

“The Cockcroft Institute is recognised as an international centre of excellence in accelerator science and technology, and has played a central role in re-establishing these capabilities in the UK and enabling the country to compete at a global level. STFC is pleased to continue to support the Institute and will work with it to develop its programme in order to make significant scientific and technological contributions to particle accelerators, research facilities and global challenges.

I’d like to convey my apologies for not being able to present these remarks in person; I have to attend a meeting in London with our colleagues from CNRS in France today. I will however be joining you for dinner tonight so if you disagree with anything that follows you can raise the issue with me then!

I’d like to highlight two ways in which I believe the Cockcroft Institute is taking the lead in setting a new and positive direction for the UK. The first concerns its scientific and technical focus – particle accelerators. Particle accelerators were of course originally developed to explore the fundamental questions of particle physics, but they now underpin a very wide range of research and have become a central plank of the major facilities that we need to address the global challenges of the 21st century. The intense beams of X-rays at the Diamond Light Source and the neutrons at ISIS are all generated by particle accelerators. The ultra-short X-ray pulses obtained in next generation light sources are only becoming possible because of advances in accelerator capabilities. Over the past five years, we have made a targeted and effective investment in accelerator science by establishing the Cockcroft Institute and its sister institution, the John Adams Institute at Oxford and Royal Holloway. In partnership with the universities and the STFC national laboratories, these have revitalised the national skill base in accelerator science and technology, attracted internationally recognised accelerator experts to the UK and increased the number of PhD students in this field tenfold. In going forward, Cockcroft scientists are leading in exploring how we can exploit this expertise to develop transformative solutions to some of the major problems facing the nation: in medicine, through the development of particle beam therapies for cancer; in energy, through the development of safer nuclear reactors driven by particle beams; and for the environment, by using accelerators to render nuclear waste less harmful.

The second way in which the Institute has set a new direction is in its structure. As a genuine partnership that brings together leading research universities, national laboratory staff and capabilities, the research council and the regional development agency, it has shown that the way forward lies by working together to pool our resources and expertise. It has also shown the need to go beyond just being a networking activity, by underlining the clear value of establishing a real physical centre with state of the art capabilities, co-located staff and access to laboratory accelerator facilities like the ALICE accelerator and the EMMA prototype.

I know from my discussions with colleagues both inside and outside the UK that the Cockcroft Institute is seen as a successful and influential concept and an example to be followed by other laboratories and countries. We certainly believe it has a very strong role to play and a great future, and that is why we have committed funding for the next eight years despite our tight overall financial situation. I’d like to thank all our partners in this enterprise for their continued support and contributions, and congratulate the Cockcroft Institute Director and his staff for everything that’s been achieved so far. We look forward to working with you all to make the next phase even stronger and more successful. "

John Womersley, Director of Science and Strategy, STFC.