



All timings are UK (GMT)

Monday 23 November

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| 11:00 | Welcome and Introductions Paolo Samori, <i>Chair of Scientific Committee</i> | |
| 11:10 | Outline of Discussion Format <i>Ed Gardner and Alexander Whiteside, Royal Society of Chemistry Publishing Editors</i> | |
| 11:15 | Introductory Lecture (Session Chairs: Paolo Samori & Vincenzo Palermo) Klaus Müllen <i>Max Planck Institute for Polymer Research, Germany</i> | |
| 12:15 | Break | |
| | Session 1: 2D materials production and generation of functional inks (Session Chair: Claudia Backes & Paolo Samori) | |
| 12:45 | Enhanced liquid phase exfoliation of graphene in water using an insoluble bis-pyrene stabiliser <u>Cinzia Casiraghi</u> , Yuyoung Shin, Xavier Just-Baringo, Matthew Boyes, Adyasha Panigrahi, Marco Zarattini, Yingxian Chen, Xinyun Liu, Gareth Morris, Eric Prestat, Kostas Kostarelos, Sandra Vranic, Igor Larrosa <i>University of Manchester, UK</i> | Paper 29708 |
| 12:50 | Low-energy electron irradiation induced synthesis of molecular nanosheets: An influence of the electron beam energy <u>Andrey Turchanin</u> , Christof Neumann, Richard Wilhelm, Maria Küllmer <i>Friedrich Schiller University Jena, Germany</i> | Paper 28985 |
| 12:55 | The philosophy of carbon: meso-entropy materials <u>Xiaodong Zhuang</u> and Boxu Feng <i>Shanghai Jiao Tong University, China</i> | Paper 28930 |
| 13:00 | Discussion | |
| 14:00 | Break | |
| | Session 1 (cont): 2D materials production and generation of functional inks (Session Chair: Claudia Backes & Paolo Samori) | |
| 14:30 | Printable hexagonal boron nitride ionogels Mark C. Hersam, Woo Jin Hyun, Lindsay E. Chaney, Julia R. Downing, Ana C. M. de Moraes <i>Northwestern University, USA</i> | Paper 28799 |
| 14:35 | Multifunctional coatings of exfoliated and reassembled graphite on cellulosic substrates <u>Fernando Galembeck</u> , Leandra Pereira Santos, Douglas Soares da Silva, João Paulo Ferreira Bertacchi, Kelly Schneider Moreira, Thiago | Paper 28947 |

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| | Augusto Lima Burgo, Bruno Carreira Batista, Jeferson dos Santos, Patrick Alvarenga de Paula <i>University of Campinas, Brazil</i> | |
| 14:40 | Sol–Gel synthesis of 2-Dimensional TiO₂: Self-assembly of Ti–Oxoalkoxy–Acetate complexes by carboxylate ligand directed condensation <u>Ruohong Sui</u> , Connor Deering, Rohen Prinsloo, Christopher Lavery, Nancy Chou, Robert Marriott <i>University of Calgary, Canada</i> | Paper 27785 |
| 14:45 | Discussion | |
| 15:45 | End of day | |

Tuesday 24 November

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| | Session 2: Applications in opto-electronics (Session Chair: Hua Zhang & Cinzia Casiraghi) | |
| 13:00 | Raman spectroscopy of GaSe and InSe post-transition metal chalcogenides layers <u>Andrea C Ferrari</u> , Maciej R. Molas, Anastasia V. Tyurnina, Viktor Zólyomi, Anna K. Ott, Daniel J. Terry, Matthew J. Hamer, Celal Yelgel, Adam Babiński, Albert G. Nasibulin, Vladimir I. Fal'ko, Roman Gorbachev <i>University of Cambridge, UK</i> | Paper 27798 |
| 13:05 | Stability and universal encapsulation of epitaxial Xenes <u>Alessandro Molle</u> , Gabriele Faraone, Alessio Lamperti, Daniele Chiappe, Eugenio Luigi Cinquanta, Christian Martella, Bonera Emiliano, Emilio Scalise, Carlo Grazianetti <i>CNR-IMM, Italy</i> | Paper 28965 |
| 13:10 | Discussion | |
| 13:50 | Break | |
| | Session 3: Biomedical applications (Session Chair: Kostas Kostarelos & Claudia Backes) | |
| 14:20 | Biodegradation of graphene materials catalyzed by eosinophil peroxidase from human immune cells <u>Alberto Bianco</u> , Rajendra Kurapati, Cristina Martín, Vincenzo Palermo, Yuta Nishina <i>Universite de Strasbourg, France</i> | Paper 28326 |
| 14:25 | White graphene for immune-sensing application <u>Suman Singh</u> , Mayank Garg and Amit Sharma <i>CSIR- Central Scientific Instruments Organisation, India</i> | Paper 28792 |
| 14:30 | Discussion | |
| 15:10 | Break | |

