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PREFACE

This book forms part of the edited proceedings of the Seventh International Conference on Computational Methods in Water Resources (formerly Finite Elements in Water Resources), held at the Massachusetts Institute of Technology, USA in June 1988. The conference series originated at Princeton University, USA in 1976 as a forum for researchers in the emerging field of finite element methods for water resources problems. Subsequent meetings were held at Imperial College, UK (1978), University of Mississippi, USA (1980), University of Hannover, FRD (1982), University of Vermont, USA (1984) and the Laboratorio Nacional de Engenharia Civil, Portugal (1986). The name of the ongoing series was modified after the 1986 conference to reflect the increasing diversity of computational techniques presented by participants.

The 1988 proceedings include papers written by authors from more than twenty countries. As in previous years, advances in both computational theory and applications are reported. A wide variety of problems in surface and sub-surface hydrology have been addressed.

The organizers of the MIT meeting wish to express special appreciation to featured lecturers J.A. Cunge, A. Peters, J.F. Sykes and M.F. Wheeler. We also thank those researchers who accepted our invitation to present papers in technical sessions: R.E. Ewing, G. Gambolati, I. Herrera, D.R. Lynch, A.R. Mitchell, S.P. Neuman, H.O. Schiegg, and M. Tanaka. Important contributions to the conference were made by the organizers of the Tidal Flow Forum (W.G. Gray and G.K. Verboom) and the Convection-Diffusion Forum (E.E. Adams and A.M. Baptista) and by K. O'Neill who organized the Special Session on Remote Sensing. The conference series would not be possible without the continuing efforts of C.A. Brebbia, W.G. Gray and G.F. Pinder, who form the permanent organizing committee.

The committee gratefully acknowledges the sponsorship of the National Science Foundation and the U.S. Army Research Office and the endorsements of the American Geophysical Union (AGU) the International Association of Hydraulic Research (IAHR), the National Water Well Association

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