Preface

This book contains the proceedings of the 14th Conference of the British Dam Society, *Improvements in reservoir construction, operation and maintenance,* held at the University of Durham in September 2006.

There are 36 papers covering a wide variety of issues. Recent changes to reservoir legislation in England and Wales relating to enforcement of the Reservoirs Act 1975 and the requirement to prepare flood plans, and the introduction of the Controlled Activities Regulations in Scotland, are discussed. Following the upgrading of many spillways in the last 30 years, internal erosion is increasingly seen as the greatest threat to UK reservoirs, and a number of methods for the early detection of internal erosion are described. The Interim Guide to Quantitative Risk Assessment of UK Reservoirs was introduced at the Society's 2004 Conference, and there are reports on feedback in its use. Hydrological and hydraulic issues covered include: a study into the effect of changes in weir crest coefficient with head; computer modelling of the operational systems of reservoirs, and developments in dam break modelling. Various schemes and studies in Portugal, India, Kazakhstan, Georgia and Egypt are also covered. Grouting works at two reservoirs are described and there is a paper on the desiccation assessment of the puddle clay cores at several reservoirs. Various other works to refurbish and rehabilitate dams are described and illustrated.

The conference included the presentation of the biennial Geoffrey Binnie Lecture by Chris Binnie. The 2006 Lecture, entitled 'Dams, responding to society's needs' is published in the Society's journal Dams and Reservoirs.