



Press

Press releases

BP Pledges \$100 Million to UK-Led Universities to Create Industry-Changing Materials

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BP is to establish a \$100 million international research centre, known as the BP International Centre for Advanced Materials, or BP-ICAM. This centre will lead research aimed at advancing the fundamental understanding and use of materials across a variety of energy and industrial applications.

The BP-ICAM will be modelled on a "hub and spoke" structure, with the 'hub' located within The University of Manchester's Faculty of Engineering and Physical Sciences, which has core strengths in materials, engineering, characterisation, collaborative working, and a track record of delivering breakthrough research and engineering applications that can be deployed in the real world. The "spokes" and other founder members, all world-class academic institutions, are the University of Cambridge, Imperial College London, and the University of Illinois at Urbana-Champaign.

The ten-year investment programme will fund research into advanced materials and is expected to support 25 new academic posts, along with 100 post-graduate researchers and 80 post-doctoral fellows.

The UK Chancellor of the Exchequer George Osborne said: "This coalition Government is committed to putting innovation and research at the very heart of its growth agenda. We are ensuring the UK maintains its competitive edge in science and we are creating an environment where innovation can flourish. That's why top businesses such as BP are investing in the UK and supporting our world-leading universities in delivering cutting edge research. And as an MP for the North West of England I particularly welcome the fact that BP's International Centre for Advanced Materials will be based at Manchester University."

Bob Dudley, BP group chief executive, said: "Advanced materials and coatings will be vital in finding, producing and processing energy safely and efficiently in the years ahead, as energy producers work at unprecedented depths, pressures and temperatures, and as refineries, manufacturing plants and pipeline operators seek ever better ways to combat corrosion and deploy new materials to improve their operations.

"Manchester has world-leading capabilities and facilities in materials and was chosen after a global search to act as the 'hub' of the centre, working with other world-class university departments. We look forward to deepening further the very productive partnership that already exists between our professionals in BP and the academic team at Manchester."

The University of Manchester's President and Vice-Chancellor, Professor Dame Nancy Rothwell, FRS, said: "We are very pleased that BP has chosen The University of Manchester to be the 'hub' for the BP-ICAM, utilising our world-leading breadth of research expertise in advanced materials and their applications to address the current and future challenges facing industry. We also look forward to working closely with the University of Cambridge, University of Illinois at Urbana-Champaign and Imperial College London as the founding "spokes" of the BP-ICAM. This is an excellent announcement for UK science and recognises the excellence of our universities, our research and our willingness and ability to work with global industry."

BP's Chief Scientist, Ellen Williams said: "We're very excited by the vision of taking advanced tools that were developed for fundamental research to the real-world application of materials used for energy production. Our engagement with these four universities demonstrates the importance both of research and of the innovation which can lead to advanced technologies."

The BP-ICAM hub will be based in dedicated premises which will use state-of-the-art tools to support this major international collaboration. The BP-ICAM will carry out research into seven primary areas of direct interest to industry – structural materials, smart coatings, functional materials, catalysis, membranes, energy storage and energy harvesting – with the initial focus on:

Structural materials, such as new metal alloys and composites for deepwater production, and high pressure/high temperature reservoirs;

Smart coatings, for increased protection from the elements and improving a structure's usable life, protecting pipelines and offshore platforms from corrosion;

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Membranes and other structures, for separation, filtration and purification of oil and gas, water and chemicals in production, refining and biofuels processes and petrochemicals.

"This should allow us to change the way we build, operate and maintain our equipment; manufacture cleaner and more efficient products; develop imaginative energy sources and then store that energy for when it is needed most; and increase the use of lighter metals and composites for structures and products," added Dudley.

### Notes to editors:

The universities will have academic freedom to publish fundamental science resulting from the BP-ICAM's work, while commercial agreements will cover specific technological applications of the work.

BP works with some 200 universities around the globe and holds a number of long term strategic partnerships with leading universities in the UK, US, China, Russia.

The University of Manchester is already home to BP's Projects and Engineering College and a major collaborator member within BP's Inherently Reliable Facilities Research Programme and includes a BP funded research laboratory in corrosion.

The University of Cambridge has a long association with BP. Since 2000, the BP Institute for Multiphase Flow has formed an important part of the relationship and in 2010 BP funded the new McKenzie Chair in Earth Sciences.

Imperial College, London, conducts a wide range of research for BP including in the areas of reservoir characterisation, process modelling, climate change, seismic imaging and urban energy systems. In 2009 the start-up company Permasense, providing wireless corrosion and non-destructive monitoring technology, was formed based on BP funded research

The University of Illinois Urbana-Champaign is one of three partners supporting the BP Energy Biosciences Institute (EBI), a 10 year, \$500 million programme supporting BP's Biofuels business. The EBI was launched in 2007.

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