>University of Crete, Greece</td>
</tr>
<tr>
<td>213.</td>
<td>Tuning electron-electron interactions in graphene at finite magnetic fields</td>
<td>Jens Sonntag</td>
<td>RWTH Aachen University, Germany</td>
</tr>
<tr>
<td>214.</td>
<td>Substrate-induced modification of band parameters of graphene</td>
<td>Shi Che</td>
<td>The Ohio State University, USA</td>
</tr>
<tr>
<td>215.</td>
<td>Strained commensurate bilayer graphene superlattices</td>
<td>Zahra Khatibi</td>
<td>Iran University of Science and Technology, Iran</td>
</tr>
<tr>
<td>216.</td>
<td>The study of the interactions between graphene and Ge(001)/Si(001)</td>
<td>Pawel Dabrowski</td>
<td>University of Lodz, Poland</td>
</tr>
<tr>
<td>217.</td>
<td>In-plane commensurate GaN/AlN junctions: Single-layer composite structures, single and multiple quantum wells and quantum dots</td>
<td>Engin Durgun</td>
<td>Bilkent University - UNAM, Turkey</td>
</tr>
<tr>
<td>218.</td>
<td>Influence of many-body effects on Auger recombination in graphene</td>
<td>Georgy Alymov</td>
<td>Moscow Institute of Physics and Technology, Russia</td>
</tr>
<tr>
<td>219</td>
<td>Iris Crassee, LNCMI, CNRS-UGA-UPS-INSa, France</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>The magneto-optical properties of 3D Dirac like Fermions in ZrTe5</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>220</th>
<th>Martin KonečNý, Brno University of Technology, Czech Republic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Fabrication and Application of Graphene-Metal Hybrid Structures in Biosensing by Surface-Enhanced Raman Spectroscopy</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>221</th>
<th>David Nezval, Brno University of Technology, Czech Republic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Electronic properties of graphene doped by gallium</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>222</th>
<th>Lorenzo Sponza, ONERA - CNRS, France</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>The impact of the environment on in-plane excitations of hBN: Free-standing single-layer and bulk allotropes</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>223</th>
<th>Alicia De Andres, Instituto de Ciencia de Materiales de Madrid, CSIC, Spain</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Oxidation mechanisms of copper under graphene</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>224</th>
<th>WITHDRAWN</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>225</th>
<th>A. Devrim Guclu, Izmir Institute of Technology, Turkey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Wigner Crystallization in Graphene Nanoribbons</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>226</th>
<th>Martin Tweedie, University of Oxford, UK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Effect of Strain on 2D Heterostructures for Flexible Electronics</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>227</th>
<th>Orellana Pedro, Universidad Técnica Federico Santa María, Chile</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Spin-polarized electric current in silicene nanoribbons induced by atomic adsorption</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>228</th>
<th>David Indolese, University of Basel, Switzerland</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>High mobility graphene Josephson junctions</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>229</th>
<th>Hikari Tomori, University of Tsukuba, Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Band gap formation in graphene by periodic strain</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>230</th>
<th>Roland Gillen, TU Berlin, Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Excitonic transitions in heterostructured Mo and W transition metal dichalcogenides from first principles</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>231</th>
<th>Sergey Slizovskiy, National Graphene Institute, The University of Manchester, UK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Acoustic phonon cooling and chiral heat transport in the quantum Hall edge states in graphene</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>232</th>
<th>Manabendra Manabendra Kuiri, Indian Institute of Science Bangalore, India</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Tunable 1D superlattice structures in graphene probed by magneto capacitance studies</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>233</th>
<th>Jérôme Lagoute, Laboratoire Matériaux et Phénomènes Quantiques (MPQ), CNRS/Université Paris diderot, Paris, France, France</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Electronic interaction between organic molecules and nitrogen doped graphene measured by scanning tunnelling microscopy</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>234</th>
<th>Andrius SakavičIus, State research institute Center for Physical Sciences and Technology, Lithuania</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Investigation of interaction at graphene and contact surface</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>235</th>
<th>Ouafi Mouhoub, Onera-CNRS, France</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Studying triangular hole growth mechanism of h-BN under electron beam irradiation by HRTEM</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>236</th>
<th>Ute Kaiser, Ulm University, Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Properties of low-dimensional materials obtained by the Cc/Cs corrected SALVE microscope</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>237</th>
<th>Dariusz Zebrowski, AGH University of Science and Technology, Poland</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>A theoretical study of the double quantum dots in bilayer graphene</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>238</th>
<th>Rodrigo Lima, GISC &amp; GFTC Instituto de Física - UFAL, Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Resonant tunnelling through a finite-width potential barrier in graphene nanoribbons</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>239</th>
<th>Magdalena Grzeszczyk, University of Warsaw, Poland</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Evolution of in-active out-of-plane B12g mode from few-layer MoTe2 Raman scattering</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>240</th>
<th>Marc Bockrath, Ohio State University, USA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Layer polarizability and easy-axis quantum hall ferromagnetism in bilayer graphene</em></td>
</tr>
</tbody>
</table>
Natural occurring Van der Waals heterostructures

