



Professor Richard Williams demonstrates to the Guangzhou public how innovation changes our life

Professor Richard Williams ([/staff/profiles/university/richard-williams.aspx](http://staff/profiles/university/richard-williams.aspx)), Pro-Vice-Chancellor and Head of the College of Engineering and Physical Sciences at the University of Birmingham, gave a public lecture to over 200 Guangzhou citizen at the Guangzhou Science Museum on Sunday 17 June about innovation.

The audience were greatly inspired by three very different technologies under development in the presentation: Washing machines for use in commerce and at home that clean clothes without using large volumes of water or solvents; a new form of engine that runs on air, requiring no petroleum fuel or batteries; and new materials that can be synthesised to produce extraordinary and different properties, including imparting the illusion of being invisible. A group of Guangzhou Young Investors of high school students enthusiastically consulted Professor Williams after the lecture regarding their innovative projects.

Professor Richard Williams commented that:



"Innovation is at the heart of future economic development. Inspiring young people to see that things can be done differently to benefit the public good is a core responsibility of university education and a core mission for the University of Birmingham. Combining the best fundamental science and leading engineering skills is the way to accelerate inventions and turn them into innovations. The examples today are truly radical innovations in the making, but we will see also that society needs to embrace and adopt change since technological excellence alone is insufficient to bring change about. As a leading city in the world the City of Guangzhou could be a leading showcase for such innovations."

See Details in the **Southern Metropolitan News** (<http://gcontent.oeeee.com/c/dc/cdc4c4734f79cd37/Blog/396/0aea7a.html>)

University of Birmingham strengthens science and engineering research links with Guangzhou as strategic partnership deepen

As the strategic partnership between the City and the University of Birmingham goes from strength to strength, University representatives are visiting Guangzhou in June to further develop joint research and innovation opportunities in science and engineering.

Academics from the University's College of Engineering and Physical Sciences will host a high-level scientific research workshop on Tuesday 19 June in cooperation with the Guangzhou Municipal Government. Covering three major themes: advanced manufacturing; the railway system; and the integrated intelligent energy system, the workshop brings together senior research and industrial representatives in Guangzhou for in-depth discussions that will benefit Guangdong's efforts of industrial upgrade, such as the UK's Manufacturing Technology Centre model.

During their stay in Guangzhou, the University of Birmingham delegation will also visit local partners such as the China National Electric Apparatus Research Institute, the Guangzhou Institute of Industry Technology, the Guangdong Institute of Industrial Technologies and the South China University of Technology. The visit endeavours to identify local partners for future projects in Guangzhou in the area of engineering and physical sciences under the three themes mentioned above.

CLCF announces collaboration with the University of Birmingham and CAS

The Centre for Low Carbon Futures (<http://www.lowcarbonfutures.org/>) announces the establishment of a new collaboration with the University of Birmingham and the Chinese Academy of Sciences, developing Energy Storage Technologies. Principal academics include Professors Xiao-Ping Zhang and Richard A Williams from the University of Birmingham, Dr Yulong Ding from the Chinese Academy of Science and the University of Leeds, Professor Peter Taylor from the University of Leeds and Professor Peter Hall from the University of Sheffield.

Intelligent Computing

Professor Xin Yao in the School of Computer Science has been working closely with academics from the University of Science & Technology of China (USTC), where he is a distinguished visiting professor (Grand Master Chair Professor), to develop a joint USTC-Birmingham research institute in Intelligent Computation and its Applications. Through this strategic partnership, both organisations will be able to increase the quantity and quality of their research output internationally.

The joint institute has already got off to a flying start, publishing joint papers in top international journals such as IEEE Transactions on Evolutionary Computation, co-supervising PhD students, co-organising international workshops and winning competitive research grants from the EU, UK and Chinese funding bodies.

In addition to being a professor of Computer Science at the University, Xin Yao is the Director of the Centre of Excellence for Research in Computational Intelligence and Applications (Cercia). He joined the University of Birmingham from Australia as a Chair of Computer Science in 1999. He is an IEEE Fellow, an IEEE Computational Intelligence Society Distinguished Lecturer and the current Vice President for Publications of IEEE Computational Intelligence Society.

His work has won many awards, including the IEEE Donald G Fink Proze Paper Award, BT Gordon Radley Award for Best Author of Innovation (2nd prize) and IEEE Transactions on Evolutionary Computation Outstanding Paper Award. He is also co-inventor of four international patents.

