

Clay Minerals Group RSC Environmental Chemistry Group – Research in Progress 2019

On 17th May 2019, the research meeting '**Clay minerals in the natural and built environment: formation, chemistry & applications**' took place at Newcastle University's Urban Sciences Building. The meeting was organised jointly by the Clay Minerals Group of the Mineralogical Society (Anke Neumann, Newcastle University) and the Environmental Chemistry Group of the Royal Society of Chemistry (Laura Newsome, University of Exeter). Before and during the meeting, Georgina Kay-Black (School of Engineering, Newcastle University) provided fantastic administrative and organisational support and Sheree Ibbetson (Newcastle University) ensured the professional design of the meeting materials. The meeting's broad and diverse scientific programme of 11 oral presentations and 8 posters attracted 50 attendees from academia, industry, and government. The two keynote speakers, Prof Josef Breu (University of Bayreuth; 'Better clays make life easier') and Prof Susan Stipp (Danish Technical University; 'Clays in nature as functional nanoparticles'), delivered inspiring and excellent overviews of the research in their fields. These insights were complemented by an industrial perspective given by the invited speaker David Owen (Treatchem Ltd; 'Clay as a performance additive in the paper industry') and an introduction into synchrotron-based X-ray spectroscopy by the invited speaker Bhoopesh Mishra (University of Leeds; 'Application of synchrotron X-ray techniques for trace element analysis in environmental systems').

The Clay Minerals Group awarded student prizes to:

- Panagiota Adamou from Newcastle University for her oral presentation 'Using Fe-bearing clay minerals to remove antibiotic resistance genes from domestic wastewater' and
- Jeffrey Paulo Perez from the GFZ German Research Centre for Geosciences for his poster on 'Revealing the interfacial reactions between green rust and arsenic species at the nanoscale'.

In addition to this rich scientific programme, coffee and lunch breaks as well as the informal drinks after the meeting gave ample opportunity for networking in a relaxed atmosphere.

