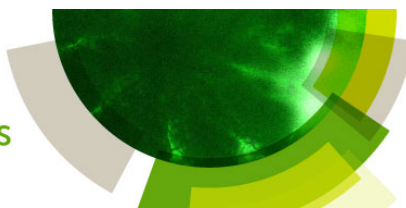


Physical Chemistry  
of Functionalised  
Biomedical Nanoparticles

Faraday Discussion 175



17-19  
September 2014  
Bristol, UK

**DRAFT PROGRAMME**

**Wednesday 17 September**

13:00	Registration and Lunch	
14.10	<b>Welcome and Introductions</b>	
14.25	<b>Outline of Discussion Format</b> Faraday Discussion, Publishing Editors	
14.30	<b>Introductory Lecture: The importance of surface chemistry for Nanomedicine</b> Peter Dobson <i>University of Oxford, UK</i>	<b>Paper 1</b>
15:30	Lightning poster presentations	
16:30	Poster Session and Wine Reception	
18:00	Close of Sessions	

## Thursday 18 September

	<b>Session 1: Magnetic Nanoparticles</b> Session Chair: Nguyen TK Thanh	
09:00	<b>Multifunctional silica-coated iron oxide nanoparticles: a facile four-in-one system for <i>in situ</i> study of neural stem cell harvesting</b> Yung-Kang Peng, C. N. P. Lui, Tsen-Hsuan Lin, Chen Chang, Pi-Tai Chou, K.K. L. Yung and S.C. Edman Tsang* <i>University of Oxford</i>	Paper 2
09:05	<b>Synthesis of functionalized, dispersible carbon-coated cobalt nanoparticles for potential biomedical applications</b> Quirin M. Kainz, Soraia Fernandes, Corina M. Eichenseer, Francesca Besostri, Helmut Körner, Rainer Müller and Oliver Reiser* <i>Universität Regensburg, Germany</i>	Paper 3
09:10	<b>Prolonging the circulatory retention of SPIONs using dextran sulfate: <i>in vivo</i> tracking achieved by functionalisation with near-infrared dyes</b> Maha R.A. Abdollah*, Tammy Kalber, Berend Tolner, Paul Southern, Joseph C. Bear, Mathew Robson, R. Barbara Pedley, Ivan P. Parkin, Quentin Pankhurst, Paul Mulholland and Kerry Chester* <i>University College London, UK</i>	Paper 4
09:15	<b>Final step gallium-68 radiolabelling of silica-coated iron oxide nanorods as potential PET/MR multimodal imaging agents</b> Benjamin P. Burke*, Neazar Baghdadi, Gonçalo S. Clemente, Nathalie Camus, Amaury Guillou, Alicja E. Kownacka, Juozas Domarkas, Zakaria Halime, Raphaël Tripier and Stephen J. Archibald <i>University of Hull, UK</i>	Paper 5
09:20	Discussion	
11:00	Morning Tea	
	<b>Session 1: Magnetic Nanoparticles continued</b> Session Chair: Steve Archibald	
11:30	<b>Protein A-conjugated iron oxide nanoparticles for separation of <i>Vibrio cholerae</i> from water samples</b> Tran Quang Huy, Pham Van Chung, Nguyen Thanh Thuy, Cristina Blanco-Andujar and Nguyen Thi Kim Thanh* <i>University College London, UK</i>	Paper 6
11:35	<b>A low cost synthesis method for functionalised iron oxide nanoparticles for magnetic hyperthermia from readily available materials</b> Joseph C. Bear, Bin Yu, Cristina Blanco-Andujar, Paul D. McNaughten, Paul Southern, Marc-Krystelle Mafina, Quentin A. Pankhurst and Ivan P. Parkin* <i>University College London, UK</i>	Paper 7
11:40	<b>Design of FeBi nanoparticles for imaging applications</b> M. Branca, F. Pelletier, B. Cottin, D. Ciuculescu, C.-C. Lin, R. Serra, J.-G. Mattei, M.-J. Casanove, R. Tan, M. Respaud and C. Amiens* <i>Université Paul-Sabatier, France</i>	Paper 8
11:45	Discussion	
13:00	Lunch	

