Groundwater Management:
Quantity and Quality

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Preface

Increasing water needs, constraints imposed by quality for different uses, and the growing importance of contamination as a result of urban, industrial and agricultural activities make it more and more necessary every day to consider aquifers as components of water resources systems to increase dependable water supplies and to preserve water quality. In order to obtain gains in efficiency, it is necessary to understand the flow and chemical processes involved in groundwater and to develop management models to simulate and optimize both quantity and quality.

This volume contains over 50 papers, including five keynote addresses, spread over the five topics into which the symposium was organized. These papers were selected by review committees from more than 150 abstracts submitted from many different countries.

We strongly believe that this volume contains some outstanding scientific papers and that it represents an important contribution that addresses groundwater management problems in their two crucial aspects of groundwater quantity and quality and gives an excellent idea of the state of the art and of the direction this subject will take in the near future.

The Editors
Préface

La croissance des besoins en eau, les contraintes de qualité imposées par diverses utilisations et l'importance de plus en plus grande de la contamination des eaux par suite des concentrations urbaines et des activités industrielles et agricoles rend de plus en plus nécessaire de considérer que les nappes sotueraines, composant des systèmes de ressources en eau, doivent être exploitées de façon à ce qu'elles puissent fournir des apports en eau présentant toutes garanties de sécurité et à ce que la qualité de leurs eaux soit préservée. En vue d'améliorer l'efficacité de la fourniture, il est nécessaire de bien comprendre les processus de l'écoulement et les processus chimiques concernant les eaux souterraines et de mettre au point des modèles d'exploitation pour simuler et optimiser à la fois la quantité et la qualité.

Le présent volume contient plus de 50 communications, y compris cinq exposés d'orientation qui couvrent les cinq thèmes suivant lesquels le conférence était organisée. Ces communications ont été choisies à partir de plus de 150 résumés soumis par les comités de revision de différents pays.

Nous sommes sûrs que ce volume représente une importante contribution, avec certains articles scientifiques tout à fait remarquables, à la solution des problèmes d'aménagement des ressources en eaux souterraines dans leurs deux aspects essentiels des quantités disponibles et de leur qualité. Cette publication donne une excellente idée de l'état actuel de nos connaissances sur ce sujet et des orientations des recherches dans le proche avenir.

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