



# 17th Annual Cardiff Chemistry Conference



14th and 15th May 2018

School of Chemistry – Large Chemistry Lecture Theatre

<http://www.cardiff.ac.uk/chemistry/events/cardiff-chemistry-conference>

## Monday 14th May 2018

13:30 Welcome: Damien Murphy (Head of School of Chemistry)

Lecture Session 1      Chair: Richard Catlow, FRS

13:35 Ilan Marek (Technion – Israel Institute of Technology, Haifa, Israel)  
*Remote functionalization*

14:35 Nicolas Biot (Cardiff University; Bonifazi Research Group)  
*Programming recognition arrays through chalcogen bonding interactions*

14:50 Rob Armstrong (Cardiff University; Hutchings Research Group)  
*Aerobic oxidation of glucose over supported Pt catalysts: a sweet application for quantitative 2D NMR*

15:05 Sponsor Presentations: Advion and IKA (Chair: Louis Morrill)

15:10 Coffee / Poster Session (Viriamu Jones Gallery)

Lecture Session 2      Chair: Thomas Wirth

15:40 Sally Price, FRS (University College London)  
*Can we predict how pharmaceuticals will crystallize?*

16:40 James Ayres (Cardiff University; Morrill Research Group)  
*Developing novel synthetic routes towards cyanamides*

16:55 Sponsor Presentations: Alfa Aesar and Fluorochem (Chair: Louis Morrill)

Poster Session      Organizer: Rebecca Melen

17:00 – 19:00 Poster Session, including Wine Reception (Viriamu Jones Gallery)

## Dinner

19:00 BY INVITATION ONLY (Aberdare Hall)



## **Tuesday 15th May 2018**

### **Lecture Session 3**      Chair: Graham Hutchings, FRS

- 09:00 Ferdi Schüth (Max Planck Institut für Kohlenforschung, Mülheim, Germany)  
*The use of mechanochemistry in catalysis*
- 10:00 Yashar Soltani (Cardiff University; Melen Research Group)  
*Modern alchemy: turning boron into gold*
- 10:15 Raquel Cruz Samperio (Cardiff University; Allemann Research Group)  
*Traceless in-cell photoactivation of proteins for research and therapy*
- 10:30 Sponsor Presentations: Asynt and GPE (Chair: Louis Morrill)
- 10:35 Coffee / Poster Session (Viriamu Jones Gallery)

### **Lecture Session 4**      Chair: John Pickett, FRS

- 11:05 Sheena Radford, FRS (University of Leeds)  
*Exploiting protein-protein and protein-ligand interactions to ameliorate amyloid disease*
- 12:05 Joey Howard (Cardiff University; Browne Research Group)  
*Mechanochemistry as an emerging tool for molecular synthesis: what can it offer?*
- 12:20 Okba Al Rahal (Cardiff University; Harris Research Group)  
*Pharmaceutical co-crystals: exploiting powder X-ray diffraction to gain new structural insights*
- 12:35 Sponsor Presentations: Radleys and Shimadzu (Chair: Louis Morrill)
- 12:40 Close of Session / Lunch

### **Lecture Session 5**      Chair: Kenneth Harris

- 14:00 **Shimadzu Lecture**  
Ivan Parkin (University College London)  
*Materials Chemistry from self-cleaning coatings to detecting trace analytes by PIERS*
- 15:00 Filipa Silva (Cardiff University; Wirth Research Group)  
*Making garlic: a short (total) synthesis of ajoene*
- 15:15 Darren Wragg (Cardiff University; Leoni / Casini Research Groups)  
*On the use of advanced molecular dynamics methods to design drugs targeted to non-canonical DNA structures*
- 15:30 Coffee / Poster Session (Viriamu Jones Gallery)

### **Lecture Session 6**      Chair: Davide Bonifazi

- 16:00 François Diederich (ETH, Zürich, Switzerland)  
*Molecular recognition in chemical and biological systems: chemical model systems and biostructural investigation of protein-ligand interactions*
- 17:00 Closing Remarks: Kenneth Harris
- 17:05 Cheese and Wine Reception (School of Chemistry Foyer)  
*Sponsored by South East Wales Local Section of the Royal Society of Chemistry*