University of Birmingham

# Birmingham Heroes Lecture: The Future of our Railways: embracing digital railway technology

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| **Locations** | London Transport Museum, Covent Garden Piazza, London WC2E 7BB |
| **Date(s)** | Tuesday 19th May 2015 (18:30-20:45) |
| **Contact** | Alumni Events Team<br>+44 (0)121 414 8904<br>**alumnievents@contacts.bham.ac.uk (mailto:alumnievents@contacts.bham.ac.uk)** |
| **Download** | **Add to Calendar (/alumni/events/items/heroes.aspx?ical=true)** |
| **Registration URL** | **http://www.bhamalumni.org/eventregistration (http://www.bhamalumni.org/eventregistration)** |

Railways around the world are having a renaissance. In Britain, CrossRail is under construction, with an extension to the existing lines already planned. Work on HS2 is moving forward, with plans in place for HS3 and beyond, and extensions to the London Underground are also proposed. Perhaps less in the public eye, but of similar importance, is the planned introduction of digital technologies to the British main line network, which has the potential to significantly improve capacity and customer satisfaction, while reducing energy consumption and whole life cycle costs. Research being carried out at the University of Birmingham is underpinning the roll-out of innovative solutions in this area, which will improve railway systems in Britain, as well as developing a potentially strong export market, helping Britain to become a true world leader in digital railway technology.

In the fourth **Birmingham Heroes (http://www.birmingham.ac.uk/research/impact/heroes/index.aspx)** lecture, **Professor Clive Roberts (http://www.birmingham.ac.uk/research/impact/heroes/staff/clive-roberts.aspx)**, Director of the BCRRE, will present the research being carried out at the University in the area of improved railway control, timetabling, predictive maintenance technologies and energy efficiency. Please join us for this lecture and drinks reception at London Transport Museum on Tuesday 19 May from 6.15pm to 8.30pm.

Joining Professor Roberts for our post-lecture Q&A will be:

- David Clarke, *Innovation Director, Rail Safety and Standards Board*
- Kuldeep Gharatya, *Head of Technical Strategy, Systems Performance & Innovation, London Underground*
- Francis How, *Technical Director, Railway Industry Association*
- Jane Simpson, *Chief Engineer, Network Rail*

Professor Clive Roberts' work is based around finding solutions for the railway industry that improve the overall efficiency of railway systems. Clive helps to ensure that rail remains an attractive option versus other modes of transport. His work combines simulation, measurement and analysis of problems in order to develop and assess new approaches and technology.

Clive works with many organisations around the world, including: the UK's Department of Transport, Network Rail, Deutsche Bahn, Singapore Land Transit Authority and Japan Central Railways. His research helps railway companies gain a better understanding of their existing systems and the appropriateness of new approaches and technology. This work informs the specification of new train and railway system designs.

**London Transport Museum (http://www.ltmuseum.co.uk/)** in Covent Garden explores the story of London and its transport system over the last 200 years, highlighting the powerful link between transport and the growth of modern London, culture and society since 1800. The museum cares for over 450,000 items - preserving, researching and acquiring objects to use in their galleries, exhibitions and other activities. Access to the museum is free of charge on Tuesday 19 May for guests attending the Birmingham Heroes Lecture.

Tickets for this event cost £20 and early booking is advised. £10 from each ticket sale will be given to the University's **Collaborative Teaching Laboratory (http://www.birmingham.ac.uk/university/building/Collaborative-Teaching-Laboratory.aspx)** project. Your support will help us this new state-of-the-art facility, which will bring together practical teaching activites across a broad range of science and engineering disciplines. Please register using the link above.

The following alumni have registered for this event and have given permission to be listed (as of 5 May):

Andy Bennett (*BSc Minerals Engineering, 1974*)
Arvinder Birdi (*BSc Economics with French, 2008*)
Gwendoline Burrow (*BA Geography, 1963*)
Mareen de Silva (*BEng Electronic and Communication Engineering, 2008*)
Meg Dillon (*BA English and History, 1981*)
Ben Dunlop (*Director, Digital Railway - Atkins*)
Derrick Edgerton (*BSc Medical Biochemistry, 1973*)
Prof Andrew Evans (*PhD Transportation & Environmental Engineering, 1967*)
Wendy Fielder (*BA American Studies, 1997*)
Dr Lawrence Grasty (*BSc Mechanical Engineering, 1986*)
Dr Christopher H Green (*MSc Physics, 1971*)
Mike Heath (*BSocSc Money Banking and Finance, 1987*)
Chris Horseman (*BA French and German, 1985*)
John Hughes (*MA Special Application of Linguistics, 1989*)
Richard Kinder (*LLB Law, 1979*)
Andrew Knatchbull (*BCom(Acc) Accounting, 1990*)
Fiona Ligonnet (*BA Archaeology & Ancient History, 1963*)
Lynn Lovell (*BA English and French, 1975*)
Bob Mason
Andy McLarnon (*PhD Medical Education, 2011*)
Jane Nelthorpe (*BA Medieval and Modern History, 1980*)
Alison Parkinson (*LLB Law, 1974*)
Rosalind Reid (*BA History/Political Science, 2001*)
Jane Rogers (*BSc Chemistry, 1973*)
Nick Tansley (*BCom Commerce, 1995*)
Jacqueline Tokley (*BSocSc Economics and Political Science, 1980*)
Stephen Watson (*BEng Chemical Engineering, 1991*)

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