Etching effect of bilayer graphene and bilayer graphene nanoribbons on SiC(0001) by O2 intercalation upon air annealing

Naturally occurring Van der Waals heterostructures

Tomo-O Terasawa, Nagoya University, Japan
Effect of gas phase conditions on growth of epitaxial graphene

Towards the growth of graphene on dielectrics by Ni-assisted CVD

Combined Raman spectral mapping and electrical properties of large scale pulsed-CVD graphene. Comparative study between rigid and flexible substrates

Growth of epitaxial graphene on SiC under high vacuum, argon and hydrogen ambient

Growth of graphene on Ge substrates with different crystallographic orientations by CVD method

Production of Few-Layer WS2 by Liquid Shear Exfoliation

Direct synthesis of graphene and metal nanostructures on Si/SiO2 substrate

CVD synthesis of graphene and h-BN on SiC, SiO2 and Al2O3

Towards 2D BiTeX crystals (X = I, Br)

Hydrogen aided CVD growth of large-area MoS2 film on graphene substrate with high photoresponse

Laser etching of solution exfoliated transition metal dichalcogenides

Engineered Graphenes and Graphene-enabled Products for Electronics

Graphene oxide-based biosensor for cancer bioimaging and biosensing

Interfacial Synthesis of Organic 2D Crystals: 2D Polymers and 2D Supramolecular Polymers

Modelling of Multi-Purpose Functionalization of Boron-Doped Graphene

Optimization of Graphene Synthesis by Electrochemical Exfoliation of Graphite

Ultrathin boron nitride layers deposited on substrates by Polymer Derived Ceramics

Large and pure h-BN nanocrystals synthesized by a polymer route combined with a sintering process
Qundong Fu, NANYANG TECHNOLOGICAL UNIVERSITY, Singapore
Synthesis of Atom-thin Metal/Semiconductor Van de Waals Solid NbS2/MoS2 with Clean Atomic Interface

Priyadarshini Ghosh, Kranthi Vaidyula, Indian Institute of Science, India
Nucleation and growth kinetics for growth of MoS2 on SiO2

Artur Filipe Rodrigues, The University of Manchester, UK
Engineering of graphene oxide flakes with controlled lateral dimensions for biology and medicine

Liubov Belyaeva, Leiden University, The Netherlands
Hydrophilicity of free-floating graphene on water

Elias Koumoulos, RNanolab, National Technical University of Athens, Greece
Lubricity of carbon-based polymer nanocomposites via nanoindentation for interface assessment

Irene Palacio, Institute of Materials Science of Madrid (ICMM-CSIC), Spain
Decoupling Epitaxial Graphene From Metals By Potential-Controlled Electrochemical Oxidation: Chemistry Below Graphene

Seung Joo Lee, Dongguk University, Republic of Korea
Magnetoelectric coupling in GaMnAs/Graphene/P(VDF-TrFE) multiferroic heterostructures

Alexander Marsden, The University of Manchester, UK
Hexagonal boron nitride and composites as steel coatings

Yasunori Tateno, Sumitomo Electric Industries, Japan
Chemical state analysis on the interface between graphene and ohmic-metal using synchrotron radiation

David Purdie, University of Cambridge, UK
Blister Cleaning for Graphene Encapsulated in Hexagonal Boron Nitride

