

## Exploring the future

The Qatar Science and Technology Park opened in March and is already home to a range of exciting research programmes. On 6 May ExxonMobil Research Qatar opened its new facility there

In an industrial environment focused on production and delivery of high-quality natural resources, it's sometimes easy to imagine that research and innovation are unimportant when compared with the daily task of extracting, processing and exporting enormous quantities of liquefied natural gas (LNG) and its by-products. But the recent opening of ExxonMobil Research Qatar's (EMRQ) new centre in Doha dispels that notion immediately.

EMRQ was inaugurated on 6 May by HE Abdullah Bin Hamad Al Attiyah, Deputy Premier and Minister of Energy and Industry. "The research programmes carried out by ExxonMobil will help strengthen Qatar Science and Technology Park's standing as a world-class centre of scientific excellence," he said, "and will support the implementation of Qatar's National Vision."

Qatar Science and Technology Park (QSTP) is an \$800 million investment in the country's future and a powerful statement of confidence. It is home to research in the fields of energy, environment, health sciences and ICT, and many of its member organisations have a strong track record of ground-breaking research.

EMRQ is among them. In 2006 it launched its first research project, evaluating the potential formation and impact of chlorination by-products due to the discharge of cooling sea water in coastal waters near Ras Laffan Industrial City. And in a project that demonstrates the practical application of its work, EMRQ recently completed the design and construction of a 3-D 'visualisation cube', which provides a virtual reality environment for training workers in oil and gas production and processing, and on LNG tankers. EMRQ's research record is a proud one.

"Research carried out at EMRQ will help advance [LNG and petroleum-based] technologies and provide facilities to support training," said Stephen Cassiani, President, ExxonMobil Upstream Research Company. "We want to be absolutely sure that the work we do is monitored and carefully watched so we can assure everyone that our business is being run in a very environmentally sensitive manner."

## A centre for creative thinking

ExxonMobil is only one of QSTP's 21 partner organisations. The others are Chevron, Cisco, ConocoPhillips, EADS, Fuego, General Electric, Hydro, iHorizons, Institut de Soudure, MEEZA, Microsoft, Qatar Petroleum, Qatar Robotic Surgery Centre, Qatar University Wireless Centre, Shell, SMARD, Tata, Total, Transport Research Laboratory and Virgin Health Bank. Some have already established units at QSTP, while others have intriguing future plans. Some early developments and announcements are listed below:

Total Research Centre - Qatar (TRC-Q) moved into QSTP in April. Its research units include an organic petrochemistry laboratory and an organic geochemistry laboratory, where Total's scientists will conduct geochemical 'fingerprinting' and develop new catalysts. TRC-Q recently completed its Qatar air quality modelling project.

**Qatar University** is building a powerful research infrastructure in collaboration with Qatar Foundation, QSTP and Qatar National Research Fund. The establishment at QSTP of the Qatar University Wireless Centre and the

university's theme for 2009, 'research and innovation towards sustainable development', are both inspired by Qatar's Vision 2030.

Qatar Petroleum is soon to set up its own research centre, whose work will be centred on gas processing. Recruitment of PhD holders and other researchers for the new centre is well under way.

## **GE Advanced Technology and Research Centre** will

soon be home to two joint ventures between General Electric and Qatar Foundation: Healthcare Information Technology for the Middle East and Africa, which will specialiase in developing healthcare IT solutions adapted to local needs, and Healthcare Technology Research and Development, which will focus initially on the acceleration and expansion of GE's research and development programmes in digital x-ray technology and molecular imaging.

Global Water Sustainability Centre is a collaboration between ConocoPhillips and GE Water & Process Technologies, focusing on treating and recycling water produced during oil production and used in refining operations, and on other aspects of water sustainability.

The quality of the work these organisations will be carrying out at QSTP is not in doubt. Nor is the importance of that work to the future effectiveness and prosperity of, among others, the energy industries and, in turn, Qatar's overall economy. The development of research facilities is an exciting step towards Qatar's future.

Gateway to knowledge: the lobby of the new ExxonMobil Research Qatar centre at Qatar Science and Technology Park

