

Nine women become RS fellows

Nine female scientists were selected to become Fellows of the Royal Society (FRS) this year, making up 21 per cent of the new fellows elected for 2003. Women now represent 4.4 per cent of the Society's total fellowship and 11 per cent of fellows elected in the last five years.

Eleanor Dodson (*below*), professor of chemistry at the University of York, was the only chemist elected among the nine women. Dodson works on the crystallographic analysis of large biological molecules and has made a significant contribution to solving the crystal structure of many proteins. She is the first woman from the University of York to become an FRS.

Dame Bridget Ogilvie, former director of the Wellcome Trust, Jocelyn Bell Burnell, dean of the science faculty at the University of Bath, and Karen Vousden, di-



rector of the Beatson Institute for Cancer Research in Glasgow, were also among the nine female scientists elected to fellowships.

Lord May, president of the Royal Society, said that he was pleased to be electing more women to fellowship this year. 'As the pool of women in science increases we will see many more excellent and talented female scientists joining the fellowship's ranks', he added.

Chemists John Brown, professor of chemistry at Oxford University, Michael Klein, professor of physical science at the University of Pennsylvania, US, Alan MacDiarmid, professor of chemistry at the University of Pennsylvania, US, and Stephen Mann, professor of chemistry at the University of Bristol, were also elected to FRS.

For a list of RSC members to become FRS, see p 59. □

Celebrity chemists in the frame

The refurbished and recently reopened Regency rooms at the National Portrait Gallery, London, have been re-hung along thematic lines. John Dalton and Sir Humphry Davy are now included among the great and good, grouped together under *Art, invention and thought – the romantics*.

Dalton, the founder of modern atomic theory – depicted in his late 60s by Thomas Phillips in 1835 – is soberly dressed with an averted, reflective gaze that evokes his Quaker upbringing. In contrast, Davy – painted in his

mid-20s by Henry Howard in 1803 – engages directly with viewers, every inch a charismatic, 'romantic genius', like his friends Wordsworth and Coleridge.

Davy's lecture demonstrations, given before an adoring public at the Royal Institution, were social events that celebrated the transforming power of science and technology. After attending them, Mary Shelley was inspired to create Dr Frankenstein, the scientist with the secret of life-giving power. □

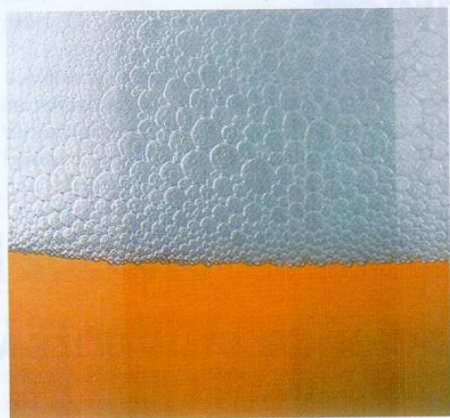
Calling time on off beer?

To beer drinkers there is little worse than taking a long-awaited slurp of their favourite beverage only to find that it has not survived storage and is unpalatable. Now a team of researchers from the University of Porto, Portugal, has developed a new way to test rapidly the level of deterioration of a beer, which could help to ensure that 'off' beer does not reach the pub pumps (L. F. Guido *et al*, *J. Agric. Food Chem.*, 2003, DOI: 10.1021/jf020895u).

Carbonyl compounds are largely responsible for off-flavours in beer. Brewers frequently use sulphur dioxide to mop up these compounds and help preserve the beer; this interacts with carbonyl compounds to give flavourless complexes.

According to the research team, led by Aguires Barros, unsaturated aldehydes can form a variety of irreversible adducts with SO₂ and acetaldehyde is by far the most common carbonyl compound in beer.

The researchers therefore decided to determine the ratio of acetaldehyde to free, unreacted SO₂ to determine the 'deterioration level' of beer samples. Using voltammetry they analysed both a range of beers stored at differ-



ent temperatures and a series of control compounds containing SO₂ and acetaldehyde. A panel of trained tasters also assessed the samples.

The voltammetry results correlated well with those of the sensory panel and the technique distinguished between fresh, naturally aged and artificially aged beers. Barros and his team are currently looking at how SO₂ reacts with other carbonyl compounds in beer model systems. □

INDUSTRY

■ **Collectis**, a French biotechnology company specialising in genome engineering, recently announced that it has entered into an agreement with **BASF Plant Science**. Under the terms of the agreement, researchers at BASF can use Collectis' proprietary Meganuclease I-SceI technology to excise marker genes in model plants and improved crop plants. Isabelle Bressac, vice-president of business development at Collectis, said that the agreement demonstrates the 'will of the plant field to move towards rational methods of genome engineering and the potential industrial value of our technology'.

■ **Cabot**, the US speciality chemical and material company, is investigating a number of European restructuring initiatives. The proposals, which are subject to regulatory approval, include closing Cabot's 60 000 t pa carbon black manufacturing facility in Zierbena, Spain, and the consolidation of all its European administrative services to one location in Belgium. If the plans are approved, Cabot says that the Zierbena plant could be closed as early as autumn 2003.

■ **CP Kelco**, the US hydrocolloid manufacturer, recently announced plans to expand the pectin capacity at its facilities in Skensved, Denmark, and Limeira, Brazil. The expansions are scheduled to be completed in mid-2003 and 2005, respectively. Martin Sapone, CP Kelco's pectin business director, said: 'Our investments to expand pectin capacity represent CP Kelco's dedication to producing the highest performing products and having them available when our customers need them'.

■ **Azelis**, the French-Italian chemical distribution company, recently acquired **Kraemer & Martin**, a specialist distributor of pharmaceutical raw materials, food and cosmetic additives and other speciality chemicals, based in Germany. The acquisition gives Azelis a presence in the German chemical and polymer markets. Commenting on the acquisition, Udo Wenzel, CEO of the Azelis network, said: 'This, together with our strong representation in Eastern Europe, will further increase our attractiveness as a European distributor and service provider'.

■ **Shell Nederland Chemie's** new styrene acrylonitrile (SAN) polymer polyol plant, located at Pernis, The Netherlands, is now on stream. The new facility increases Shell Nederland Chemie's SAN polymer polyol capacity five-fold, to 50 000 t pa. SAN polymer polyol is used by furniture, bedding and automobile manufacturers.