Francesco Colangelo, NEST, Scuola Normale Superiore and Istituto Nanoscienze CNR, Italy
Understanding the goodness of a suspended graphene membrane

Aristotelis Sgouros, National Technical University of Athens, Greece
Suspended Single- and Multi-layer Graphenes under compression

Norio Inui, University of Hyogo, Japan
Van der Waals force acting on a graphene electromechanical switch

Rory Phillips, The University of Manchester, UK
Fabrication and properties of graphene oxide and reduced graphene oxide suspended membranes

Sungjong Woo, Korea Institute for Advanced Study, Republic of Korea
Coupling between shear and tensile strains in layered two-dimensional crystals

Hu Li, Uppsala University, Sweden
Quantity Production of Graphene Nanoscrolls and Observation of Superadhesion Property

Samaneh Nasiri, Friedrich-Alexander University Erlangen-Nuernberg, Germany
Rupture of graphene sheets with randomly distributed defects

Marlene Bonmann, Chalmers University of Technology, Sweden
Studies of hysteresis in capacitance and current characteristics of flexible graphene field-effect transistors

Ulrike Hutten, University of Duisburg-Essen, Germany
Spatially-resolved Photocurrent in MoS2 Phototransistors

Xinxin Yang, Chalmers University of Technology, Sweden
Broadband Flexible Graphene RF Power Detectors

Marie-Blandine Martin, Thales Research & Technology, France
Statistical study of passivation effects on graphene field effect transistors (GFETs) for RF/Optoelectronic applications
283 Luigi La Spada, Queen Mary University of London, UK
Electromagnetic graphene meta-surfaces for antennas applications

284 Jinhong Kim, Konkuk University, Republic of Korea
Twist angle dependent electrical properties of CVD grown bilayer graphenes

285 Alberto Montanaro, Thales Research and technology, France
Performance optimization of Optoelectronic mixers based on graphene up to 67 GHz

286 Matilde Eredia, University of Strasbourg Institut de Science et d’Ingénierie Supramoléculaires (I.S.I.S.), France
An in-depth study on the electronic properties of electrochemically exfoliated graphene

287 Yusuke Hoshi, University of Tokyo, Japan
Suppression of exciton-exciton annihilation in tungsten disulphide and its robust luminescence at strong photoexcitation

288 Xiangyu Wu, IMEC, Belgium
The Scaling Property of Graphene Nanoribbons

289 Maria Politou, KU Leuven - IMEC, Belgium
Metal Contacts to Single-, Few- and Multilayer Graphene

290 Julian Peiro, Zernike Institute for Advanced Materials, University of Groningen, The Netherlands
Spin transport in encapsulated CVD graphene devices

291 Hakan Selvi, School of Electrical & Electronic Engineering, UK
Towards substrate engineering of graphene-silicon Schottky diode photodetectors

292 Antonio Lombardo, Cambridge Graphene Centre, University of Cambridge, UK
High-Mobility, Wet-Transferred, Encapsulated CVD Graphene

293 - WITDRAWN

294 Lucia Lombardi, University of Cambridge, Cambridge Graphene Centre, UK
Dielectric h-BN ink for flexible inkjet-printed thin film transistors

295 Dmitri Efetov, MIT & ICFO, USA
Approaching the quantum limit in ultra-sensitive graphene photo-detectors

296 Vladimir Ermolov, VTT Technical Research Center of Finland, Finland
Graphene antennas for radio systems: does it make sense?

297 Ioannis Chatzakis, University of Southern California Los Angeles, present at U.S. Naval Research Laboratory, USA
Broadband terahertz modulation in electrostatically-doped artificial trilayer graphene

298 Jean-Francois Dayen, Université de Strasbourg/CNRS, France
Graphene/nanoclusters hybrid for quantum electronics

299 Takeshi Fujii, Fuji electric, Japan
Schottky barrier height modulation of metal/graphene/p-SiC junctions by Pt atom intercalation

300 - WITDRAWN

301 Manisha Chhikara, University of Geneva, Switzerland
Effect of uniaxial strain on the optical Drude scattering in graphene

302 Filippo Giannazzo, CNR-IMM, Italy
Towards high frequency devices based on graphene integration with Nitride semiconductors

