

### Use of CDS databases by the Durham Biological Chemistry Group - Ben Davis

As a synthetic laboratory with interests in carbohydrate chemistry and biocatalysis, knowledge of precise literature, characterization and structural information is vital for the Durham Chemical Biology group. In particular, and despite the existence of some specialist journals in these fields, the diversity of these two areas means that papers are distributed widely across both chemical and biological journals. It is therefore only possible to keep truly abreast of current developments through the use of databases that allow powerful searching and cross referencing techniques. Central to our day-to-day work is the use of the ISIS database system and in particular the Biocatalysis database. This latter database is unique as a collection of information and places the UK academic community at the forefront of access to biocatalytic information. The importance of these databases also features prominently in the Durham teaching programme and we operate workshops as part of a 4<sup>th</sup> year & PG course "Information Retrieval" that teach the use of ISIS. In summary, the Daresbury service is a vital tool to the research and teaching community at Durham.

### Examples of papers in our group from 2001 that acknowledge the importance of the Daresbury service are

[1] "Glycosyldisulfides: A New Class of Solution and Solid Phase Glycosyl Donors"; B.G. Davis, S.J. Ward and P.M. Rendle, *Chem. Commun.* **2001**, (2), 189-190.

[2] "The Controlled Glycosylation of a Protein with a Bivalent Glycan: Towards a New Class of Glycoconjugates, Glycodendriproteins"; B.G. Davis, *Chem. Commun.* **2001**, (4), 351-352.

[3] "Expanding the Utility of Proteases in Synthesis: Broadening the Substrate Acceptance in Non-Coded Amide Bond Formation Using Chemically Modified Mutants of Subtilisin"; K. Khumatveeporn, A. Ullman, K. Matsumoto, B.G. Davis and J.B. Jones, *Tetrahedron: Asymm.* **2001**, *in press*.

[4] "Glycosylation of the Primary Binding Pocket of a Protease Causes a Remarkable Broadening in Stereospecificity in Peptide Synthesis"; K. Matsumoto, B.G. Davis and J.B. Jones, *Chem. Commun.* **2001**, *in press*