School of Chemistry and Chemical Engineering

**Green Impact Teams – administration and support**

* Environmental Champion given full support from Head of School (Chris Hardacre) and a remit to deliver environmental improvement programs within the School
* Objectives set at School Board level to reduce environmental impact
* Progress reported direct to Head of School and to School Board
* “Environmental Issues” now standing item on the School Senior Management Board Agenda
* Worked with Estates on technical and behaviour change projects
* 5 teams participated in the Green Impact (GI) Program - element of competition to encourage staff/students to participate
* Regular meetings with team leads and Environmental Champion (Trevor Sewell) to co-ordinate completion of GI activities
* Head of School and School Manager attended selected GI meetings
* Positive feedback given to all GI team members by Head Of School on progress in the GI process

**Behaviour Change projects:**

* Environmental induction program – inductions take place concurrent with Safety inductions
* GI awareness lecture for all occupants of GI labs
* “environmental safety” audit of chemicals within GI labs
* “environmental awareness” of chemical hazards for all GI lab occupants
* Chemical swap program in the process of being implemented
* Lab environmental plans introduced for all GI labs
* Establishment of “switch off” responsibilities – day-to-day, at weekends and for holiday periods – in all GI labs
  + ***Typical actions taken included:***
  + Switch off regime for lighting and lab equipment
  + Awareness stickers and signage
  + Improvements in the Storage and use of chemicals
  + An increase in the number of recycling bins for paper, plastic bottles and aluminium cans.
  + An established central recycling of copper, steel, aluminium foil and brass.
  + Staff and student awareness training
  + Inclusion of environmental criteria in the Lab Hand book, student induction and in write up of lab work
  + Audit of all chemicals and updating of labelling systems for the same
  + Program of fridge monitoring – to improve efficiency being implemented
  + Reinforcement of University Green Purchasing Policy
  + Fume cupboard stickers to reinforce the “shut the sash” possibilities in all fume cupboards (FC) in GI labs to be rolled out to all FC in all of the Schools labs
  + Noise survey of existing plant to establish potential environmental nuisance issues

**Technical Initiatives:**

* *The majority of the technical issues outlined below have been undertaken with Mark Spence from Estates unless otherwise stated:*
* Installation of a trial scheme of motorised fume hood sashes with sensors, which will close sashes automatically when not in use
* The same trial scheme has included light timers on fume hoods to switch off after a period of non-use
* Installation of automatic sensors throughout the corridors of the school which will switch off the lights after a period of no access
* Installation of automatic sensors in selected multi use / occupancy rooms within the school which will switch off the lights after a period of no access eg post grad write up room on the 1st floor. *It is hoped this will be extended to other rooms as Estates funding is available.*
* Program of adding under (FC) extraction – enabling Chemicals to be safely stored and energy intense FC to be switched off.
* Rebalancing of FC extraction enabling HVAC speed to be lowered a hence a significant carbon and monetary saving
* Autotimers being introduced for selected overnight equipment – reducing energy consumption by 50% - this followed on from an audit conducted with Kevin McKenna – further audits are to be arranged
* Reports provided by Estates on out of hours lighting use – users approached and reminded to “switch off when not in use”.
* On-going recycling audits with Nicola Keown – establishing a baseline of recycling equipment and signage on each floor.