Interfacing High-end Research with the Construction Industry at UoB
A Panel Presentation & Discussion

Wednesday 16 Nov 2016
4:30-7:00 pm
Huxley 300
Moulsecoomb Campus, UoB

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The Outline

- The Built Environment Research Group (BERG)
- Research Themes
- Research Expertise
- What we do
- Pathways to develop collaboration with industry
BERG Who we are...

- Group members

Dr Emmanuel Aboagye-Nimo
Dr Philip Ashton
Dr Kassim Gidado
Dr Arman Hashemi
Dr Kenneth Ip
Ms Della Madgwick
Mr Noel Painting
Dr Poorang Piroozfar
Prof Neil Ravenscroft
Dr Hannah Wood
Mr Richard Kulczak
BERG Research Themes

- Advanced Technologies in the Built Environment, Architecture and CONstruction (@BEACON)
- Construction and Project Management
- Education in the Built Environment
- Housing, Community, People and Planning
- Sustainability, Environmental Impact, Energy Efficiency and Building Performance
What we do: BERG Theme 1: Advanced Technologies in Built Environment, Architecture And CONstruction (@Beacon)

• PODIT (Post-Occupancy Design Information Toolkit)
• Rule-based Systems (Fuzzy/AHP)
• Mass Customisation & Personalisation
• Building Information Modelling/Management (BIM)
• OSM/OSP/OSC
What we do: BERG Theme 2: Construction and Project Management

- Project Complexity
- Public Private Partnership in Emerging Economies
- Health, safety and the well-being
- Risk Management
- Facilities Management (PODIT)

(Radosavljevic and Bennett, 2012)
What we do: BERG Theme 3: Education in the Built Environment

- Intensive design weeks for architectural technology programmes
- Personalising teaching and learning experience of built environment students in large groups
- Flipping the Classroom
- Rationalising Built Environment Education in the UK
- Embedding Emerging Technology in Built Environment Education
What we do: BERG Theme 4: Housing, Community, People and Planning

- Towards hydrocitizenship - Connecting communities with and through responses to interdependent, multiple water issues [www.hydrocitizenship.com](http://www.hydrocitizenship.com) (funded by AHRC)
- EUWATHER: Small Regional Canals and Rivers: European Waterscapes as Cultural Heritage (funded by AHRC and part of the European Joint Programme Initiative on Cultural Heritage)
- Assessing the resilience capacity of stakeholders in response to changing water environments at a catchment scale: A study in adaptivity, knowledge transfer and technological innovation along the River Adur (funded by the Daphne Jackson Trust)
- Envisioning the Future Village. The role of digital technology in supporting creativity and imagination in the collaborative envisioning of a community Neighbourhood Plan (funded by an AHRC Collaborative Doctoral Award, co-funded by Action in Rural Sussex)
- Housing
  - CSH,
  - Laundry Drying,
  - Section 106,
  - Offsite and prefabricated housing
What we do: BERG Theme 5: Sustainability, Environmental Impact, Energy Efficiency and Building Performance

• Container homes – the Richardson’s Yard scheme

• Eco-refurbishment – 19 Sterndale Road, Hammersmith, London
What we do: BERG Theme 5: Sustainability, Environmental Impact, Energy Efficiency and Building Performance

• The House that Kevin Built – the Waste House, Brighton

• Operational Performance and Life Cycle Assessment of Double Skin Facades for Office Refurbishments in the UK
What we do: BERG Theme 5: Sustainability, Environmental Impact, Energy Efficiency and Building Performance

• Food in Sustainable Development

• Urban Heat Islands Effects

• GHG and non-GHG Impacts of Double Skin Façades in Office Refurbishments

• Water Efficiency in Buildings
Pathways to develop collaboration

- Research/teaching/vocation
- Applied and action research
- Problem-based research
  - The development of a **problem** statement “is an exercise in logic” (O'Connor, 2000:i). Identifying a **research-worthy problem** is far from a mechanical process and depends on a combination of inspiration, perspiration, and logical argumentation.
Pathways to develop collaboration

Working together to identify a problem and find a solution through research... where to start?!

What UoB can offer:
• Venues/Staff time for meeting to formulate the problem
• Facilities to support research
• Expertise to conduct research
• Knowledge and Experience, RO, KTP, GGP: to pinpoint and secure the best ways to support research
• Networks with industry and other academic institutions

What you can bring into this collaboration:
• A problem no matter how vague it is
• Time to spend with UoB staff to develop it
• Stamina and enthusiasm to follow it up
• Patience...
• Tell us...
Thank you!

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