PREFACE

As part of the special year devoted to the *Application and Numerical Solutions to Partial Differential Equations*, the Centre for Mathematical Analysis at the Australian National University, Canberra, hosted a Mini–conference on *Free and Moving Boundary and Diffusion Problems*, on June 14–16, 1990. The primary aim was to stimulate strong interaction between practitioners (scientists, industrialists and engineers) with specific free and moving boundary and diffusion problems and mathematicians (pure, applied and computational) working on the mathematical theory as well as on the exact and approximate solution of such problems. In addition, the Mini-conference aimed to foster the interest of younger colleagues in research connected with these problems. A number of Australian and overseas speakers were invited to participate. They were:

Prof. Jim Hill University of Wollongong	Similarity Solutions for Nonlinear Diffusion and Related Phenomena
Dr. Francis Rose DSTO, Melbourne	Diffusion with Trapping and Fast Diffusion Paths
Prof. Giles Auchmuty University of Houston	Algorithms for Computing Equilibria of Rotating Self-Gravitating Fluids
Dr. Jeff Dewynne University of Southampton	Phase Change and Loose Change: Unstable Stefan Problems and the Stock Market
Dr. Rodney Weber ADFA, Canberra	Fire Spread as a Moving Boundary
Prof. Michael Barber School of Mathematical Sciences, ANU	Velocity Selection in Dentritic Growth
Prof. John Mason Royal Military College, Schrivenham	A Method of Particular Solutions for Free Boundary Problems