



Bioinspired Nanomaterials: From Biomolecular Structures to Biomimetic Materials and Applications

RSC Chemical Nanoscience and Nanotechnology Interest Group
Early Career Researcher Meeting

March 18-19, 2019

Technology and Innovation Centre, University of Strathclyde, Glasgow G1 1RD

Biomolecular structures from molecular complexes and protein assemblies to natural fibers showcase the fascinating molecular interactions of “bionanocomponents” that confer functionalities often not achieved by synthetic materials. Specific examples include silk, the nuclear pore complex (NPC) for selective protein transport, and membrane scaffolds for organizing and focusing membrane protein function. These systems have direct relevance for a wide range of applications including molecular separation, biomaterials, high strength fibers, and even cosmetics and food science. Further understanding of the biomolecular structures as well as their physical chemistry can foster direct exploitation of these materials or the development of soft matter and nanosystems that mimic their function. On the other hand, the observed biochemical and biophysical principles can simply inspire novel synthetic nanomaterials that depart from the original biological functions. Some examples include nanoreactors, enzyme systems, theragnostics, and a range of bionanostructures. To highlight and encourage research in the area of bioinspired nanomaterials, this meeting will bring together researchers in biological structure characterization as well as bioinspired soft matter and bionanotechnology, and will involve industry interests in advanced materials.

Confirmed speakers:

Prof Nico Bruns, University of Strathclyde
Prof My Hedhammar, KTH Royal Institute of Technology, Stockholm, Sweden
Dr Johana Kuncova-Kallio, BioNavis Ltd, Finland
Prof Roderick Lim, Biozentrum and The Swiss Nanoscience Institute, University of Basel
Dr Fabio Nudelman, University of Edinburgh
Prof Erik Reimhult, BOKU University of Natural Resources & Life Sciences, Vienna
Dr Philipp Seib, University of Strathclyde
Dr Simona Serban, Purolite Ltd., UK
Prof Patrick Theato, Karlsruhe Institute of Technology

Scientific and organizing committee:

Dr King Hang Aaron Lau, University of Strathclyde
Prof Carsten Mim, KTH Stockholm
Prof Basit Yameen, Lahore University of Management Sciences

Registration fees:

Early bird student and postdocs (by Feb 8): £15
Early bird RSC Member / Non-Member (by Feb 8): £30 / £60
Standard student / postdocs: £30 / £60
Standard RSC Member / Non-Member: £60 / £80

Call for oral and poster presentations:

Abstracts (max. 300 words) should follow the template downloadable on the website, and be submitted to Prof Carsten Mim <carmim@kth.se>

Registration and abstract submission:

Abstract submission opens: Dec 15, 2018
Abstract submission closes: Feb 15, 2019
Registration opens: Jan 28, 2019
Registration closes: Mar 15, 2019

Contact Information:

aaron.lau@strath.ac.uk (chair), carmim@kth.se and basit.yameen@lums.edu.pk (abstracts and program)

For abstract submission and registration, please visit: <https://bio-nanomaterials-glasgow-2019.org.uk>

Recommended accommodation: <http://glasgow.frasershospitality.com/en> (Discount code: “Strathclyde University”)

Funding for this meeting comes from:



MATERIALS CHEMISTRY DIVISION
CHEMICAL NANOSCIENCE AND NANOTECHNOLOGY GROUP



HUMAN FRONTIER SCIENCE PROGRAM
FUNDING FRONTIER RESEARCH INTO COMPLEX BIOLOGICAL SYSTEMS

EPSRC

Engineering and Physical Sciences Research Council