

“The UK Space Programme”
Dr David Williams
The UK Space Agency

The first lecture of 2012 was given by Dr David Williams, chief executive of recently formed UK Space Agency, which is responsible for ensuring that the UK retains and grows a strategic capability in the space-based systems, technologies, science and applications. Its aim is to achieve sustainable economic growth and secure new scientific knowledge, with a budget of £250M.

Central to the work of the UK Space Agency is encouraging and supporting the high levels of growth, which the industry has displayed over the last decade. It works closely with the industry to maximise the benefits of UK's participation in European Space Agency (ESA) and other international projects. Priority areas include developing scientific advancements in space technologies, gaining a better understanding of our planet through Earth observation spacecraft and nurturing our next generation of space scientists and research workers.

Current projects include Skylon – a possible single stage into orbit spacecraft and small (10 cm³) affordable mini satellites to enable small research groups to carry out experiments in space. Earth observations include monitoring atmospheric ozone and emissions, geomagnetic fields, movements of dust clouds, ocean currents, polar ice coverage, solar flare activity and natural disasters such as volcanic eruptions.

Space research is based at the Harwell Space Cluster and includes instrumentation to detect deep space residual microwave radiation and studies of our own Milky Way galaxy. The Agency is participating in the ESA focus on Mars and has two prototype land rovers for future exploration of the planet's surface. Although the UK is the only country to have developed and abandoned a launch capability, it is now a major force in the telecommunications and satellite development fields.

Given on Wednesday 11th January 1012 at the Royal Agricultural College