

# EVENT SCHEDULE \*

\*All schedule timings are Greenwich Mean Time (GMT)

## BERNAL ONLY ACTIVITIES

- 09:30 – 09:45 Introduction to the event and competitions
- 09:45 – 11.00 Thesis in 3 – Chair Dr John Mulvihill, School of Engineering, Bernal Institute
- 11:00 – 11.30 ‘EU research the next framework program of Horizon Europe’ Dr Cathal Linnane, Research Funding, University of Limerick

## INTERNATIONAL SESSION

Conference Hall >

- 11.30 – 11.45 Introductions to the Bernal Institute and our sponsors
- 11:45 – 12:00 **Welcome Address:** Professor Norelee Kennedy, Vice President for Research, University of Limerick
- 12:00 -13.00 **Keynote speaker 1:** Professor Markus Antonietti, Max Planck Institute of Colloids and Interfaces, Germany. *‘Perspectives of renewable structured materials’*

**Chair:** Professor Luuk van der Wielen, Director Bernal Institute and Chair of Biosystems Engineering & Design, University of Limerick

- 13:00 – 13:45 Industry Engagement – Global Grand Challenges
- 13.00 – 13.15 Kevin Boyle - SVP of interventional segment - Becton Dickinson
- 13.15 – 13.30 Micheal O’Loughlin - Vice President, R&D, Urology and Pelvic Health - Boston Scientific
- 13.30 – 13.45 Dan Liebholz - CTO - Analog Devices

- 13.45- 14.45 **Keynote speaker 2:** Professor Eugenia Kumacheva, University of Toronto, Canada *‘Nanocolloidal “inks” for 3D Printing of Structured Materials’*

**Chair:** Professor Michael Zaworotko, Bernal Chair of Crystal Engineering, University of Limerick

- 14.45 – 15.00 **Break/Industry market**

## PARALLEL SESSIONS FOR BERNAL CLUSTERS

Session 1 >

- 15:00-16:00 **Parallel sessions for Bernal Clusters**
- Session 1: Molecular and Nano Cluster**
- Speaker 1:** Professor David Scanlon, University College London, United Kingdom. *‘Computationally Driven Design of New and Improved Transparent Conducting Oxides’*
- Speaker 2:** Professor Ursel Bangert, Bernal Chair in Microscopy and Imaging, University of Limerick. *‘Assessment of 2-D entities for quantum technology devices development via atomic resolution electron microscopy & spectroscopy’*
- Chair:** Professor Kevin Ryan, Department of Chemical Science, Bernal Institute, University of Limerick

Session 2 >

### Session 2: Biomaterials Cluster

**Speaker 1:** Professor Giovanni Tosi, University of Modena and Reggio Emilia, Italy. *'Tailored Nanomedicine for Brain Diseases'*

**Speaker 2:** Dr John Mulvihill, School of Engineering, Bernal Institute, University of Limerick, Ireland. *'The role of tissue structure in concussion'*

**Chair:** Dr Andreas Grabrucker, Dept. of Biological Sciences, Bernal Institute, University of Limerick, Ireland

Session 3 >

### Session 3: Composites Cluster

**Speaker:** Professor Brian Falzon, Queen's University Belfast, Northern Ireland. *'The use of highly aligned carbon nanotube web in multifunctional composite structures'*

**Chair:** Professor Paul Weaver, Bernal Chair in Composite Materials and Structures, University of Limerick

Session 4 >

### Session 4: Process Cluster

**Speaker 1:** Professor Claire Adjiman, Imperial College London  
*'Molecular Engineering for Process Development'*

**Speaker 2:** Professor Marianthi Ierapetritou, University of Delaware, United States  
*'Towards a Digital Twin: Advances in Process Modeling and Integration of Pharmaceutical Manufacturing'*

**Chair:** Professor Gavin Walker, Director SSPC, SFI Research Centre for Pharmaceuticals Bernal Chair of Pharmaceutical Engineering Bernal Institute University of Limerick

**Closing International Event – Professor Luuk van der Wielen**

Conference Hall >

## BERNAL ONLY ACTIVITIES

16:15 – 17:00 Bernal Awards

# ASTRUM

## Advanced Structured Materials 2021

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