

***Preliminary Program***  
(July 26, 2017)

**Impact of Nanomaterials on the Biosphere:  
Balancing Societal Benefit and Assessed  
Risk to Human Biology and Ecosystems**

**September 4 - 7, 2017  
Maryborough Hotel  
Cork, Ireland**

**Conference Chairs**

**Alexandra E. Porter**  
Imperial College London, United Kingdom

**Teresa (Terry) D. Tetley**  
Imperial College London, United Kingdom



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**Monday, September 4, 2017**

17:30 - 18:30            Conference Check-in

18:30 - 19:30            Opening Reception

19:30 - 21:00            Dinner

**Tuesday, September 5, 2017**

- 07:30 - 09:00            Breakfast
- 09:15 - 09:30            **Welcoming remarks**  
Prof: Linn Hobbs, ECI Liaison
- Session 1: Nanomaterials in devices and medicine**  
Chair: Professor Trevor Douglas
- 09:30 - 10:30            **Keynote lecture**  
**Engineering virus cages for targeted therapies**  
Prof. Trevor Douglas, Indiana state University, USA
- 10:30 - 11:00            Tea/Coffee Break
- 11:00 - 11:45            Invited Talk  
**Nanomaterials at the Neural Interface**  
Dr. Jessamyn Fairfield, UC Galway, Ireland
- 11:45 – 12:30            Invited Talk  
**Nanomaterials in Energy applications**  
Prof. Martyn Pemble, Chemistry and Tyndall National Institute, University  
College, Cork, Ireland
- 12:30 - 14:00            Lunch
- Session 2: General Nanotoxicology**  
Chair: Professor Trevor Douglas
- 14:00 - 14:45            **Invited talk**  
**Redox proteomics as a readout for oxidative stress induced by engineered  
nanoparticles**  
Prof. David Sheehan, University College, Cork, Ireland
- 14:45 - 15:30            **Invited talk**  
**Uptake and translocation of engineered nanoparticles by human lung cells**  
Prof. Terry Tetley, National Heart & Lung Institute, Faculty of Medicine, Imperial  
College, London, UK
- 15:30 - 16:15            **Invited talk**  
**Potential nanotoxicities encountered in manufacturing environments  
involving nanoparticle devices or nanoprocessing routes**  
Hakan Wallin, National Research Centre for the Working Environment,  
Copenhagen, Denmark
- 16:15 - 16:45            **Contributed talks**
- 16:45 - 17:30            General Discussion
- 17:30 - 18:30            Poster Session / Social Hour

Free evening

**Wednesday, September 6, 2017**

07:30 - 09:00 Breakfast

**Session 3: Biominerals, glasses and biodegradation**

Chair: Professor Jonathan Powell

09:00 - 09:45

**Invited Talk**

**Calcium phosphate nanoparticles in the gut lumen**

Prof. Jonathan Powell, MRC, UK

09:45 - 10:30

**Invited Talk**

**Overview of the European and FDA guidance on the use of this nanoparticles in medical devices**

Dr. Federica Bellucci, Medtronic, USA

10:30 - 11:00

Tea/Coffee Break

11:00 – 11:45

**Invited Talk**

**TBA**

11:45 – 12:30

**Invited Talk**

***In situ* microscopy of nanomaterial's transformations in the environment**

Prof. Mary Ryan, Imperial College London, UK

12:30 - 13:00

**Contributed talks**

13:00 - 14:30

Lunch

14:30 – 19:00

*Contributed talks/Workshop/Free time*

19:00 – 21:00

Conference Banquet

21:00 – 21:45

**Keynote talk**

**Inflammatory and cytotoxic responses to nanoscale debris from surgical implantation and device wear**

Prof. Alister Hart, Royal National Orthopaedic Hospital NHS Trust, UK

**Thursday, September 7, 2017**

07:30 - 09:00 Breakfast

**Session 4: Environmental risk assessment**  
**Chair Professor Mark Rehkamper**

09:00 - 09:45 **Invited Talk**  
**Isotopic labelling for tracking nanomaterials in the environment**  
Prof. Mark Rehkamper, Imperial College London, UK

09:45 - 10:30 **Invited Talk**  
**TBA**

10:30 - 11:00 Tea/Coffee Break

11:00 - 11:45 **Invited Talk**  
**TBA**

11:45 - 12:15 **Invited Talk**  
**Molecular effects in silver nanoparticle exposure to soils**  
Prof. David Surgeon, Centre for Ecology and Hydrology, NERC, UK

12:15 – 13:00 **General Discussion and Conclusions**

13:00 - 14:30 Lunch