Similarly, channelling needs to be further investigated both theoretically and by field observations.

Traditional multivariate geostatistical estimation 'Co-kringing' is stated to have been found inapplicable in some cases. Estimation of spatially distributed variables might be improved if cross correlation between variables could be included in the estimation process. New techniques for stochastic modelling of three dimensional fracture net work and simulation produces the spatial variability of fracture density and orientation. Discontinuous formation of geology and ground water travel time prediction are some other items which received significant consideration and invited wide discussions.

Large uncertainties are inherent in characterising geologic media and in defining the future conditions under which geologic repositories must perform. Incorporating subjective information is an important aspect of the quantitative assessment of repository performances.

There are 31 papers, in addition to the introduction, written by 87 authors. The papers reflect a uniformly high standard of presentation and thought process. 33 peer reviewers spanning different fields of specialisation, have contributed to this fine review.

While the proceedings have an immediate relevance to the Department of Atomic Energy, they contain valuable material on geostatistical methods for advanced research workers and professional earth scientists.

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DIRECTORY OF EQUIPMENT 1980–89. (Equipment supported through DST Funding, Dept. of Science and Technology, 1989).

As a follow-up of the recent brochure on Research and Funding Development of Central Government Departments, the Department of Science and Technology has brought out a Directory of Equipment furnishing details of the sophisticated equipment operated by different agencies of Govt. through financial aid given by the D.S.T. During the period 1980–89 the aggregate value of the equipment acquired is as much as Rs. 3,518.78 lakhs. A marked spurt is noted after 1987. Country-wise break up of the cost of equipment is furnished and we learn that nearly a third portion of the cost is on equipment of Indian origin.

The five Institutes of Technology and the Indian Institute of Science (25%), Universities (25%), autonomous institutions (50%) account for the total investment on equipment. A computerised database is stated to be available incorporating information on the location and details of the equipment.

While the information available is certainly valuable, it would be worthwhile to go a step further and analyse the extent to which these equipment are being used, idle time, if any, difficulties experienced in operating the equipment, the extent to which such facilities are utilised by agencies other than the institutions where these are located. Such a continuous assessment of the utility of equipment, we feel, is essential to know the extent to which they are utilised.

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