

**CHEMISTRY LABORATORIES**  
**DURHAM UNIVERSITY**

Client – Durham University – xxxxxxxxxxxxxxxx

Estates & Building, Holly Wing, Mountjoy Centre, Stockton Road,  
Durham, DH1 3LE

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Architect – PH Partnership – xxxxxxxxxxxxxxxx

10 Lumley Court, Chester-le-Street, Co. Durham. DH2 1AN

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Completion – February 2014 (7 Months)

Value - £460,000 (*JCT Intermediate Contract With Contractors Design 2011 Edition*)

Site Man. - Neale Torr

The work consisted of the remodelling of the live Chemistry Building to create an Integrated Chemical Reaction Facility (ICRF). The unique purpose-built new facility provides a high pressure laboratory to house complex chemical process reactor systems and associated analytical instruments.

The refurbishment of the existing laboratories involved many specialist trades, including the installation of new fume cupboards, the installation of extractor systems to create a negative pressure environment, the installation of high pressure and specialist piped gases, etc.



In addition to the works to the existing labs, we built a new Blast Cell. The cast insitu reinforced concrete cell allows for the safe operation of high pressure vessels up to 5 L / 300 bar.

The works were planned and managed to ensure that the noise and dust were minimised to enabling the surrounding research and teaching facilities to be used during the works. Due to the sites land locked/tight location, crange for the roof top plant and other major workface deliveries had to be pre-arranged, planned and co-ordinated with the University to maintain the safety of staff & students and to ensure that we did not affect other operations on and around the site.

The project was successfully completed with minimal disruption to the department, staff & students. Our philosophy of understanding and working around the client's needs certainly helped on this live site and enabled ourselves and the University to function alongside each other. The project further expanded our knowledge in the specialist laboratory field. There were some issues with some of the named specialists on this project who performed poorly & independently of each other. We have since learnt from this experience and on similar complex projects for Durham & Newcastle Universities, we have been able to adopt and demonstrate these newly acquired best practices, thus enabling us to complete these works even more smoothly.



The new ICRF laboratory & facilities has been welcomed by the staff & students who are now safely able to use highly reactive/toxic gases, with state-of-the-art equipment and instrumentation. The new state of the art facility has given Durham University a world-class laboratory for the development and exploitation of interdisciplinary sustainable, efficient chemical reactions and energy-related research projects.