Dr Alison Davenport is Reader in Corrosion Science at the University of Birmingham School of Metallurgy and Materials in the UK. She obtained her BA and PhD in Metallurgy and Materials at the University of Cambridge, and then spent eight years at Brookhaven National Laboratory in the USA, develop synchrotron X-ray methods for in situ characterisation of corrosion and passivation of alloys. She then returned to the UK, first to the University of Manchester and then University of Birmingham where she continued to develop synchrotron characterisation methods while also exploring the relationship between alloy microstructure and localised corrosion chemistry. She is currently using synchrotron X-ray microtomography, radiography, diffraction, spectroscopy and fluorescence mapping in order to study corrosion issues in nuclear waste storage, airframe alloys, fuel cells and corrosion of metals in the body.

Dr Davenport was elected to Chair the 2008 Gordon Research Conference in Aqueous Corrosion in the USA, and is a past Chair of the Corrosion Division of the Electrochemical Society and the Corrosion Science Division of the UK Institute of Corrosion. She is a Chartered Engineer, and has served as an Associate Editor of the Electrochemical Society, and is currently on the International Advisory Board of the Journal Corrosion Engineering, Science and Technology. She has also been involved in organising international conferences and workshops including the UK ISE Meeting in Edinburgh, and a number of symposia for NACE International, ECS, MRS and ICorr. She has been involved in UK Funding Councils (EPSRC College, STFC Science Board and is Director of the STFC Harwell Imaging Partnership), and carried out consulting work in Switzerland, the US and the UK in relation to nuclear waste storage. She received the NACE International H. H. Uhlig Award for outstanding effectiveness in corrosion education, and has graduated 22 doctoral students and 21 Masters students in the last 15 years.