THE COCKCROFT INSTITUTE *of*
ACCELERATOR SCIENCE AND TECHNOLOGY

Cockcroft Institute Building Opened

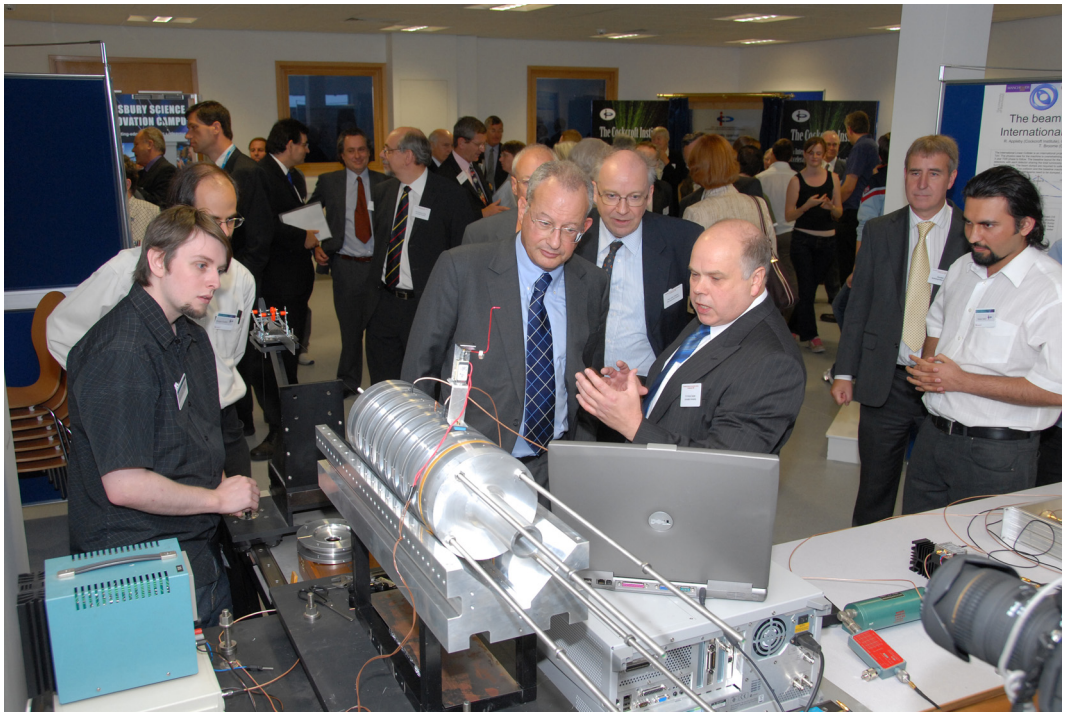
Tuesday September 19th 2006 is now an important day in the history of the Cockcroft Institute. The UK Minister of Science, Lord Sainsbury, opened the new building in a ceremony in the Institute in the presence of many distinguished guests. Representatives from all the stakeholders (PPARC, CCLRC, Lancaster, Liverpool, and Manchester Universities, and the NWDA) were present.

The Minister of Science, Lord Sainsbury, is pictured having unveiled the plaque marking the opening of the Cockcroft Institute building; on his left are, from left to right, The Rev. Canon Catherine Milford, Mrs. Jocelyn Blackburn, Mr. Christopher Cockcroft, and Miss Elisabeth Cockcroft; to the Minister's right are Professor John Dainton (left, Director of the Cockcroft Institute) and Professor Mike Poole (right, Director of CCLRC ASTeC).

After opening the Daresbury Science and Innovation Campus, Lord Sainsbury unveiled a plaque in the presence both of guests and of the descendants of Sir John Cockcroft after whom the Institute is named, to mark the opening of the Institute building. He then spent time with the staff in the laboratories viewing and discussing demonstrations of R&D underway concerned with RF systems, vacuum science and engineering, design simulation, and theoretical accelerator physics.
The Cockcroft Institute is a new centre on the Daresbury Campus which brings together long established scientific excellence in the three research-led universities and the ASTeC group in CCLRC to underpin UK collaboration with global partners, both academic and industrial, in accelerator science and technology.

The Institute is named after Sir John Cockcroft FRS, who was born in Todmorden on the Yorkshire-Lancashire border. Following an engineering apprenticeship, he was educated as a mathematician and electrical engineer in Manchester. He worked for some time at Metropolitan Vickers, a large engineering firm in Manchester famous for the manufacture of large systems concerned with electrical power delivery.

He was taken on by Lord Rutherford, who had moved from Manchester University to Cambridge University after he had discovered the atomic nucleus. Together with Ernest Walton he worked in Rutherford's group to build the first particle accelerator. The aim was to produce a beam of energetic nuclei and bombard a target to demonstrate that the atomic nucleus could be split. Cockcroft and Walton developed with Metropolitan Vickers the technology to produce high enough voltages so that the beam had high enough energy. Their accelerator worked, and ahead of anyone else, they demonstrated "the splitting of the atom".



Lord Sainsbury with Cockcroft Institute members from Lancaster University at a demonstration using a prototype RF cavity in which the sensitivity of cavity performance to “microphonics”, that is to tiny mechanical distortion, is investigated; left to right standing at the front are Graeme Burt, Philippe Goudket, Lord Sainsbury listening to Amos Dexter, and Imran Tahir.

John Cockcroft was awarded the Nobel Prize in 1951, and knighted.

He subsequently went on to play a number of leading roles in the development of Nuclear Physics and Nuclear Energy in the latter half of the last century. He was instrumental in the establishment of the UK Atomic Energy Authority, and led the UK delegation which founded CERN, the European Particle Physics Laboratory, more than 50 years ago.

The association of his name with an Institute devoted to the new challenges of particle accelerators in a new century is thus particularly appropriate.

The descendants of Sir John who participated with Lord Sainsbury in the opening of the building are his son, Mr. Christopher Cockcroft, and daughters Mrs. Jocelyn Blackburn, Miss Elisabeth Cockcroft, and The Rev. Canon Catherine Milford.