

Research Collegium Coastal Eco-cities Symposium 2013

Tuesday 23 July 2013 10.00 a.m.

Lecture Theatre A, Lanchester Building (7)

Highfield Campus

AGENDA

Welcome and Introduction:

“Southampton—a port city”

Councillor Simon Letts, Leader, Southampton City Council

10.00– 10.15

“Governance of Infrastructure Systems—a synthesis of pragmatism and rigor”

Professor Brian Collins, Director, UCL Centre for Engineering Policy (ex. CS, BIS and DfT) - University College London*

10.15 - 10.45

“Cities of the Future: Research Opportunities”

Professor Jeremy Watson, ARUP *

10.45—11.15

“Transportation as a Vitruvian concept in the design of a sustainable city”

Professor Nick Tyler, Head of Department of Civil, Environmental and Geomatic Engineering, Director Accessibility Research Centre, University College London *

11.15 - 11.45

“Flooding in coastal cities: present situation and future trends”

Professor Robert Nicholls, University of Southampton

11.45 - 12.15

“Approaches to Energy Supply in Cities”

Prof. AbuBakr Bahaj, University of Southampton *

12.15 - 13.00

- ◆ **Further information on these speakers overleaf.*
- ◆ *Lectures start at 10.15*
- ◆ *Tea, coffee and light refreshments provided from 10.00*

To register:

- ◆ *Please e-mail*
Sheila Stickland eccd@soton.ac.uk

The Collegium will span the period July - September 2013, within Southampton. The Inaugural Symposium will provide a launch and a public event for the Collegium. Further details on the motivation and format are given below and at the following link: <http://www.southampton.ac.uk/engineering/research/groups/fsi/lret/lret.page>.

Collegium Motivation: The success of the Collegium will depend on the collaborative application of a broad range of engineering and other competences as the drive to address the challenges encountered in Coastal Eco Cities. The aim is for Collegium contributors to identify practical solutions addressing current and future challenges within the theme, focussing on both engineering fundamentals as well as well as interdisciplinary pathways covering processes from an initial concept into a deliverable reality and which includes a range of engineering as well as socio-economic branches and interactions *inter alia*.

Collegium Format: The Collegium will provide an environment where young people in their formative post-graduate years can learn and work in a small, mixed discipline teams drawn from academe and industry to develop their skills whilst addressing a global challenge. The Collegium will be informed by user requirements to encourage delegates to develop imaginative solutions, using their individual, specialised knowledge and experience, together with learning derived from teaching which will form a common element of the early part of the Collegium programme.

Speakers in the Inaugural Symposium will consider elements of Coastal Eco Cities – addressing current and future challenges faced by such cities, giving a multidisciplinary observation related to their expertise. The purpose is to inform and to stimulate the cohort of the Collegium in relation to the tasks ahead. The Speakers on 23 July are:

Professor Brian Collins, CB, FEng, FBCS, CITP, FIET, C Eng, FIOP, FICE, FRSA, RCDS, MA, DPhil took up the role of Professor of Engineering Policy at UCL on the 1st August 2011. Prior to that he was the Department for Transport's (DfT) Chief Scientific Adviser (CSA) from October 2006 and CSA for the Department for Business innovation and Skills (BIS) from March 2009 after being CSA in Department for Business, Enterprise and Regulatory Reform (BERR) from May 2008, during which time Energy policy was in his remit. He left both positions at the end of May 2011. He was Professor of Information Systems at Cranfield University from August 2003 until July 2011. Until the end of March 2012 he chaired the Engineering and Interdependency Expert Group for Infrastructure UK, led by Lord James Sassoon, Commercial Secretary in Her Majesty's Treasury, and is a member of the Royal Society working group on 'Science as an Open Enterprise', with a final report due to be published in June 2012. He was bestowed by HM the Queen the Honour of Companion of the Bath (CB) in the 2011 New Years Honours list, and elected a Fellow of the Royal Academy of Engineering in 2009. He was Vice President of the BCS responsible for External Affairs and was Chairman of the BCS Information Security Strategic Forum. He has served as Vice President of the then IEE and was Chairman of the Informatics Division. By presidential invitation, he is a Fellow of the Institute of Civil Engineers, in addition to being a Fellow of the Institute of Physics. Academic roles held include that of Emeritus Visiting Professor at City University London, a visiting Professorship at Wollongong University, New South Wales, Australia and an Honorary Doctorate from Kingston University. He holds a MA in Physics from Oxford University and a D.Phil in Astrophysics from the same University. Professor Collins is also CSA at the Department for Transport and he advises the Home Office and other agencies on Intelligence and Counter Terrorism matters.

