

EC funded training and research at BRE Cardington

TMR, the Training and Mobility of Researchers programme run by the Science, Research & Development Directorate of the EC, finances the participation of young researchers in unique and innovative research projects across the European community. Recently it awarded BRE Cardington with a two year contract for training young scientists on its ground breaking ,whole building projects.

With three full scale, multi-storey structures in concrete, steel and timber, BRE Cardington, a former airship hangar located 70 km north of London, is the world's premier facility for whole building studies. Under the TMR programme it offers an exciting opportunity for young European researchers to investigate the behaviour of Europe's major construction materials under different environmental and accidental loading conditions. The buildings also offer a unique facility for examining the effects of new technologies - design, materials, manufacturing and construction - on the performance of the complete building during fabrication, construction, working life and demolition.



Steel framed building

Constructed in 1993, the steel framed building is similar to a typical London headquarters office block, 8-storeys in height. It has been subjected to extensive construction process and performance projects at domestic and European level. Further work will explore the potential for repairing the fire damaged steelwork.

Timber frame 2000

TF2000 is a 6-storey timber framed building, the largest of its kind in Europe. It is being tested to ensure the provision of a sound basis for design and construction of medium rise timber frame buildings. It aims to demonstrate the benefits of timber frame construction against proven benchmarks.

Photo: steel, concrete and timber buildings at BRE Cardington

In-situ concrete frame

A seven storey in-situ concrete frame building is soon to be completed. Part of the European Concrete Building Project (ECBP), the building is the first of four (in-situ, precast, hybrid and innovative) to be constructed at the facility. Research will initially focus on the construction process aiming to reduce costs, increase the speed of construction and improve quality. The ECBP is currently the biggest, most ambitious concrete research programme in the world.

Dr David Moore, Head of the Centre for Whole Structure Behaviour, who will manage the contract says "BRE Cardington has never had a more exciting time with three major whole building projects underway in concrete, steel and timber. The TMR project will run for 2 years and offers a real opportunity for young researchers to be involved at the cutting edge of industry advancements."

If you or your organisation would like to be involved in the TMR programme at BRE Cardington, or would like further information please contact Dr David Moore, BRE, +44.1923.664578. Applicants must be from an EC member or associate state with preference given to young researchers.