Royal Society of Chemistry Awards 2014

The UK Royal Society of Chemistry has honored a number of scientists in its 2014 awards scheme. We congratulate all the awardees, and feature a selection of our authors here.

David J. Procter (University of Manchester) is the recipient of the Bader Award, which is presented "to recognize eminence in organic chemistry". Procter studied at the University of Leeds, where he obtained his PhD (supervised by Christopher Rayner) in 1995. After postdoctoral research with Robert Holton at Florida State University, he started his independent career at the University of Glasgow in 1997. He moved to the University of Manchester in 2004, and is currently professor. Procter's research interests lie in the development of new synthetic methods, the synthesis of natural and unnatural targets, catalysis, and chemical biology. He has reported in *Angewandte Chemie* on selective reduction reactions using SmI_2/H_2O.[1]

Michael C. Willis (University of Oxford) is the winner of the Catalysis in Organic Chemistry Award. Willis studied at Imperial College London, and worked with Steven V. Ley at the University of Cambridge for his PhD (awarded in 1995). He was subsequently a postdoctoral researcher with David A. Evans at Harvard University, and in 1997, he joined the faculty at the University of Bath. In 2007, he moved to the University of Oxford, where he is currently professor. Willis and his research group are interested in developing new reactions and catalysts for organic synthesis, in particular transition-metal catalysis, with an emphasis on practical processes for the preparation of functional molecules. He has reported in *Angewandte Chemie* on the rhodium-catalyzed hydroacylation of alkynes.[2]

Euan K. Brechin (University of Edinburgh) has been honored with the Chemistry of Transition Metals Award. Brechin studied at the University of Edinburgh, where he was awarded his PhD in 1997 for work supervised by Richard E. P. Winpenny. He then carried out postdoctoral research with George Christou at Indiana University (1997–1999) and with Peter Tasker and Richard E. P. Winpenny at the University of Edinburgh (1999–2000). In 2001, he started his independent career as a research fellow at the University of Manchester, and in 2004, he moved to the University of Edinburgh, where he is currently Professor of Coordination Chemistry. Brechin's research interests are in the areas of coordination chemistry and the magnetic applications of polymetallic complexes. He has reported in *Angewandte Chemie* on a Co^{II}–Y^{III} single-ion magnet.[3]

Duncan W. Bruce (University of York) is the recipient of the Peter Day Award, which recognized contributions to the field of materials chemistry. Bruce studied at the University of Liverpool, where he carried out his PhD (awarded in 1984) with David Cole-Hamilton. He then joined the University of Sheffield, firstly as a research fellow and subsequently joined the faculty there, and moved to the University of Exeter in 1997. He was made Professor of Materials Chemistry at the University of York in 2005. Bruce's research interests are in the area of materials chemistry, mostly involving liquid crystals and transition metals, in particular metallomesogens. He has reported in *Angewandte Chemie* on iridium-containing phosphorescent mesomorphic dyads.[4]

Holger Braunschweig (University of Würzburg) is the winner of the Main Group Chemistry Award. Braunschweig studied at the RWTH Aachen, where he completed his PhD (supervised by Peter Paetzold) in 1990. After postdoctoral research with Michael F. Lappert at the University of Sussex, he returned to the RWTH Aachen, where he completed his habilitation in the group of Peter Paetzold, and was appointed lecturer in 1998. He moved to Imperial College London in 2000, and was made Professor of Inorganic Chemistry at the University of Würzburg in 2009. Braunschweig's research program covers main-group-element, in particular boron, and transition-metal chemistry, including boron–boron multiple-bond systems, boron heterocycles, metallocenophanes, and metal-only Lewis pairs. He has reported in *Angewandte Chemie* on a neutral boron-containing radical.[5]

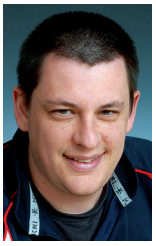
Andrew D. Smith (University of St. Andrews) is the recipient of the Merck Award, which is presented to a researcher less than 45 years old for outstanding work in organic chemistry. Smith spent two years as a professional footballer at Aston Villa FC, and studied at the University of Oxford, where he worked with Stephen G. Davies for his doctorate (awarded in 2000). After a research fellowship at the same institution, he joined the University of St Andrews in 2005, and is currently professor. Smith's research is focused upon the development and mechanistic understanding of novel catalytic asymmetric processes using organocatalytic methods, in particular Lewis base promoted catalytic processes, including N-heterocyclic carbenes and isothioureas in organocatalysis. He has reported in *Angewandte Chemie* on the isothiourea-mediated synthesis of 2,4,6-trisubstituted pyridines.[6]