303 José M. Iglesias, University of Salamanca, Spain
Monte Carlo simulation of harmonic generation in graphene under AC applied fields

304 Chiara Alessandri, imec, Belgium
Bandwidth analysis and optimisation of graphene-Si electro-absorption modulators
<table>
<thead>
<tr>
<th>305.</th>
<th>Hajati Yaser, Shahid Chamran University of Ahvaz, Iran</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Highly confine plasmon modes at the subwavelength scale in substrate-mediated graphene-coated nanowire</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>306.</th>
<th>Priyadarshini Ghosh, Kranthi Vaidyula, Indian Institute of Science, India</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effect of stoichiometry of MoS2 on device performance</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>307.</th>
<th>Moshe Kirshner, Bar Ilan University, Israel</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Carrier multiplication in graphene diodes</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>308.</th>
<th>Stefano Veronesi, NEST-Istituto Nanoscienze - CNR, Italy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Direct measurement of the enthalpy released during hydrogen adsorption on Ti-decorated graphene</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>309.</th>
<th>Tugba Ozturk, Gebze Technical University, Turkey</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electrical Conductivity Change by Uniaxial Compression for 3D Graphene Aerogel Cathodes</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>310.</th>
<th>Jinhua Sun, Umea University, Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Porous graphite oxide pillared with tetrapod-shaped molecules</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>311.</th>
<th>Lucia Lombardi, University of Cambridge, Cambridge Graphene Centre, UK</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supercapacitors based on graphene/transition metal oxides hybrids</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>312.</th>
<th>Lionel Dubois, CEA, France</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Doped Graphene as a Noble Metal-Free Electro-catalyst for the oxygen reduction reaction (ORR)</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>313.</th>
<th>Adnan TaşDemir, Sabanci University, Turkey</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Copper and Manganese Doped Ceria Nanorods Supported Nitrogen Doped Reduced Graphene Oxide for CO Oxidation</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>314.</th>
<th>RiDvan ErğUn, Sabanci University, Turkey</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Silicon nanoparticles decorated graphene based materials for high performance Li-ion battery anodes</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>315.</th>
<th>Bagila Baltimbetova, Satpayev Kazakh National Research Technical University, Kazakhstan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The coating of graphene on aluminum substrate for battery</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>316.</th>
<th>Kwang Bum Kim, Physical and Chemical Modification of Graphene for Electrochemical Energy Storage Devices</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The role of graphene flake size in anti-corrosion coatings</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>317.</th>
<th>Oana Mihaela Istrate, University of Manchester, UK</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The role of graphene flake size in anti-corrosion coatings</strong></td>
<td></td>
</tr>
</tbody>
</table>

| 318. | WITDRAWN |

<table>
<thead>
<tr>
<th>319.</th>
<th>Siamak Eqtesadi, Abalonyx AS, Norway</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The potential of graphene oxide and reduced graphene oxide in fabrication of 3D printed ceramic composites</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>320.</th>
<th>Magdalena Winkowska, Institute of Electronic Materials Technology, Poland</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High-temperature treatment of rGO flakes and studies on adsorption of 2-methyl-4-chlorophenoxyacetic acid on its samples and their use in electroanalysis as electrode modifier</strong></td>
<td></td>
</tr>
</tbody>
</table>

