



2 February 2009

**ROLLS-ROYCE AND CHINESE ACADEMY OF SCIENCES TO DEVELOP  
TECHNOLOGY FOR NEW MATERIALS**

Rolls-Royce today signed a Memorandum of Understanding (MoU) with the Chinese Academy of Sciences (CAS) to undertake a joint research project. Work will focus on developing manufacturing techniques and utilising new materials for use in low pressure turbine blades for the Group's gas turbine engines.

The MoU will enable further cooperation between Rolls-Royce and the Institute of Metals Research (IMR) at CAS, on advancing techniques in titanium aluminide casting technology.

Rolls-Royce conducts research on key technologies and alternative materials as part of its continuous drive to enhance the efficiency and performance of its products. This joint research project combines Rolls-Royce expertise in advanced engine technologies with IMR's specialist skills in advanced and alternative material technologies.

Jiang Mianheng, Vice President, Chinese Academy of Sciences and Sir John Rose, Chief Executive, Rolls-Royce attended the signing ceremony at Downing Street today in the presence of Prime Minister Gordon Brown and His Excellency the Premier of the State Council Wen Jiabao.

Sir John Rose said, *"We have a long and successful history of working with research institutes in China. In signing this MoU, we are building on our strong relationship with this important and valued partner. This project will make an important contribution to the development of a new generation of lighter and more fuel-efficient aircraft engines."*

Jiang Mianheng said, *"It is a great pleasure for us to sign this MoU with Rolls-Royce to share technology development and advances through IMR. Our collaboration shows that world leading companies can find reliable and effective research and technology partners in China. We firmly believe that this work will produce important advances in casting which will be of great value to both sides."*

**Note to editors**

1. IMR, located in Shenyang, China, is one of more than 90 institutes managed by CAS and specialises in research in innovative materials. Among the Institute's focus areas are nano-scale manufacturing technology for electronics, advanced materials, advanced nano-measurement and nano-processing technology.
2. Rolls-Royce, a world-leading provider of power systems and services for use on land, at sea and in the air, has established a strong position in global markets - civil aerospace, defence aerospace, marine and energy.
3. Rolls-Royce continues to invest in core technologies, products, people and capabilities with the objective of broadening and strengthening the product portfolio, improving efficiency and

enhancing the environmental performance of its products. These investments create high barriers to entry.

4. Each year, in collaboration with its partners, Rolls-Royce invests over £800 million on research and development, two thirds of which has the objective of further improving the environmental aspects of its products. The primary technology investment area is aimed at reducing noise and emissions.
5. Sixty per cent of research and development investment and 40 per cent of new product development spending over the past five years has been outside the UK. Research and development is carried out in facilities in the UK, Germany, Italy, Singapore, Japan, the US and Scandinavia, with particularly strong relationships with the 29 universities where there are Rolls-Royce University Technology Centres.
6. Rolls-Royce has been present in China for over 45 years. The Civil Aerospace, Marine and Energy businesses have a strong presence in China. More than 400 Rolls-Royce powered aircraft are currently operating with twelve Chinese airlines, including Special Administrative Regions of the PRC, Hong Kong, and Macao. Rolls-Royce compressors pump gas along the West-East Pipeline, one of China's major infrastructure projects, and have given 200,000 hours of trouble free operation. Rolls-Royce also has a successful turbine component joint venture in Xian; and is growing its component and materials purchasing in China. The Marine business focuses on power, propulsion and motion control solutions and serves over 2,000 customers around the world. The North East Asia marine business of Rolls-Royce is headquartered in Shanghai where the company also runs a manufacturing facility.
7. Rolls-Royce also leads the field in developing top-quality technical and managerial training programmes with a range of Chinese organisations including Chinese Government organisations, Civil Aviation Administration of China (CAAC) and Aviation Industries of China (AVIC I and II).

**For further information:**

Please visit The [Newsmarket](#) for broadcast-standard video. If you are a first-time user of The Newsmarket, we encourage you to take a moment to register. If you have any questions about using The Newsmarket, please email [Journalist Help](#).

Josh Rosenstock  
Head of Corporate Communications  
Rolls-Royce Group plc  
T: +44 (0) 20 7227 9163  
Email: [josh.rosenstock@rolls-royce.com](mailto:josh.rosenstock@rolls-royce.com)

Robin Tan  
Deputy Director for Industrial Cooperation  
IMR  
Tel.: +86 24 8397 8050  
Email: [rbtan@imr.ac.cn](mailto:rbtan@imr.ac.cn)