Ian Paterson (University of Cambridge) is the winner of the Natural Product Chemistry Award. Paterson studied at the University of St Andrews, and carried out his PhD research with Ian Fleming at the University of Cambridge, followed by a postdoctoral fellowship with Gilbert Stork at Columbia University. After holding a lectureship

Awarded ...

D. J. Procter

M. C. Willis



E. K. Brechin

D. W. Bruce

H. Braunschweig

A. D. Smith


I. Paterson


T. J. Donohoe


F. Wudl


P. A. Gale


B. Binks

at University College London, he returned to the University of Cambridge in 1983, and is currently Professor of Organic Chemistry. His principal research interests are in the development of new synthetic methods and the synthesis and structure determination of biologically important natural products, in particular the chemical synthesis of complex polyketides that include anticancer agents and antibiotics. He has reported in *Angewandte Chemie* on the total synthesis of jiadifenolide.[7]

Timothy J. Donohoe (University of Oxford) is the recipient of the Charles Rees Award, which is given for excellent work in the field of heterocyclic chemistry. Donohoe studied at the University of Bath, and worked with Stephen G. Davies at the University of Oxford for his doctorate (awarded in 1992). After postdoctoral research with Philip D. Magnus at the University of Texas at Austin, he started his independent career at the University of Manchester in 1994. He moved to the University of Oxford in 2001, and is currently professor. Donohoe's research interests lie in the development of new methods for chemical synthesis and in testing and exploiting that methodology in the total synthesis of complex and biologically active compounds. His report on rhodium-catalyzed methylation was recently featured on a cover of *Angewandte Chemie*.[8]

Fred Wudl (University of California, Santa Barbara) is honored with the Spiers Memorial Award, which was shared with **Pulickel M. Ajayan** (Rice University). Wudl studied at the University of California, Los Angeles, where he was awarded his PhD in 1967 for work supervised by Donald J. Cram. After postdoctoral work with R. B. Woodward at Harvard University, he joined the faculty at the State University of New York, Buffalo, in 1968. In 1972, he moved to Bell Laboratories, Murray Hill, and in 1982, he joined the University of California, Santa Barbara, where he is currently Professor of Chemistry and Materials. Wudl's research program includes topics such as the optical and electrooptical properties of processable conjugated polymers, the organic chemistry of fullerenes, and self-healing polymers. He has reported in *Angewandte Chemie* on self-assembling decacyclene triimides.[9]

Philip A. Gale (University of Southampton) is the winner of the Supramolecular Chemistry Award. Gale studied at the University of Oxford, where he worked with Paul D. Beer for his doctorate (awarded in 1995). After postdoctoral research with Jonathan L. Sessler at the University of Texas at Austin, he took up a research fellowship at the University of Oxford in 1997, and moved to the University of Southampton in 1999. He is currently Professor of Supramolecular Chemistry at Southampton, as well as Distinguished Adjunct Professor at King Abdulaziz University, and Head of the UK National Crystallography Service. Gale's research is currently focused on the design of small molecules that mediate the transport of anions through lipid bilayer membranes, which he has discussed in a Minireview in *Angewandte Chemie*.[10]

Bernard Binks (University of Hull) is the winner of the Surfaces and Interfaces Award. Binks studied at the University of Hull, where he completed his PhD (supervised by Robert Aveyard) in 1986. After research fellowships with Dominique Langevin and Jacques Meunier at the École normale supérieure, Paris (1987), and at the University of Hull, he joined the faculty at Hull in 1991, and is currently Professor of Physical Chemistry. Binks and his research group are interested in the properties and behavior of colloidal particles at fluid interfaces, including particles at planar interfaces, particle-stabilized emulsions and foams, and novel materials derived from them. He has reported in *Angewandte Chemie* on switchable Pickering emulsions.[11]

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