| 321. | WITDRAWN |

| 322. | WITDRAWN |

<table>
<thead>
<tr>
<th>323.</th>
<th>Xianzhe Cheng, National University of Defense Technology, China</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Comparison research between electrostatic graphene earphone and graphene thermoacoustic earphone</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>324.</th>
<th>George Anagnostopoulos, Institute of Chemical Engineering Sciences, Foundation for Research and Technology, Greece</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Graphene as a heating element in commercial devices; the case of a graphene-based waist protector</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>325.</th>
<th>Dominik Suszalski</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thermoelectric properties of bilayer graphene</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Author(s)</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>326.</td>
<td>Nektarios Lathiotakis</td>
</tr>
<tr>
<td>327.</td>
<td>Elvira Villaro Ábalos, Instituto de Tecnologías Químicas Emergentes</td>
</tr>
<tr>
<td></td>
<td>de La Rioja (INTERQUIMICA), Spain</td>
</tr>
<tr>
<td>328.</td>
<td>Yanfei Yang, National Institute of Standards and Technology, USA</td>
</tr>
<tr>
<td>329.</td>
<td>Tanaka Shukichi, National Institute of Information and</td>
</tr>
<tr>
<td></td>
<td>Communications Technology, Japan</td>
</tr>
<tr>
<td>330.</td>
<td>IVAN NIKITSKIY, ICFO - The Institute of Photonic Sciences, Spain</td>
</tr>
<tr>
<td>331.</td>
<td>Frantisek Karlicky, University of Ostrava, Czech Republic</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>332.</td>
<td>YUE LIN, University of Cambridge, UK</td>
</tr>
<tr>
<td>333.</td>
<td>Vaqueiro Contreras, The University of Manchester, UK</td>
</tr>
<tr>
<td>334.</td>
<td>Xiaoyu Jia, Max Planck Institute for Polymer Research, Germany</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>335.</td>
<td>Andrew Harvey, Trinity College Dublin, Ireland</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>336.</td>
<td>Marta Ruiperez-Alonso, Institut d'Investigacions Biomédiques August</td>
</tr>
<tr>
<td></td>
<td>Pi i Sunyer, Spain</td>
</tr>
</tbody>
</table>
Monday      Tuesday      Wednesday      Thursday      Friday

SCIENTIFIC PROGRAMME – THURSDAY, 28 SEPTEMBER 2017

08:00 – 17:00  Registration, Ilissos Foyer
10:00 - 18:30  Exhibition, Olympia Foyer
08:30 – 12:55  Plenary Session, Olympia Hall
13:00 – 15:00  Lunch, Amalia and Olympia Foyer
14:00 – 18:00  Graphene Connect Workshop – New Materials and Devices, Horizon
14:00 – 15:00  Fringe Session IV: Inside Nature Research, Ilissos
15:00 – 15:30  Parallel Sessions
  - Synthesis and functionalisation of graphene and other 2DM, Olympia A
  - Commercialisation, standardisation & industrialisation of graphene and related materials, Olympia A
  - Mechanics of graphene and other 2DM/energy applications of graphene and related materials, Olympia B
  - Fundamental science of graphene/2DM and their heterostructures, Vergina
  - Graphene/2DM inks & powders and their applications, Ilissos
  - Polygraph project results, Mycenae
18:00 – 19:30  Poster Session II, Ilissos Foyer and Ilissos
20:30 – 00:00  Conference Dinner and Poster Prizes, Zeppelion Megaron

Plenary Session, Olympia Hall

08:30 - 09:05  Andrea Ferrari, Cambridge Graphene Centre, University of Cambridge, UK
Light Scattering and Emission from Graphene and Hetero-structures

09:05 - 09:40  Jonathan Coleman, Principal Investigator at School of Physics and CRANN, Trinity College Dublin, Ireland
Liquid exfoliated nanosheets: applications in energy, sensing and electronics

09:40 - 10:15  Marco Molina, Leonardo, Italy
Graphene-enhanced LHP for space applications

10:15 - 10:35  Coffee break

10:35 - 11:10  Grzegorz Lupina, IHP, Germany
Integration of graphene into 200 mm wafer silicon technology platform

11:10 - 11:45  Ian Kinloch, The University of Manchester, UK

11:45 - 12:20  Gerasimos Konstantatos, ICF, Spain
The synergy of 2D and 0-dimensional materials towards high performance optoelectronics and solar cells.

12:20 - 12:55  Yuhei Hayamizu, Tokyo Institute of Technology, Japan
Bioelectronic interfaces by spontaneously organized peptides on 2D materials
**Fringe Session IV: Scientific Publishing, Ilissos**

14:00 - 15:00 Luke Fleet, Nature Physics, UK; Maria Maragkou, Nature Materials, UK  
Chairs: Silvia Milana, Nature Communications; Olga Bubnova, Nature Nanotechnology  
Inside Nature Research

**Graphene Connect Workshop, Horizon**

**New Materials and Devices**

13:45 - 14:00 Registration  
14:00 - 14:10 Welcome  
Salvatore Majorana, Head Deputy of Innovation, Graphene Flagship

