

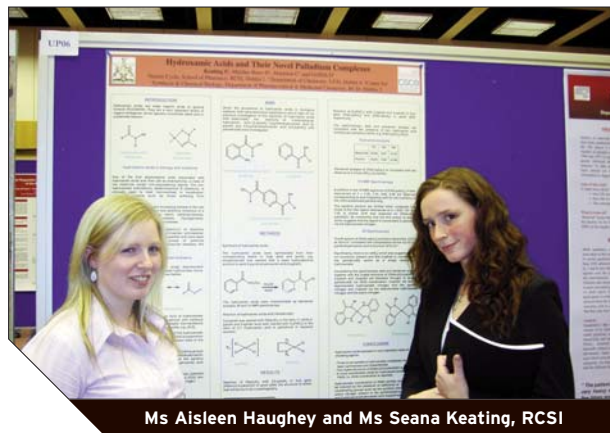
Recent and Upcoming Events

March: 7th Annual Symposium on Supramolecular Chemistry in Ireland

TCD hosted over 100 scientists for the annual symposium on supramolecular chemistry on March 31, 2006. Speakers from Ireland and abroad gave plenary and invited lectures on developments in this field, including biological applications of supramolecular structures based on phosphorescent porphyrins, fluorescent chemosensors and polyhedral coordination cages. This annual event is organised by Professor Thorri Gunnlaugsson and Dr Paul Kruger.

April: RCSI Annual Research Day

The RCSI research day on April 19, 2006 showcased the work of CSCB investigators Professor Kevin Nolan, Dr Celine Marmion, Dr Mauro Adamo and Dr Marc Devocelle through oral and poster presentations by postgraduates and undergraduates.



Ms Aisleen Haughey and Ms Seana Keating, RCSI

April-June: CSCB Seminars

The following visiting professors gave seminars at the CSCB from April to June:

Professor Marcel Jaspars, University of Aberdeen;
 Professor Nick Farrell, Virginia Commonwealth University, USA;
 Professor Jim Naismith, University of St Andrews;
 Professor Peter Deigner, University of East Anglia, UK;
 Professor Stefan Oscarson, Stockholm University, Sweden.

July: TCD "Fun Day of Chemistry"

A day-long series of lectures was hosted by Professor Thorri Gunnlaugsson in TCD on July 25, 2006.

August: Society for General Microbiology (SGM) Irish Branch - Microbial Bioconversions: Biocatalysis and Biodegradation

August 31 - September 1, 2006; William Jefferson Clinton Auditorium, UCD

December: Recent Advances in Synthesis and Chemical Biology V

December 15, 2006; O'Flanagan Theatre, RCSI

Research Highlights

- Professor Paul Engel, Dr Francesca Paradisi and Dr Brian Glennon presented their collaborative work as part of the CLASS series of seminars at UCD Conway Institute. The researchers have developed genetically engineered enzymes which catalyse the asymmetric synthesis of non-natural amino acids. This process has been scaled up for optimal biocatalyst production. Faulkner, E.; Barrett, M.; Okor, S.; Kieran, P.; Casey, E.; Paradisi, F.; Engel, P.; Glennon, B. *Biotechnol. Prog.* **2006**, *22*(3), 889-897.



Professor Engel, Dr Paradisi and Dr Glennon

- Dr Jens Nielsen, SFI PIYRA researcher, has developed an online tool called the pKD web server, which allows researchers to predict the performance of new enzymes with respect to their pH-dependent characteristics using computational methods. Tools such as this may potentially be used for the design of more environmentally friendly and efficient enzymes for industrial processes. The pKD server is freely available online to researchers worldwide at <http://enzyme.ucd.ie/pKD>

The Centre for Synthesis and Chemical Biology (CSCB) is a collaboration between University College Dublin, Trinity College Dublin and the Royal College of Surgeons in Ireland.

New CSCB Principal Investigators

We would like to extend a welcome to two new Principal Investigators, **Professor Mathias Senge**, SFI Research Professor and Professor of Organic Chemistry at TCD, and **Dr Cosima Stubenrauch**, lecturer at the UCD School of Chemical and Bioprocess Engineering.

Recent Promotions

Congratulations to **Dr Isabel Rozas** (TCD) who was recently promoted to Senior Lecturer, **Drs David Grayson** (TCD), **Paul Murphy** and **Declan Gilheany** (UCD) who were promoted to Associate Professor and to **Professors Pat Guiry** and **Tony Manning** (UCD) who were promoted to full Professor.

CSCB Research in the Media

- Dr Marc Devocelle and Professor Kevin Nolan, RCSI
The Irish Medical Times, May 12
Role of Free Radicals in Thrombosis

Anthranilic hydroxamic acid (AHA) derivatives synthesised by Dr Marc Devocelle, Professor Kevin Nolan and Professor Des Fitzgerald have shown significant biological activity in inhibiting the free radical activity that can contribute to cardiovascular diseases.

- Dr Matthias Tacke, UCD
Irish Times, June 8
Waging War on Cancer Cells

Dr Tacke has developed titanocene-based anti-cancer drugs which have been shown to exhibit biological activity against renal cell cancer.

- Dr Isabel Rozas, TCD
The Irish Medical Times, July 6
High affinity alpha-blockers are needed

Dr Rozas has recently published work in the Journal of Medicinal Chemistry which aims to help researchers design new drug treatments for benign prostatic hyperplasia (BDH).



Dr Isabel Rozas

Science@CSCB

- In collaboration with UCD New ERA, the CSCB hosted 15 students from seven second-level schools around Dublin for a half-day workshop on April 25, 2006. The workshop included a guided tour of the facilities and a short lecture giving an introduction to chemistry and chemical biology and the degree courses available. This was followed by the popular "hands-on" session in the lab, and the workshop finished with a short quiz.
- 164 second-level students attended the Science@CSCB taster talks, which were held as part of the Uni4U and fifth-year summer school programmes. Seven sessions were held over two days; a fun interactive talk was followed by a short molecular modelling session.



Jane Hill and Karen Corcoran build lysine and CO₂

- 15 secondary school teachers who were participating in the SFI STARs (Secondary Teachers Assistant Researchers) programme attended a techniques workshop at the CSCB on July 5 where they took part in demonstrations of High Performance Liquid Chromatography (HPLC) and Mass Spectrometry.
- Professor David Grayson hosted a Chemistry Summer School at TCD from July 20-23, 2006 in conjunction with the School of Chemistry, University of Bristol. 16 students from the Bristol area took part in team-based "research projects", a chemistry quiz and many social events over the three days.
- The Science@CSCB outreach website was launched in June. The website contains details of the outreach programme, interviews with researchers, and information on the degree programmes in the three institutions. A mail-out of the Science@CSCB brochure is planned for the autumn to recruit schools for our outreach activities.

