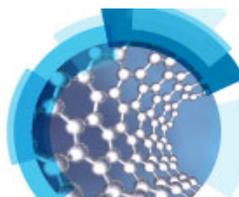


New Advances in Carbon Nanomaterials

Faraday Discussion 173



1-3 September 2014
London, UK

Monday 1 September

11:00	Registration, Tea and Coffee	
12:00	Lunch	
12.45	Welcome and Introductions Karl Coleman	
12.55	Outline of Discussion Format <i>Faraday Discussions</i> , Publishing Editors	
13.00	Introductory Lecture (Session Chair: Karl Coleman) Pulickel M. Ajayan* <i>Rice University, USA</i>	Paper 1
	Session 1: Synthesis in gas and liquid phase (Session Chair: Milo Shaffer)	
14:00	Spinning of carbon nanotube fibres using the floating catalyst high temperature route: purity issues and the critical role of sulphur Alan Windle* Thurid Gspann and Fiona Smail <i>University of Cambridge, UK</i>	Paper 2
14:05	Boundary layer chemical vapour synthesis of self-organised ferromagnetically filled radial-carbon-nanotube structures Mark Baxendale* Filippo S. Boi, Rory M. Wilson, Gavin Mountjoy and Muhammad Ibrar <i>Queen Mary, University of London, UK</i>	Paper 3
14:10	Effect of post-annealing on plasma etching of graphene-coated-copper L. S. Hui* E Whiteway, M Hilke and A Turak <i>McMaster University, Canada</i>	Paper 4
14:15	Discussion	
15:30	Afternoon Tea	
16:00	Bulk properties of solution-synthesized chevron-like graphene nanoribbons Alexander Sinitskii* Timothy Vo, Mikhail Shekhirev, Alexey Lipatov and Rafal Korlacki <i>University of Nebraska, USA</i>	Paper 5
16:05	Synthesis of face-centred cubic Cs₃C₆₀ in THF Matthew Rosseinsky* Alec G. McLennan, Alexy Y. Ganin, Yasuhiro Takabayashi, Ross H. Colman, Ruth H. Zadik and Kosmas Prassides <i>University of Liverpool, UK</i>	Paper 6
16.10	Discussion	
17:00	Poster Session and Wine Reception	
18:00	Close of Sessions	

Tuesday 2 September

	Session 2: Doping and Theory (Session Chair: Malcolm Heggie)	
09:00	Moiré pattern as a magnifying glass for strain and dislocations in van der Waals heterostructures Vladimir Fal'ko* Diana A. Cosma, John R. Wallbank and Vadim Cheianov <i>Lancaster University, UK</i>	Paper 7
09:05	Metal-semiconductor transition like behaviour of naphthalene-doped single wall carbon nanotube bundles Katsumi Kaneko*, Fitri Khoerunnisa, Aaron Morelos-Gomez, Hideki Tanaka, Toshihiko Fujimori, Daiki Minami, Radovan Kukobat, Takuya Hayashi, S.Y. Hong, Y.C. Choi, Minoru Miyahara, Mauricio Terrones and Morinobu Endo <i>Shinshu University, Japan</i>	Paper 8
09:10	Chameleon-like behaviour of cyclo[n]paraphenylenes in complexes with C₇₀: on their impressive electronic and structural adaptability as probed by Raman spectroscopy Juan Casado* Miriam Peña Alvarez, Paula Mayorga Burrezo, Takahiro Iwamoto, Lili Qiu, Miklos Kertesz, Mercedes Taravillo, Valentín G. Baonza, Juan T. López Navarrete and Shigeru Yamago <i>University of Malaga, Spain</i>	Paper 9
9:15	Discussion	
10:30	Morning Tea	
11:00	Role of edge geometry and chemistry in the electronic properties of graphene nanostructures Toshiaki Enoki* Shintaro Fujii, Maxim Ziatdinov, Misako Ohtsuka, Koichi Kusakabe and Manabu Kiguchi <i>Tokyo Institute of Technology, Japan</i>	Paper 10
11:05	Maximum aromaticity or maximum pentagon separation; which is the origin behind the stability of endohedral metallofullerenes? Antonio Rodriguez-Forteza* Josep M. Poblet <i>Universitat Rovira i Virgili, Spain</i>	Paper 11
11:10	Nitrogen segregation in nanocarbons Chris Ewels* D. Erbahar, P. Wagner, X. Rocquefelte, R. Arenal, P. Pochet, M. Rayson, M.Scardamaglia, C. Bittencourt and P. Briddon <i>Institute of Materials, France</i>	Paper 12
11:15	Discussion	
12:30	Lunch	
	Session 3: Functionalisation, Separation, and Solvation (Session Chair: Pagona Papakonstantinou)	
13:30	Spectroscopic and atomic force studies of the functionalisation of carbon surfaces: new insights into the role of the surface topography and specific chemical states Philip R. Davies* Carlo Buono, Robert J. Davies, Thomas	Paper 13

