

# **BUILDING R80**

# HARWELL, OXFORDSHIRE

A phased 2-storey extension to Building R80, to provide a new IMAT external beamline facility used as a neutron imaging and diffraction instrument for material science, materials processing and engineering by ISIS research.

Phase 1:The design and construction of a 415sqm 2-storey extension to Building R80 to serve as an experiment building housing the IMAT experimental equipment and plant with an attached pump enclosure and covered way creating a new entrance lobby to R80.

The building is fully M&E serviced with AHU's, new pumpset and pipework from boiler plant room, BMS controls and a two hook 10 tonne/2 tonne crane; electrical installation included sub-mains distribution, supplies to mechanical plant, small power and lighting, emergency lighting, data/communications, public address, fire alarm installation, lightning protection and card swipe access system.



# **PROJECT DETAILS**

## SCOPE

2 phase, 2 storey 415sqm extension to research building

#### ROLE

Architect, Lead Designer, employed by Design & Build Contractor

## CONTRACT

NEC3 Design & Build

## CONTRACTOR

Stepnell

#### CLIENT

Rutherford Appleton Laboratory/ STFC

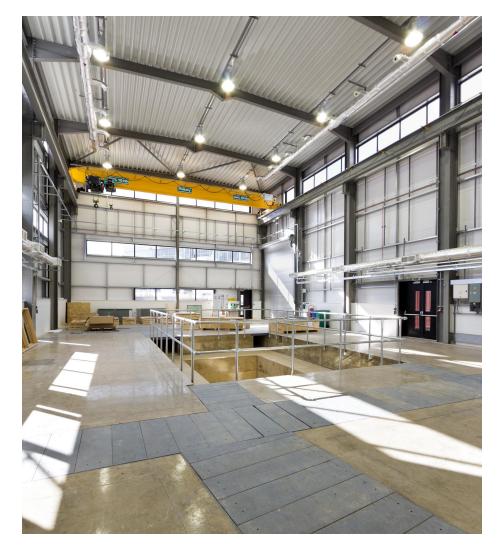
#### VALUE

£1.6m

### DATES

Completed 2015





Phase 2: The design and installation of a mezzanine flooring system complete with access staircases and the design and construction of a User Office and Counting House complete with small power and lighting. The Phase 2 works couldn't be commenced until the Completion of the installation of IMAT plant and equipment by others.

# **KEY ASPECTS**

- Working within tight building level tolerances due to accuracy required by IMAT equipment
- Full overhead gantry crane coverage
- Roller shutter door access from service yard to allow full forklift and vehicle access to experimental area
- Interfacing and integrating with existing Building R80 which remained in operation during works
- Phased construction programme to allow IMAT equipment to be supplied and installed by others





