

## Scientific

### Science and Technology Facilities Council



Formed by Royal Charter in 2007, the Science and Technology Facilities Council is one of Europe's largest multidisciplinary research organisations supporting scientists and engineers world-wide. The Council operates world-class, large scale research facilities and provides strategic advice to the UK government on their development. It also manages international research projects in support of a broad cross-section of the UK research community. The Council also directs, coordinates and funds research, education and training.

Appointed as a term consultant, edpConstruction provides the following services to STFC primarily at their Rutherford Appleton Laboratory (RAL) and Daresbury Laboratory (DL) facilities:

- CDM Co-ordinator Services;
- CDM Training;
- Principal Contractor Assistance (including independent compliance auditing);
- DDA Access Auditing Consultancy.

## Scientific

### ***STFC RAL – ISIS Target Station Two Fit-Out***



ISIS is the world's leading spallation neutron source, providing access for UK and international research scientists to the best scientific facilities of their kind. ISIS has contributed significantly to many of the major breakthroughs in materials science, physics and chemistry since it was commissioned in 1985. Expansion of ISIS through the building of a Second Target Station was announced in April 2003 by the then Science Minister, Lord Sainsbury, as a key part of the UK investment strategy in major facilities.

The fit-out of ISIS TS2 involves the construction of a new target station (supported on a steel and concrete monolith) and associated instruments, connected to the existing ISIS accelerator via an extracted proton beam; all housed within a custom-built building which was built prior to the fit-out. The construction works largely involve heavy engineering works using concrete blocks (weighing up to 30 tonnes) and steel plating to form the structures and provide radiation shielding.



Project Manager – The Edwards Partnership  
Cost Consultant – Franklin and Andrews  
CDM Co-ordinator – edpConstruction

Designer – STFC ISIS Project Engineering  
Principal Contractor – Alstec

Project Duration – 130 weeks

Project Value – £90m

# Scientific

## ***STFC RAL – R89 Computer Building***



The R89 Computer Building project involved the construction of a new three-storey building to house high performance computers and associated plant facilities on the ground floor and office accommodation etc. on the first and second floors.

Project Manager – Davis Langdon  
Structural Engineer – Clancy Consulting  
Cost Consultant – Franklin Andrews  
CDM Co-ordinator – edpConstruction

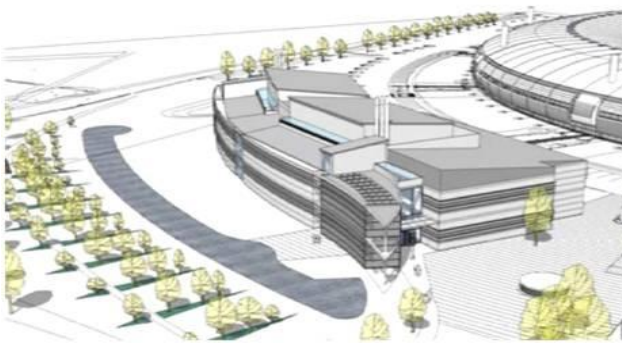
Architect – Oxford Architects  
M&E Services Engineer – BDP  
Principal Contractor – Mansell Construction Services

Project Duration – 54 weeks

Project Value – £18m

## Scientific

### STFC RAL – R92 Research Complex



Currently under construction, the R92 Research Complex will deliver a multidisciplinary centre of scientific excellence that maximises the research capability and scientific opportunities of Diamond Light Source ([www.diamond.ac.uk](http://www.diamond.ac.uk)) and the Central Laser Facilities ([www.clf.rl.ac.uk](http://www.clf.rl.ac.uk)); supporting scientists on long term and medium term appointments who will work on technically challenging problems that will benefit from interaction with other scientists.