**14:10 - 15:15 State of the art research**

14:10-14:30 Ken Teo, Managing Director at AIXTRON Ltd, UK  
Industry Perspective: Thin Film Graphene Growth

14:30-14:50 Jonathan Coleman, Principal Investigator at School of Physics and  
CRANN, Trinity College Dublin, Ireland  
Criteria for the choice of 2D material synthesis exploration

14:50-15:10 Stephan Roche, ICREA Research Professor at the Catalan Institute of  
Nanoscience and Nanotechnology, Spain  
Graphene and its use in tomorrow’s computer, the case of spintronic

**15:15-16:00 Industry perspective**

15:15-15:35 Ken Verguts, PhD researcher at KU Leuven/IMEC, Belgium  
Challenges in graphene film production

15:40-16:00 Amaia Zurutuza, Scientific Director at Graphenea, Spain  
The story behind Graphenea

16:00-16:30 Coffee Break  
16:30-17:45 Group discussion  
17:45-18:00 Summary  
18:00-19:00 Matchmaking

**Parallel Sessions**

**Synthesis and functionalisation of graphene and other 2DM, Olympia A**

15:00 -15:20 Argiris Laskarakis, Nanotechnology Lab LTFN, Aristotle University of Thessaloniki, Greece  
In-Situ and Real-Time Spectroscopic Ellipsometry monitoring of Graphene growth by Chemical Vapour  
Deposition

15:20 - 15:40 Alexey Tarasov, BioMed X Innovation Center, Germany  
Synthesis and doping of highly uniform, wafer-scale MoS2 and WSe2 for applications in transistors  
and flexible sensors

15:40 - 16:00 Hu Li, Uppsala University, Sweden  
Physical Routes to Approach Graphene Fluorination: Towards the Site-selective Bandgap Engineering

16:00 - 16:20 Martin Heilmann, Paul-Drude-Institut für Festkoerperelektronik, Germany  
Epitaxial graphene as a substrate for molecular beam epitaxy of hexagonal boron nitride

16:20 - 16:40 Coffee break
Commercialisation, standardisation & industrialisation of graphene and related materials, Olympia A

16:40 - 17:00 Julio Gómez Cordon, Avanzare, Spain
Multifunctional Fire retardant Epoxy-GRM composites

17:00 - 17:20 Alberto Fina, Politecnico di Torino, Italy
Flame retardant polymer foams exploiting 2d materials

17:20 - 17:40 Leonidas Mouchliadis, Foundation for Research and Technology, Russia - 3769915
Polarization resolved second harmonic generation as a quality marker for transition metal dichalcogenide monolayers

Mechanics of graphene and other 2DM, Olympia B

15:00 - 15:20 Melkamu Belete, University of Siegen, Germany
Probing Dielectric Properties of Layered MoS2 Synthesized by Vapor-Phase Sulfurization

15:20 - 15:40 Berger Christian, University of Manchester, UK
Capacitive pressure sensing with suspended graphene-polymer heterostructure membranes

15:40 - 16:00 Dimitrios Papageorgiou, The University of Manchester, UK
Mechanics of the reinforcement of nanocomposites by 2D materials

16:00 - 16:20 Holger Buch, Center for Nanotechnology Innovation @ NEST, Italian Institute of Technology (IIT), Italy
Superlubricity of epitaxial monolayer tungsten disulfide on graphene

16:20 - 16:40 Coffee break

Energy applications of graphene and related materials, Olympia B

16:40 - 17:00 Leila Haghighi Poudeh, Sabanci University, Turkey
Design and Fabrication of 3D Graphene Based Composite Structures via Core-shell Electrospinning Technique for Energy Storage Systems

17:00 - 17:20 Marco Alfonso, Centre de Recherche Paul Pascal, France
Electrostrictive soft materials for mechanical energy harvesting

17:20 - 17:40 Tae-Ho Kim, Sungkyunkwan University, Republic of Korea
High Performance Piezoelectric Power Generation from Monolayer MoS2 via Sulfur Vacancy Passivation

Fundamental science of graphene/2DM and their heterostructures, Vergina

15:00 - 15:20 Andrea Tomadin, Istituto Italiano di Tecnologia, Italy
Plasmon launching in double-layer devices by purely electrical means

