

development of new industrial products that must face the ultimate test in the marketplace. I suspect that this book is one new Australian product that will succeed in its ultimate test.

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Radioactive Waste Management and Disposal 1985 *edited by R. Simon*
(Cambridge University Press, Cambridge, 1986) pp xi + 734, \$178.50, ISBN 0-521-32580-3.

The edited volume of conference proceedings, prepared by requiring the papers to be submitted as camera-ready copy in a standard format, is now a popular means for the rapid dissemination of scientific information. This impressive volume emerged from the Second European Economic Community (EEC) Conference on Radioactive Waste Management and Disposal. Held in Luxembourg in 1985, the conference attracted nearly 400 delegates from twenty countries. Just as the first such conference in 1980 had reviewed the first five-year EEC research programme in this difficult field, this second conference reviewed progress since 1980. An impressive measure of international co-operation on this question has been achieved by the EEC through a variety of imaginative funding schemes: almost all of the 42 papers included in this volume are the result of international collaboration, typically involving six to eight different organisations or research laboratories.

The papers cover five main fields: treatment and conditioning technology, testing and evaluation of waste forms, geological disposal in different types of crustal material, migration mechanisms and modelling studies, and analysis of geological isolation systems. Each paper is followed by a discussion, although these predominantly consist of one-sentence questions followed by answers of similar brevity. The papers are of a high standard, although some of the expression is on the level one might expect when the authorship is in the collective hands of an international committee of scientists.

Perhaps the most interesting feature for the non-specialist reader is the panel discussion which concluded the conference. This reviewed the state of knowledge at the end of the ten years of international collaboration within Europe. While the work which has been done is as impressive as the scale of the EEC budget in this area, the honest assessment of what needs to be done before there is an assured waste disposal technology makes sobering reading. It is, in fairness, no small task to devise systems in which we can have faith for periods of time on the geological scale, since high-level radioactive waste needs to be isolated from the bio-sphere for hundreds of thousands of years. The European assessment of the current state of knowledge is a much more defensible statement than the glib reassurances recently given the Australian public by the Australian Science and Technology Council.

The consensus is that enough research has been done to determine the most promising options, so it is now appropriate to move into the engineering development phase, which it was observed 'will show the public that steady progress is being made towards a solution of the problem' (p. 693). The analogy

used to illustrate the present position was a situation 'in which the principal components of a nuclear power station have been developed, but the power station itself has not yet been constructed' (p. 699). Perhaps a different analogy would now be chosen in the post-Chernobyl era. The session included an unusually frank exchange on the problem of convincing the public of the safety of waste disposal systems, representing the two opposing viewpoints of the scientific community. In spite of recent experience, there are still some scientists who believe that the public should not be told any more information than is strictly necessary, on the grounds that irrational fears will be aroused by an honest assessment. On the other hand, there are scientists who believe that they should give the public an honest and complete assessment, rather than face charges of hiding the truth.

There are many complex issues which need to be resolved for the safe disposal of radioactive waste, the enduring legacy of the age of nuclear power. This volume goes further than giving a very comprehensive picture of the current state of technical knowledge. It also offers an insight into the vexed question of how the uncertainty of complex technological systems should be communicated to the general public. This makes the volume of considerable interest to many people outside its obvious target market, the technical specialists in radioactive waste management and disposal. The price, however, presumably reflects a small print run and a low probability of the book appealing to the more general reader. It is perhaps a book to urge your friendly local library to purchase.

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The Control Revolution: Technological and Economic Origins of the Information Society by *James R. Beniger*

(Harvard University Press, Cambridge, Mass., 1986), pp. 493. ISBN 0-674-16985-9.

For the past four decades a series of phrases have spun from the pens of scholars to describe the transformations in our technological society: 'the postcapitalist society', 'the new industrial estate', 'the global village', 'the computer state', 'the technocracy', 'the second industrial divide', 'the wired society' 'telematique', 'the technocratic era' — not to mention a string of revolutions from organisational, educational, computer, scientific-technological, information, electronic, micro and microelectronic, which social scientists have perceived since the Second World War. To each of these writers it has appeared that society is experiencing a series of revolutionary changes that hinge on technological developments of recent times. This is not the view of Dr James Beniger, Associate Professor of Communications and Sociology of the Annenberg School of Communications, University of Southern California. Beniger, a historian with early training in computer technology, challenges the notion of successive social transformations and traces the roots of our contemporary society to a deep, reverberating set of changes occurring in the mid to late nineteenth century generated by the industrial revolution in manufacturing and transportation which, in terms of technological innovation and restructuring of the economy,