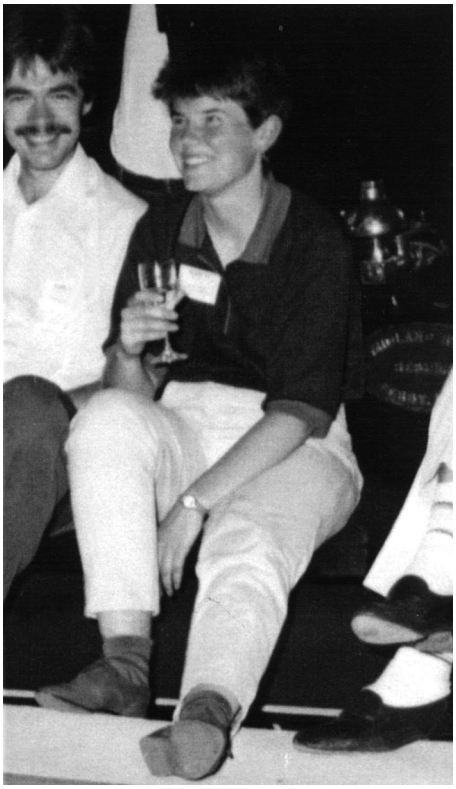
Obituary

J. Synchrotron Rad. (1998). **5**, 1324–1325



Judith Corker, 1967–1998

By the untimely death of Judith Corker in July 1998, the UK synchrotron radiation community has lost one of its burgeoning talents. A native of Sheffield, Judith spent her student years on the south coast of England at the University of Southampton. One of her final-year undergraduate research projects was centred on the estimation of bond angles and data precision [*J. Chem. Soc. Chem. Commun.* (1989), p. 181] within nickel coordination complexes. She was awarded the R. E. Parker Prize for the best undergraduate research project for this work. She subsequently carried out *in situ* EXAFS experiments on the activation of such complexes to form homogeneous catalysts during her PhD; this programme spanned nickel [*J. Chem. Soc. Chem. Commun.* (1991), p. 1104; *J. Chem. Soc. Dalton Trans.* (1994), p. 1337] and copper [*J. Chem. Soc. Chem. Commun.* (1994), p. 1027] catalysts. She successfully developed sampling techniques for carrying out EXAFS studies on highly air-sensitive and thermolabile solutions. Judith coupled her thoughtful and effective experimentation with painstaking data analysis.

Judith then moved to the CNRS Institut de Recherches sur la Catalyse to work with Jean Marie Basset. Her project in Villeurbanne, on pore modification of the wide-pore gallophosphate, cloverite, provided an excellent basis upon which to initiate her own research themes on transition-metal catalysts in microporous and mesoporous solids. This she duly did on her return to Southampton as a Lecturer in Chemistry in 1993. She continued then to use EXAFS as one of her techniques for characterization. Her care and precision allowed her to make key contributions in collaborations with others. Perhaps the most notable of these involved the Villeurbanne group, particularly the characterization of silica-supported hydrides of zirconium [*Science* (1996), **271**, 5251] and tantalum [*J. Am. Chem. Soc.* (1996), **118**, 4595] which are catalysts for alkane activation. In addition, her experiments helped to demonstrate the formation of mesoporous metals by George Attard's group in Southampton [*Angew Chem. Int. Ed. Engl.* (1997), **36**, 1315].

In the last few years we shared two projects to develop *in situ* methods of investigating heterogeneous catalysts using EXAFS. The first of these concentrated on sulfur as an example of a soft X-ray absorption edge [*J. Chem. Soc. Chem. Commun.* (1996), p. 1431]. Towards the end of last year, our first successful experiments using energy-dispersive EXAFS (EDE) to carry out time-resolved EXAFS on a microreactor bed were achieved on station 9.3 at the SRS (on platinum in mesoporous silica), and extended earlier this year to ID24 at the ESRF (rhodium on alumina). Happily, Judith led the group to this success at Daresbury,

but the ravages of leukaemia prevented her from seeing the extension of her plans effected in Grenoble.

Judith is sadly missed by her contemporaries, her past research group members (Darren Browning, Clive Hayter, Richard Oldroyd, Shehla Sheikh and Kathryn Tearle) and current folk (Tom Campbell, Steve Fiddy and Mark Newton), and her many colleagues in the UK, France and elsewhere. She was devoted also to delivering high-quality teaching to our undergraduates, who responded well to her evident concern for them. We all can celebrate knowing a fine scientist and caring colleague. Our thoughts are especially with her husband, Mark Holmes, her mother and all of the other members of her family.

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