Dalton 2016

Joint Interest Groups Meeting

29-31 March 2016
University of Warwick, UK

Plenary lecturers research summaries.

RSC Prize and Award Winners

Dr Christopher Barnard (Johnson-Matthey)
Research in the field of platinum group metal chemistry for catalytic and medicinal applications in industry.

Professor Peter Ford (UC Santa Barbara)
Fundamental studies of mechanisms of inorganic photochemistry, homogeneous catalysis and the bioinorganic chemistry of nitric oxide and related nitrogen oxide species.

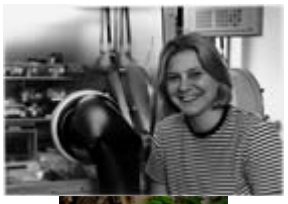
Professor Todd Marder (Julius-Maximilians-Universität Würzburg)
Fundamental studies of the synthesis, structure, bonding, reactivity and photophysical properties of organometallic compounds, and their applications in homogeneous catalysis and materials chemistry.

Professor Pedro Pérez (Universidad de Huelva)
Development of alkane C-H functionalisation reactions, including those of methane, and other reactions catalysed by metal carbenes.

John Dalton 250th Birthday Lecture

Rachel Dunn (Durham)
Doctoral postgraduate student in the Department of Philosophy at Durham University. Her PhD working title is Seeing and Believing: John Dalton and the Visual Culture of Experimental Science in British Dissenting Academies, 1770-1840.

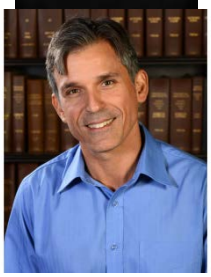
Interest Group Plenaries



Professor Claire Carmalt (UCL)
Application of organometallic chemistry to problems in materials deposition, most notably the development of "designed" molecular precursors targeted for thin film growth by chemical vapour deposition (CVD).

Professor Eric Rivard (University of Alberta)
Fundamental synthetic inorganic chemistry with focus on the stabilisation of reactive intermediates/new bonding environments across the period table, and the generation of new polymeric materials for solar cell devices and active components for the electronics industry.

Professor Martin Warren (Kent)
Biosynthesis and biology of the pigments of life, encompassing metallocofactor molecules such as vitamin B_{12}, heme and siroheme, and synthetic biology approaches to reconstructing whole synthetic pathways in cells.



Professor Jonas Peters (Cal Tech)
Synthesis of novel first row transition metal complexes with relevance to living systems and energy materials, and studies of their electronic structures and reactivities.

Professor Martha Greenblatt (Rutgers)
Synthesis and crystal growth of novel transition metal compounds with quasi-low-dimensional properties, including perovskite-related manganates, coboltates and ferrates, transition metal oxide bronzes, metal cluster chalcogenides, transition metal nitrides, and high temperature superconductors.

Professor Antoni Llobet (The Institute of Chemical Research of Catalonia, ICIQ)
Mechanistic studies of redox catalysis by transition metal complexes for technological applications, including catalytic oxidation of water to dioxygen (artificial photosynthesis) and photo-production of hydrogen from water and sunlight.