Collaborative Workshop of the Institute for Advanced Study of the Technical University of Munich (Germany) and the Institute of Advanced Studies of the University of Birmingham (UK)

October 25-26, 2017

Technical University of Munich · Institute for Advanced Study
Lichtenbergstraße 2 a · 85748 Garching · Germany

Organizing Committee
Angela Casini, Michael J. Hannon, and Fritz E. Kühn
Program

WEDNESDAY, OCTOBER 25, 2017  

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<th>Time</th>
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<td>10:00–11:00 a.m.</td>
<td><strong>Registration (Foyer, ground floor)</strong></td>
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| 11:00–11:15 a.m. | Welcome Address:  
Ernst Rank (Director TUM-IAS)  
Michael J. Hannon (Director UoB-IAS)  
Introduction:  
Angela Casini (TUM-IAS Fellow) |
| 11:15–12:15 p.m. | **Plenary - Siderophores and their potential applications as antimicrobials**  
Anne-Kathrin Duhme-Klair (Dept. of Chemistry, University of York) |
| 12:15–12:35 p.m. | **Synthesis of selective zinc chelators to help combat resistant bacteria**  
Alexander Åstrand (School of Pharmacy, University of Oslo) |
| 12:35–12:55 p.m. | **Metallo-supramolecular cylinders that bind unusual DNA and RNA structures: from DNA nanoscience to bio-activity**  
Michael J. Hannon (School of Chemistry, University of Birmingham) |
| 12:55–2:00 p.m. | **Lunch Break (Max Planck Canteen)**                                   |
| 2:00–2:20 p.m. | **Organometallics for medicinal chemistry**  
Fritz E. Kühn (Molecular Catalysis, TUM) |
| 2:20–2:40 p.m. | **Bismuth-oxo-clusters for soft tissue staining**  
Madleen Busse (Munich School of BioEngineering, TUM) |
| 2:40–3:00 p.m. | **Advancing metalloprotein design for new functions and applications**  
Anna Peacock (School of Chemistry, University of Birmingham) |
| 3:00–4:00 p.m. | **Plenary - Chemical strategies to fight multiresistant bacteria**  
Stephan A. Sieber (School of Chemistry, TUM) |
| 4:00–4:20 p.m. | **Coffee Break (Foyer, ground floor)**                                 |
| 4:20–4:40 p.m. | **Metal-containing Derivatives of Nucleic Acids and Nucleosides**  
James Tucker (School of Chemistry, University of Birmingham) |
| 4:40–5:00 p.m. | **Contribution of molecular modelling to the development of virus-like particles for breast cancer theranostics**  
Rita Melo (Instituto Superior Técnico, University of Lisbon) |
5:00 – 5:20 p.m.  **Hydrocarbon oxidation by a Fe-complex featuring dual active sites**  
Corinna Hess (Department of Chemistry, TUM)

5:20 – 6:20 p.m.  **Plenary - Targeting hepatitis B virus – host interaction for therapy development**  
Ulrike Protzer (Institute of Virology, TUM)
Thursday, October 26, 2017

Auditorium (ground floor)

08:45 – 09:45 a.m. Plenary - Factors determining anticancer metal drug response: from DNA damage to immunogenic cell death induction
Walter Berger (Medical University of Vienna)

09:45 – 10:05 a.m. Chemical modulation of cellular redox balance for cancer treatment
Isolda Romero-Canelon (School of Pharmacy, Univ. of Birmingham)

10:05 – 10:25 a.m. Luminescent metal complexes and nano-particles for detection and imaging
Zoe Pikramenou (School of Chemistry, University of Birmingham)

10:25 – 11:25 p.m. Poster Session & Coffee Break (Faculty Club 4th floor)

11:25 – 11:45 a.m. Organometallic host-systems for supramolecular and biomedical applications
Alexander Pöthig (Catalysis Research Center, TUM)

11:45 – 12:05 p.m. Elucidating the target selectivity of metal-based anticancer agents by mass spectrometry approaches
Sam Meier-Menches (Dept. of Analytical Chemistry, University of Vienna)

12:05 – 12:25 p.m. Advanced molecular dynamics approaches for drug discovery
Darren Wragg (School of Chemistry, Cardiff University)

12:25 – 1:30 p.m. Lunch Break (Max Planck Canteen)

1:30 – 2:30 p.m. Molecular systems engineering with DNA
Hendrik Dietz (Physics Department, TUM)

2:30 – 2:50 p.m. Getting a handle on the genome: the development and application of enzymatic, sequence-specific DNA alkylation.
Rob Neely (School of Chemistry, University of Birmingham)

2:50 – 3:10 p.m. Supramolecular metallacages as targeted drug delivery systems
Angela Casini (School of Chemistry, Cardiff University)

3:10 – 3:30 p.m. Coffee Break (Foyer, ground floor)

3:30 – 3:50 p.m. Interfacing with biology through polymer chemistry and nanotechnology
Paco Fernandez-Trillo (School of Chemistry, Univ. of Birmingham)
3:50 – 4:10 p.m.  Novel radiometaled peptides translocate reversibly the blood-brain barrier
João Galamba Correia (Instituto Superior Técnico, University of Lisbon)

4:10 – 4:30 p.m.  Novel organometallic NHC Au(I) complexes as G-quadruplex stabilizers: synthesis and biophysical studies of their DNA binding capabilities
Riccardo Bonsignore (School of Chemistry, Cardiff University)

4:30 – 5:30 p.m.  Plenary - Multimodal molecular neuroimaging of and with metals
Gil Westmeyer (Molecular Imaging, TUM)

5:30 p.m.  Concluding Remarks

5:40 – 7:00 p.m.  Poster Session (Faculty Club 4th floor)

7:00 p.m.  Social Dinner (Faculty Club 4th floor)

FRIDAY, OCTOBER 27, 2017

9:30 a.m.  MunichSchool of BioEngineering
Boltzmannstraße 11, 85748 Garching
Introduction by Prof. Franz Pfeiffer
Lab Tour

11:00 a.m.  Catalysis Research Center
Ernst-Otto-Fischer-Straße 1, 85748 Garching
Introduction by Dr. Alexander Pöthig
Lab Tour