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| | Session 3 (cont): Biomedical applications (Session Chair: Kostas Kostarelos & Claudia Backes) | |
| 15:40 | Autoperforation of two-dimensional materials to generate colloidal state machines capable of locomotion Mike Strano <i>Massachusetts Institute of Technology, USA</i> | Paper 28801 |
| 15:45 | DNA-driven dynamic assembly of MoS₂ nanosheets Matteo Palma, Giuseppe Amoroso, Andrei Sapelkin, Qingyu Ye, Vicente Araullo-Peters, Alessandro Cecconello, Gustavo Fernandez <i>Queen Mary University of London, UK</i> | Paper 28926 |
| 15:50 | Discussion | |
| 16:30 | Lightning presentations (by invitation of the scientific committee) | |
| 17:00 | Claire Vallance <i>President, Faraday Division</i> | |
| 17:10 | Poster Session | |
| 18:10 | End of day | |

Wednesday 25 November

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| 11:30 | Poster session | |
| 12:30 | Break | |
| | Session 4: 3-dimensional graphene-like structures and applications (Session Chair: Cinzia Casiraghi & Vincenzo Palermo) | |
| 13:00 | Graphene-supported 2D cobalt oxides for catalytic applications <u>Valérie Caps</u> , Loïc Michel, Sécou Sall, Thierry Dintzer, Cerise Robert, Antoine Demange <i>CNRS (ICPEES, UMR 7515), France</i> | Paper 28892 |
| 13:05 | Core-shell graphene oxide-polymer hollow fibers as water filters with enhanced performance and selectivity <u>Manuela Melucci</u> , Alessandro Kovtun, Antonio Bianchi, Massimo Zambianchi, Cristian Bettini, Giampiero Ruani, Franco Corticelli, Letizia Bocchi, Francesco Stante, Massimo Gazzano, Tainah Marforio, Matteo Calvaresi, Matteo Minelli, Luisa Maria Navacchia, Vincenzo Palermo <i>CNR, Italy</i> | Paper 29102 |
| 13:10 | Discussion | |
| 13:50 | Break | |
| | Session 4 (cont): 3-dimensional graphene-like structures and applications (Session Chair: (Mark Hersam & Vincenzo Palermo) | |
| 14:10 | Electrochemical exfoliation of graphite in H₂SO₄, Li₂SO₄ and NaClO₄ solutions monitored in-situ by Raman microscopy and spectroscopy <u>Zhenyuan Xia</u> , Vittorio Bellani, Jinhua Sun, Vincenzo Palermo <i>Chalmers University of Technology, Sweden</i> | Paper 28913 |

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| 14:15 | Graphitic carbon nitrides as platforms for single-atom photocatalysis <u>Ivo Teixeira</u> , Felipe Colombari, Marcos da Silva, Mauricio Homs, Beatriz Souza, Mileny Araujo, Juliana Francisco, Gelson Silva, Ingrid Silva, André de Moura <i>Universidade Federal de São Carlos, Brazil</i> | Paper 28885 |
| 14:20 | Facile assembly of layer-interlocked graphene heterostructures as flexible electrodes for Li-ion batteries <u>Gang Wang</u> , Xinliang Feng, Guangbo Chen, Sheng Yang, Panpan Zhang, Faxing Wang, Ali Shaygan Nia, Minghao Yu <i>Technische Universität Dresden, Germany</i> | Paper 28506 |
| 14:25 | Discussion | |
| 15:25 | Break | |
| | Session 4 (cont): 3-dimensional graphene-like structures and applications (Session Chair: Vincenzo Palermo & Mark Hersam) | |
| 15:55 | Synthesis of metallic mixed 3R and 2H Nb_{1+x}S₂ nanoflakes by chemical vapor deposition <u>Manish Chhowalla</u> , Abdul Rahman Mohmad, Azrul Azlan Hamzah, Jieun Yang, Yan Wang, Ibrahim Bozkurt, Hyeon Suk Shin, Hu Young Jeong <i>University of Cambridge, UK</i> | Paper 27810 |
| 16:00 | Computational design of graphitic carbon nitride photocatalysts for water splitting <u>Natalia Martsinovich</u> and Gareth Hartley <i>University of Sheffield, UK</i> | Paper 29004 |
| 16:05 | Discussion | |
| 16:45 | Concluding Remarks Lecture (Session Chair: Paolo Samori and Vincenzo Palermo) Maurizio Prato <i>University of Trieste, Italy</i> | |
| 17:30 | Acknowledgements | |
| 17:40 | Close of meeting | |

This is a draft programme and timings are subject to change.