Geomicrobiology Network

Research in Progress Meeting

13 and 14 June, 2016, Bangor University

Current Schedule

The meeting will be held in the Brambell Building in the main science site (see map; building #38, 3 mins walk from the railway station). The lecture room number is A12 and it is located on the ground floor of the building. Refreshments and posters will be in the museum area on the first floor of the same building.

Day 1, June 13:

Celebration of geomicrobiology with invited speakers exploring the evolution of the research field over the years and future directions

12:00 noon start: Buffet lunch, tea/coffee

13:00 -17:00: Invited talks, speakers include..

- **Mark Lever (ETH Zurich)** Defining the ecological boundary between surface and subsurface sediments
- **Mike Wilkins (Ohio State University)** Opportunistic colonization of pristine deep shale environments by piezotolerant halophiles
- **Geoff Gadd (University of Dundee)** Geomycology within geomicrobiology: time to broaden the horizon
- **Tom Clarke (UEA)** Mapping the electron transfer pathways of mineral respiring organisms
- **Lynne Macaskie (University of Birmingham)**
- **Jon Lloyd (University Of Manchester)**
- **Barrie Johnson (University of Bangor)**

17:00: Posters and reception

~19:00: Conference dinner (details to follow)

Day 2: June 14

Talks

9:00-9:30
Tea/coffee

9:30-9:45
Laura Newsom, University of Manchester
Nanoscale imaging of microbe-mineral interactions: implications for arsenic-contaminated groundwater

9:45-10:00
Helen Downie, University of Manchester
Imaging microbes interface during Fe(III) reduction of minerals

10:00-10:15
Roseanne Barata Holanda, University of Bangor
Acidibacillus ferrooxidans and A. sulfuroxidans: insights into novel genus and species of acidophilic iron-oxidizing Firmicutes.

10:15-10:30
Mario Toubes-Rodrigo, Manchester Metropolitan University
Microbial communities inhabiting basal glacier ice and proglacial soils

10:30-10:45
Peter Woolman, Open University
The influence of salt composition on the entombed microbial community within the deep sub-surface Boulby Mine

10:45-11:15
tea/coffee

11:15-11:30
Mohamed Merroun, Universidad de Granada
Geomicrobiological processes at the interface microbe/metal: multidisciplinary approach characterization

11:30-11:45
Eva Pakostova, University of Bangor

In situ bioleaching: an alternative approach of metal extraction from deep-buried sulfide ores

11:45-12:00
Gina Kuippers, University of Manchester
Heavy metal and radionuclide immobilization via the biodegradation of the complexing agent isosaccharinic acid in nuclear waste disposal

12:00-12:15
Angela Sherry, Newcastle University
Nutrient-stimulated bioremediation of oil-contaminated sediments

12:15-12:30
Adrian Cleary, University of Manchester
Strontium treatment in sediment systems by stimulation with glycerol phosphate

12:30-14:00
Lunch and posters

14:00-14:15
Rory Poerteous, University of Glasgow
Limits of Raman Spectroscopy for detecting organic molecular signals in natural Siliceous sinters

14:15-14:30
Sarah Smith, University of Bangor
Oxidative and reductive bioleaching of cobalt-bearing ores

14:30-14:45
Sophie Nixon, University of Manchester
The potential for biogenic sulfide production during shale gas extraction

14:45-15:00
Andre Soares, University of Aberyswyth
The deep subsurface microbiome: a meta-analysis

15:00-15:30
tea/coffee

15:30-15:45
Christopher Charles, University of Huddersfield

pH profiles and survival of alkaliphilic floc communities under intermediate level radioactive waste repository conditions.

15:45-16:00
Nick Thomas, University of Glasgow
Survival of Molecular Signs of Life on the Arid Slopes of the Chilean Altiplano: A Unique Martian Analogue Region

16:00-16:15
Haydn Haynes, University of Manchester
Microbe Influence on Clay Barriers Relevant to the Disposal of Nuclear Waste

16:15-16:30
Rose Jones, University of Bangor
Evolution of bacterial populations in low pH, ferrous iron-oxidising bioreactors in response to the addition of AMD from Mynydd Parys, North Wales

Posters

Please put your posters up by 17:00 on day 1.

Alex Price, Open University
Anaerobic iron oxidation: implications for Mars?

Clare McCann, Newcastle University
Redox interactions of long lived U(VI) in a contaminated soil.

Isaac Kyeremeh, University of Huddersfield
Investigations into the extremophilic properties of Exiguobacterium sp strain – HUD by genotypic and phenotypic methods.

Laura Kelly, University of Bangor
The influence of mineralogy on subterranean acid mine microbial communities

Laura Newsom, University of Manchester
Impact of microbial Fe(III)-reduction on cobalt & nickel laterites

Lynn Foster, University of Manchester
The microbial ecology and biogeochemistry of a nuclear fuel storage pond

Peter Leary, Newcastle University

Investigating microbial diversity, function, and distribution in long-term uranium impacted soils.

Philippe Nauny, University of Glasgow
Organic biomarkers in Martian analogues in Chile

Sara Rassner, University of Abertystwyth
Geo-Carb-Cymru -- harnessing the power of microbes to enhance geological carbon storage and geothermal energy in Wales

Sophie Nixon, University of Manchester
Microbial iron reduction in extreme environments

Zohier Shwia, University of Huddersfield
Isolation and characterization of novel alkaliphilic bacteria from soil contaminated with lime kiln wastes.

Jaime Gomez Bolivar, Universidad de Granada
Reduction of Se(IV) by Stenotrophomonas sp. BII-R7 isolated from Spanish bentonites: microscopic and spectroscopic characterization