Biomimetics - The abstraction of good design from nature

Tuesday 21 October 2014, 11.00 am - 4 pm, Bangor University, Gwynedd

Lunch provided, free to attend, venue confirmed on booking (e-mail c.loxton@bangor.ac.uk)

Biomimetics is not about copying nature but learning from it. Approaching a problem from a biomimetics perspective can help us solve problems. Biomimetics examples are all around us, from the familiar such as cats eyes on roads and Velcro, through to the not so obvious such as passive ventilation of buildings based on air flow through termite mounds and self-cleaning paints based on water repellency observed on lotus flowers.

This workshop will highlight some existing UK biomimetic projects, illustrate how biomimetics can be used in design and problem solving and then go on to discuss and identify possible projects and project partners for future research proposals.

Provisional Program:

10:30 Tea / Coffee

11:00 Welcome and Introductions, Dr Rob Elias, Director of The BioComposites Centre, Bangor Uni

Dr Richard Bonser, Reader in Biomimetics and Design, Brunel University London, "How to build an octopus"

Robert Davies, Cardiff University "Biomimetic multi-scale damage immunity for construction materials"

Andy Middleton, Biomimicry for Creative Innovation, "Biomimicry and the process of innovation"

Questions/ Answers / Comments / Specific introductions from workshop participants

Dr Dan Thomas, Swansea University "The rise of 3D printing"

Dr Andrew Copestake, Swedish Biomimetics3000 "Commercialisation of biomimetic inspired technologies"

Dr Andy Goodman, Bangor University, "MUDBASE: A biomimetic process inspired by Chinese philosophy of mind."

13:30 Lunch and networking

14:30 onwards open workshop to identifying future projects, collaborations and partners (Delegates may attend morning, afternoon or both sessions)

Workshop participants will include:

Eoin Bailey, Business Innovation—Design Lead, **Dr Callum Hill**, Bangor University lead on a Horizon 20/20 proposal based on a biomimetic process, **Chris Hillier**, WISE network, behavior change specialist, **Prof John Kinuthia** and **Phil Young**, University of South Wales, construction sector experts, **Dr Graham Ormondroyd**, Plants and Architecture PI Bangor University

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