	Jones, Jiří Kulhavý, Ryan Lewis, David J. Morgan, Neil Robinson and David J. Willock <i>Cardiff University, UK</i>	
13:35	Aqueous dispersions of oligomer-grafted carbon nanomaterials with controlled surface charge and minimal framework damage Milo Shaffer, Sheng Hu*, Shu Chen, Robert Menzel, Angela Goode, Mary Ryan and Alexandra Porter <i>Imperial College London</i>	Paper 14
13:40	Water-soluble fullerene materials for bioapplications: photoinduced reactive oxygen species generation Yoko Yamakoshi * S. Aroua, T.-M. D. Nguyen, Y. Iwamoto and T. Ohnishi <i>Laboratorium für Organische Chemie, ETH-Zürich, Switzerland</i>	Paper 15
13:45	Discussion	
15:00	Afternoon Tea	
15:30	Synthesis and first X-ray structure of a hexa-peri-hexabenzocoronene-fullerene-fyad: a model for an inter-carbon-allotrope hybrid Andreas Hirsch* Andreas Kratzer, Jan M. Englert, Dominik Lungerich, Frank W. Heinemann and Norbert Jux <i>Universität Erlangen-Nürnberg, Germany</i>	Paper 16
15:35	Organocatalysis for new chiral fullerene-based materials Nazario Martin* Rosa M. Girón, Silvia Reboredo, Juan Marco-Martínez and Salvatore Filippone <i>Universidad Complutense de Madrid, Spain</i>	Paper 17
15:40	Inkjet printing of graphene Kirill Arapov * Robert Abbel, Gijsbertus de With and Heiner Friedrich <i>Eindhoven University of Technology, Netherlands</i>	Paper 18
15:45	Discussion	
17:00	Close of sessions	
19:00	Pre-Dinner Drinks Sponsored by Thomas Swan Advanced Materials	
19:30	Conference Dinner	

Wednesday 3 September

	Session 4: Applications, Composites, Devices (Session Chair: Karl Coleman)	
09:00	Gel electrophoresis using a selective radical for separation of single walled carbon nanotubes Mary B. Chan-Park*, Sara Mesgari, Ashok Kumar Sundramoorthy and Leslie S Loo <i>Nanyang Technological University, Singapore</i>	Paper 19
09:05	Single-walled carbon nanotubes networks in conductive composite materials Oana Andreea Bârsan* Günter G. Hoffmann, Leo G. J. van der Ven and Gijsbertus de With <i>Eindhoven University of Technology, Netherlands</i>	Paper 20
09:10	Few layer graphene - polypropylene nanocomposites: the role of flake diameter Ian Kinloch* Cristina Vallés, Amr M. Abdelkader and Robert J. Young <i>University of Manchester, UK</i>	Paper 21
09:15	Discussion	
10:30	Morning Tea	
11:00	Do we need covalent bonding of Si nanoparticles on graphene oxide for Li-ion batteries? Yana Miroshnikov Gal Grinbom, Gregory Gershinsky, Gilbert D. Nessim and David Zitoun* <i>Bar Ilan University, Israel</i>	Paper 22
11.05	Reduced graphene oxide and graphene composite materials for improved gas sensing at low temperature Alexander Zöpfl * Michael-Maximilian Lemberger, Matthias König, Guenther Ruhl, Frank-Michael Matysik and Thomas Hirsch <i>University of Regensburg, Germany</i>	Paper 23
11.10	Oxygen reduction reaction in electrochemically reduced graphene oxide Santosh Bikkarolla*, Peter Cumpson, Paul Joseph and Papakonstantinou Pagona <i>University of Ulster, UK</i>	Paper 24
11:15	Discussion	
12:30	Concluding remarks (Session Chair: Kosmas Prassides) Alan Windle* <i>University of Cambridge, UK</i>	Paper 25
13:15	Acknowledgements	
13:30	Close of meeting	