R92 Research Complex is constructed on a 5000m<sup>2</sup> area (6548m<sup>2</sup> gross floor area) consisting of two floors of laboratories and office / IT facilities. The superstructure will be a reinforced concrete frame with reinforced concrete slabs, with an envelope consisting of rain screen cladding and curtain walling. A comprehensive mechanical and electrical installation will be included, the majority of the plant being housed inside a rooftop plant room.

Project Manager – Capita Symonds  
Structural Engineer – Price and Myers  
Landscape Architect – Fira Landscape Ltd  
Principal Contractor – M+W Zander

Architect – Nightingale Associates  
M&E Services Engineer – Hoare Lea  
Cost Consultant – Gleeds  
CDM Co-ordinator – edpConstruction

Project Duration – 88 weeks

Project Value – £20m

## Scientific

### STFC DL – SRS Decommissioning



The Synchrotron Radiation Source (SRS) was a world class facility dedicated to the exploitation of Synchrotron Radiation for fundamental and applied research. The SRS was a 2GeV electron storage ring, operated solely for the provision of synchrotron radiation (synchrotron light) for multiple simultaneous user experiments. The facility comprised a suite of three electron accelerators, two feeding sequentially into the third, which is the

main storage ring. The synchrotron light spectrum was emitted from dipole bending magnets and, enhanced in narrow spectral regions, from insertion devices. The storage ring served experimental stations. Each was optimised for a particular spectral range segment, exploiting radiation from an SRS dipole or an insertion device, and in most cases, was used for a variety of scientific and technological applications.

Following a government decision to close the SRS facility edpConstruction has been assisting STFC in their role as Principal Contractor by providing a dedicated consultant to monitor and ensure compliance with the relevant legislation and industry procedures. Initially the decommissioning involves the systematic removal of individual beam lines and test stations but in 2009 the decommissioning will move on to the complete removal of all accelerators, associated radiation shielding / structures and all ancillary equipment / services.

Designer and Principal Contractor – STFC

Cost Consultant – Franklin Andrews

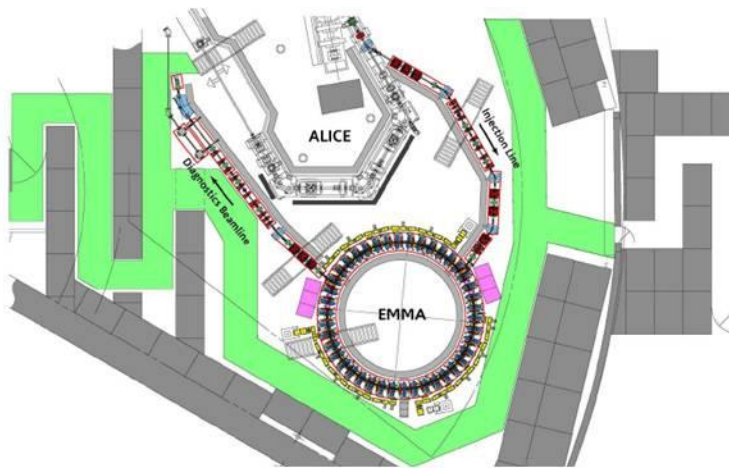
CDM Co-ordinator and Advisor to Principal Contractor – edpConstruction

Project Duration – 136 weeks

Project Value – £38m

## Scientific

### STFC DL – EMMA



The EMMA project involves the construction of a prototype 20 MeV electron non-scaling fixed-field alternating gradient accelerator (NS-FFAG). NS-FFAG accelerators will be smaller, simpler and significantly cheaper than other accelerators that are currently used. They will have a major impact as next generation hospital-based clinical accelerators for proton and carbon ion beam treatment of cancers.

edpConstruction is assisting STFC in their role as Principal Contractor by providing a dedicated consultant to monitor and ensure compliance with the relevant legislation and industry procedures.

Designer and Principal Contractor – STFC

Cost Consultant – Franklin Andrews

CDM Co-ordinator and Advisor to Principal Contractor – edpConstruction

Project Duration – 40 weeks

Project Value – £4m