Professor Jeremy Watson is Arup's Global Research Director, responsible for Arup's Global Research Strategy and the Research Consulting Business. Until November 2012, Jeremy was also Chief Scientific Advisor for the Department of Communities & Local Government (DCLG). An engineer by training and practice, Jeremy has held research and technical management roles in industry and academia including service with the DTI, BIS and EPSRC. His specialties include Strategic Technology Development and Transfer, Innovation Processes and NPD Management. Jeremy is a Visiting Professor at the Universities of Southampton and Sussex, and an Honorary Professor at UCL. He serves on the Council of the Engineering & Physical Sciences Research Council (EPSRC) and was a former Board member of the Technology Strategy Board. He was a founding member of the Institute for Sustainability

Professor Nick Tyler is Chadwick Professor of Civil Engineering, and investigates the ways in which people interact with their immediate environments. He set up the Accessibility Research Group within the Centre for Transport Studies, with a team of researchers investigating many aspects of accessibility and public transport. The group has a total research portfolio of more than £20million for projects including the PAMELA pedestrian environment laboratory, which is being used to develop models for accessible pedestrian infrastructure. Nick is also the Director of the UCL CRUCIBLE Centre, which is a multi-Research Council funded Centre for interdisciplinary research on lifelong health and wellbeing involving researchers from all 8 faculties in UCL. Nick holds a PhD from University College London, where his thesis was on a methodology for the design of high capacity bus systems using artificial intelligence. He was on the winning team for the EC-funded 'City Design in Latin America 2000: The European City as a Model' competition, for the design of the transport interchange at Federico Lacroze in Buenos Aires, Argentina. He is currently part of the UK involvement in the Chinese Low Carbon Cities Development project. He is a member of the UK HM Treasury Infrastructure UK's Engineering Interdependencies Expert Group. He is a Fellow of the Institution of Civil Engineers and a Fellow of the Royal Society of Arts. He was appointed a CBE in the New Year's Honours 2011 for services to technology.

Professor AbuBakr Bahaj, FICE, FRSA, MInstP, CPhys is head of the Energy & Climate Change Division (ECCD) at the University of Southampton where he completed his PhD in 1982. For more than 25 years, Prof Bahaj has pioneered sustainable energy research as the head of one of the UK's leading university-based research groups, the Sustainable Energy Research Group, (SERG). The aims of ECCD and SERG are to promote and conduct fundamental and applied research and pre-industrial development in the areas of energy technologies, improvements in energy efficiency and assessing the impact of climate change on the built environment. Under the leadership of Prof Bahaj, the SERG involvement in ground breaking research projects in the UK, as well as in China, the Middle East and Africa, has been pivotal. Prof Bahaj is a major contributor to the energy debate at local, national and EU levels as well as through the organisation of and participation at major international conferences and meetings. Prof Bahaj also acts as a panel member and reviewer for major research and grant awarding bodies including: EPSRC, the Canada Foundation for Innovation, the Ireland Higher Education Authority, Science Foundation Ireland, Technology Strategy Board (TSB) the Commonwealth Scholarship Commission, the U.S. Dept. of Agriculture Small Business Innovation Research (SBIR), New Zealand Foundation for Research Science and Technology. Appeared as an expert witnesses before the House of Lords' Select Committee, contributed to UK Government Chief Scientific Advisor Technology and Innovation Futures Project as well as the International Energy Agency (IEA) work on marine energy. In 2012, Prof Bahaj was appointed Chief Scientific Advisor to Southampton City Council – believed to be the first such appointment in the UK.