

SATELLITE MEETING ON

Photoactivatable metal complexes: exciting potential in biotechnology and medicine?

Wednesday 20 – Thursday 21 June 2012

The Royal Society at Chicheley Hall: Home of the Kavli Royal Society International Centre

Organised by Professor Peter J Sadler FRS, Professor Akhil R Chakravarty and Dr Nicola J Farrer

DAY 1

09.00 Welcome by Royal Society & Peter Sadler FRS

09.15 SESSION 1: Photorelease of small molecules

Introductory remarks by chair
Dr Peter Ford

09.30 Photoactivated CO releasing molecules and their bioconjugates
Professor Ulrich Schatzschneider

10.00 Discussion

10.15 NO and CO releasing materials
Professor Alexander Schiller

10.45 Discussion

11.00 Coffee

11.30 Targeted nitric oxide delivery: a novel approach to photochemotherapy for malignancies and infections
Professor Pradip K Mascharak

12.00 Discussion

12.15 The future for photorelease metal complexes
Professor Claudia Turro

12.45 Discussion

13.00 LUNCH

14.00 SESSION 2: DNA and targeting

Introductory remarks by chair
Professor Chi-Ming Che

14.15 Interactions of intercalating photooxidising dipyrrophenazine metal complexes with DNA
Professor John M Kelly

14.45 Discussion

15.00 Metal photocleavage of DNA
Dr Samantha L H Higgins

15.30 Discussion

15.45 Tea

16.15 Multifunctional *in cellulose* probes
Dr James Thomas

16.45 Discussion

17.00 Targeted photodynamic therapy
Professor David Phillips CBE

17.30 Discussion

17.45 Flash posters

18.15 Close

18.45 Pre-dinner drinks

19.00 DINNER

DAY 2

09.00 SESSION 3: Phototherapy

Introductory remarks by chair
Dr Nicola J Farrer

09.15 Synergistic effect of nitric oxide and reactive oxygen species originated from light irradiation of nitrosyl ruthenium complex as potentiation of photodynamic therapy. Photobiological and cytotoxicity studies
Professor Roberto da Silva

09.45 Discussion

10.00 Light-activated drug therapy
Dr Julie Woods

10.30 Discussion

10.45 Coffee

11.15 Round-table discussion
Professor Colin Hopper

12.00 Flash posters

12.15 LUNCH

13.15 SESSION 4: Cellular probes, imaging and commercial development

Introductory remarks by chair
Professor Ulrich Schatzschneider

13.30 Exploitation of luminescent transition metal complexes as biomolecular and cellular probes
Professor Kenneth Kam-Wing Lo

14.00 Discussion

14.15 Time-resolved luminescent lanthanide bioprobes
Professor Jean-Claude Bünzli

14.45 Discussion

15.00 Tea

15.30 Challenges during the development of photoactive metal complexes for PDT applications
Professor Volker Albrecht

16.00 Discussion

16.15 Closing remarks

16.30 CLOSE