



**CONSTRUCTING
EXCELLENCE**
Sussex



University of Brighton

School of Environment and Technology

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

Dr Poorang PIROOZFAR

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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



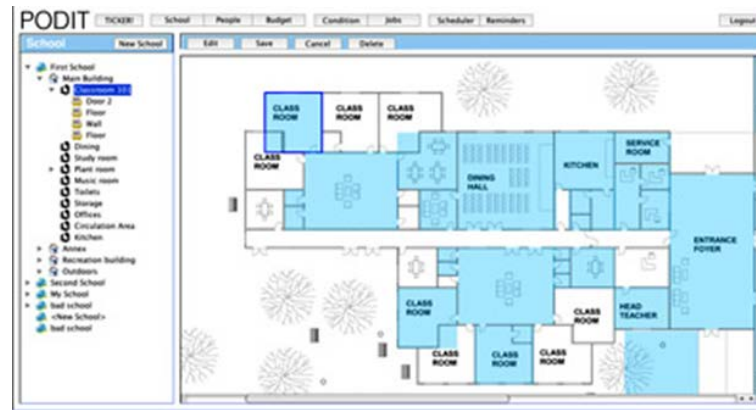
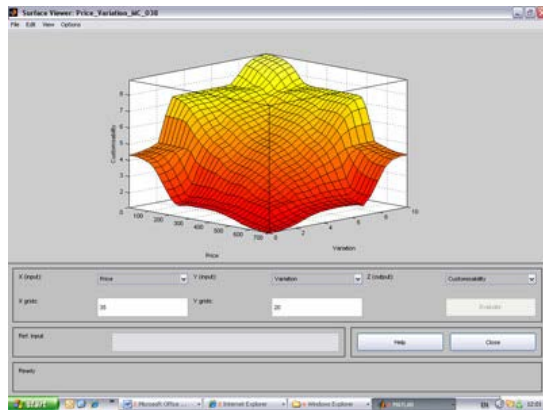
BERG Research Themes

- 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



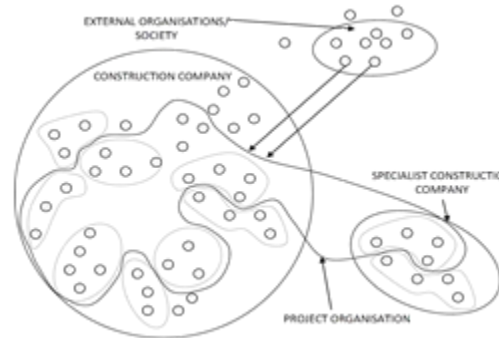
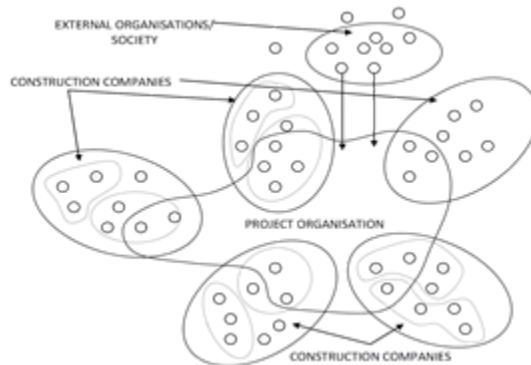
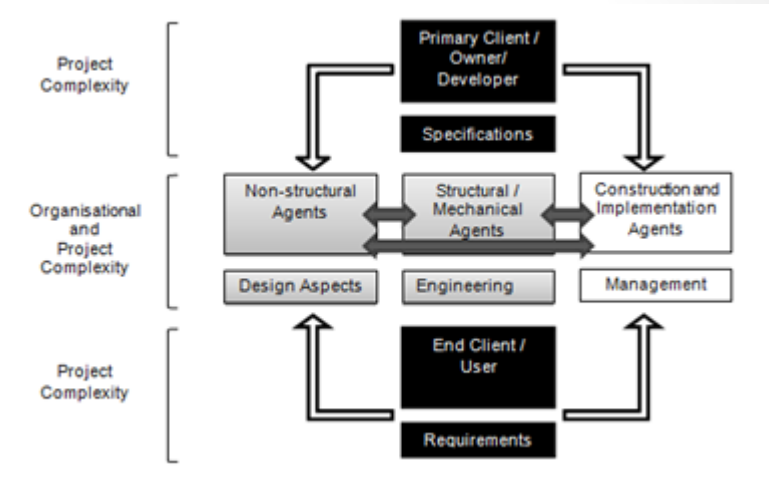
What we do: BERG Theme 1: Advanced Technologies in Built Environment, Architecture And CONstruction (@Beacon)

- 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 (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

The River Adur: Past, present & towards a sustainable future

Dr Mary Gearey from the University of Brighton presents and discusses the findings from a two year study examining community responses to changing water environments within the River Adur valley.

Alongside Mary members of the local community contribute their perspectives on the River Adur's past, its present & its future. Historian Dr Janet Pennington, poet Chris Luck & architects from the South Down Project (re-designing Shoreham cement works) will share their insights on this fascinating landscape. For more info contact Mary: m.gearey@brighton.ac.uk

Wednesday 16th November 2016, 7pm – 8.15pm
Steyping Centre, Fletcher's Croft, Steyping, BN44 3XZ
Free refreshments will be provided. No tickets...just turn up.

Daphne
Jackson
Trust



University of Brighton
Aquatic Research Centre



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



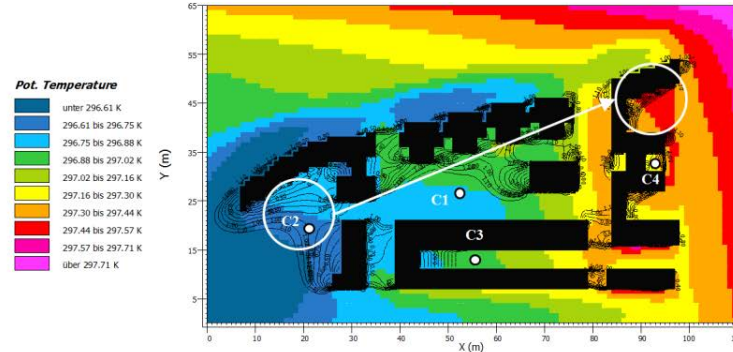
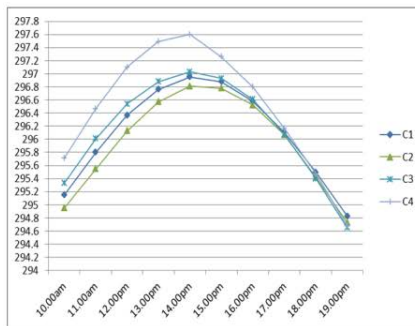
What we do: BERG Theme 5: Sustainability, Environmental Impact, Energy Efficiency and Building Performance

- The House that Kevin Built – the Waste House, Brighton
- Operational Performance and Life Cycle Assessment of Double Skin Façades 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...





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Thank you!

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