15:20 - 15:40 Leonid Chernozatonskii, Emanuel Institute of Biochemical Physics, RAS, Russia
Bi-layered graphene based structures with folded nanoholes: formation, properties and applications

15:40 - 16:00 Ignacio Gutierrez-Lezama, University of Geneva, Switzerland
Long-Range Field Effect from Gate Tuning of Nonlocal Conductivity in WTe2

16:00 - 16:20 Gregory Schneider, Leiden University, The Netherlands
DNA sequencing with graphene: the required chemical tools
16:20 - 16:40 Coffee break

16:40 - 17:00 Dongkeun Ki, University of Geneva, Switzerland
Transition temperature of the broken symmetry states in charge-neutral graphene multilayers

17:00 - 17:20 Lin He, Beijing Normal University, China
Emergent Phenomena in Graphene

17:20 - 17:40 Riccardo Pisoni, ETH Zürich, Switzerland
Gate-Defined Nanostructures in MoS2 van der Waals Heterostructures

**Graphene/2DM inks & powders and their applications, Ilissos**

15:00 - 15:20 Thomas Miller, University College London, UK
Single crystal, luminescent carbon nitride nanosheets formed by spontaneous dissolution

15:20 - 15:40 Tian Carey, University of Cambridge, UK
Fully inkjet printed 2d material field effect heterostructures for wearable and textile electronics

15:40 - 16:00 Ashok Keerthi, The University of Manchester, UK
Enhanced gas permeation through atomically thin capillaries

16:00 - 16:20 Marcelo Lozada-Hidalgo, The University of Manchester, UK
One-atom-thick membranes with subatomic selectivity

16:20 - 16:40 Coffee break

16:40 - 17:00 Amritha Janardanan, The University of Manchester, UK
Gas transport through 2D material assembled nanocapillaries

17:00 - 17:20 Antonio Esau Del Rio Castillo, IIT Genoa, Italy
Large scale production of 2D crystals

17:20 - 17:40 Chris Howard, University College London, UK
Ionic solutions of two-dimensional materials

**Polygraph project results, Mycenae**

15:00 - 15:20 Julio Gómez Cordon, Avanzare, Spain
Preparation and processing of large lateral size graphene material in epoxy matrix composites

15:20 - 15:40 Francine Amon, RISE Research Institutes of Sweden, Sweden
Estimating the life cycle costs & environmental impacts of production of GRM and GRM filled polymer formulations

15:40 - 16:00 Han Zhang, Queen Mary University of London, UK
Self sensing using graphene in thermoset composites

**Poster Session II, Ilissos Foyer and Ilissos**

Wednesday 27 – Thursday 28 September 2017
See list of posters given below the programme of Wednesday
SCIENTIFIC PROGRAMME – FRIDAY, 29 SEPTEMBER 2017

08:00 – 13:00  Helpdesk, Ilissos Foyer
08:30 – 12:55  Plenary Session, Olympia Hall
12:55 – 13:20  Closing Ceremony, Olympia Hall
13:30 – 15:00  Lunch, Amalia and Olympia Foyer

Plenary Session, Olympia Hall

08:30 - 09:05  Hong Jun Gao, Chinese Academy of Sciences, China
Construction and functionality of novel and intrinsically patterned 2D materials

09:05 - 09:40  Yoshi Iwasa, University of Tokyo, Japan
Bioelectronic interfaces by spontaneously organized peptides on 2D materials

09:40 - 10:15  Annick Loiseau, National Centre for Scientific Research (CNRS), France
Hexagonal Boron Nitride in the Class of 2D Materials: spectroscopic properties

10:15 - 10:35  Coffee break

10:35 - 11:10  Camilla Coletti, Italian Institute of Technology (IIT), Italy
Scalable graphene/WS2 vertical heterostacks for optoelectronics

11:10 - 11:45  Francesco Bonaccorso, Italian Institute of Technology (IIT), Italy
Graphene and related 2D materials for Perovskite Solar Cells

11:45 - 12:20  Annalisa Fasolino, Radboud University, The Netherlands
Mechanics of thermally fluctuating membranes

12:20 - 12:55  Thomas Müller, TU Wien, Austria
2D nanosheet electronics and optoelectronics