	<b>Session 2: Optical Nanoparticles</b> Session Chair: Lanry Yung	
14:00	<b>A multifunctional amphiphilic polymer as a platform for surface-functionalizing metallic and other inorganic nanostructures</b> Wentao Wang, Fadi Aldeek, Xin Ji, Birong Zeng and Hedi Mattoussi* <i>Florida State University, USA</i>	<b>Paper 9</b>
14:05	<b>3 Bisphosphonate ligands improve the water solubility of quantum dots</b> Siti Fatimah Abdul Ghani*, Michael Wright, Juan Gallo Paramo, Melanie Bottrill, Mark Green, Nicholas Long and Maya Thanou <i>King's College London, UK</i>	<b>Paper 10</b>
14:10	<b>The properties and performance of a pH-responsive functionalised nanoparticle</b> Sandra Ast, Peter J. Rutledge and Matthew H. Todd* <i>University of Sydney, Australia</i>	<b>Paper 11</b>
14:15	Discussion	
15:30	Afternoon Tea	
16:00	<b><i>In vitro</i> study of the interaction of heregulin-functionalized magnetic–optical nanorods with MCF7 and MDA-MB-231 cells</b> A. Lesniak, D. Kilinc, Suad A. Rashdan, A. von Kriegsheim, B. Ashall, D. Zerulla, W. Kolch and G. U Lee* <i>University College Dublin, Ireland</i>	<b>Paper 12</b>
16:05	<b>Studies of the dynamics of biological macromolecules using Au Nanoparticle–DNA artificial molecules</b> Qian Chen, Jessica M. Smith, Haider I. Rasool, Alex Zettl and A. Paul Alivisatos* <i>University of California, Berkeley, USA</i>	<b>Paper 13</b>
16:10	Discussion	
17:00	Poster session	
18:00	Close of sessions	
19:00	Pre-Dinner Drinks	
19:30	Conference Dinner	

## Friday 19 September

	<b>Session 3: Other Nanoparticles</b> Session Chair: Edman Tsang	
09:30	<b>Precious metal carborane polymer nanoparticles: characterisation of micellar formulations and anticancer activity</b> Nicolas P.E. Barry*, Anaïs Pitto-Barry, Isolda Romero-Canelón, Johanna Tran, Joan J. Soldevila-Barreda, Ian Hands-Portman, Corinne J. Smith, Nigel Kirby, Andrew P. Dove, Rachel K. O'Reilly and Peter J. Sadler <i>University of Warwick, UK</i>	<b>Paper 14</b>
09:35	<b>Lanthanide nano-drums: a new class of molecular nanoparticles for potential biomedical applications</b> Richard A. Jones*, Annie J. Gnanam, Jonathan F. Arambula, Jessica N. Jones, Jagannath Swaminathan, Xiaoping Yang, Desmond Schipper, Justin W. Hall, Lauren J. DePue, Yakhya Dieye, Jamuna Vadivelu, Don J. Chandler, Edward M. Marcotte, Jonathan L. Sessler, Lauren I. R. Ehrlich, and Katherine A. Brown <i>The University of Texas at Austin, USA</i>	<b>Paper 15</b>
09:40	Discussion	
10:30	Morning Tea	
11:00	<b>Aptamer-conjugated theranostic hybrid graphene oxide with highly selective biosensing and combined therapy capability</b> Bhanu Priya Viraka Nellore, Avijit Pramanik, Suhash Reddy Chavva, Sudarson Sekhar Sinha, Christen Robinson, Zhen Fan, Rajashekhar Kanchanapally, Justin Grennell, Ivy Weaver, Ashton T. Hamme and Paresh Chandra Ray* <i>Jackson State University, USA</i>	<b>Paper 16</b>
11:05	<b>Functionalised gold and titania nanoparticles and surfaces for use as antimicrobial coatings</b> Sacha Noimark, Kristopher Page, Joseph C. Bear, Carlos Sotelo-Vazquez, Raul Quesada-Cabrera, Yao Lu, Elaine Allan, Jawwad A. Darr, and Ivan P. Parkin <i>University College London, UK</i>	<b>Paper 17</b>
11:10	Discussion	
12:00	<b>Concluding Remarks</b> Mostafa El-Sayed <i>Georgia Institute of Technology, USA</i>	<b>Paper 18</b>
12:45	<b>Acknowledgements</b>	
13:00	<b>Close of meeting and Lunch</b>	