UCD Centre of Sythesis and Chemical Biology, Dublin

The building comprises of a 2,200 m² four story research building with the buildings plant room situated on top of the roof connected to the existing sciences building. The facade is a curtain wall glazing system to the front and rear of the building incorporating a powder coated aluminium wall cladding system to the rear elevation, end stairwell and perimeter of the front elevation.

The ground floor is made up of visitor/occupants canteen off the main entrance lobby and upper floor access zones. The main areas off the ground floor reception lobby are the meeting rooms, offices, conference rooms and a NMR laboratory with a substantial plant installation of a Super conduction magnet, a 600mMHz Magnetic Nuclear Resonance Spectrometer.

Also incorporated on the ground floor is a transform building that supplied the new build along with supplying the new power supply to the adjacent science buildings. Each floor of the three upper floors were divided up into two main laboratories off a main corridor running along the length of the front of the building, with stairwells on either end and office spaces for the Professors. The ceiling incorporated plenum system zones

of perforated metal ceiling tiles with plenum partitions above ceiling levels. These connected by ducting to the main through the smaller services riser shafts to the AHU plant mounted on the roof pantarea. Due to the requirements of the laboratories a pressurised ventilation system was installed where the fume cupboard and the plenums AHU supply were linked as part of the BMS system and ramped up and down the air supply to the laboratories depending on volume of extract been created by the bank of fume cupboards in operation and the specific requirements for each fume cupboard. This ensures that no toxic gases could seep from the fume cupboard into the room areas and provides a safe working area for the graduates.

JJ Rhatigan
Building Contractors