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Preface

Every three years, scientists and engineers from around the world and of various specialization within radio science, participate in the General Assembly of the International Radio Science Union (URSI). In today's increasing specialization in research, this year's General Assembly is a unique opportunity to gain a wider perspective on various scientific aspects of radio science.

This book presents fifteen contributions to the XXVIth URSI General Assembly in Toronto, Ontario, Canada. They range from the Public Lecture, to three General Lectures, to ten tutorials highlighting areas of research of ten URSI Commissions and one special tutorial on issues related to the frequency spectrum. Reflecting rapid developments in various areas of communications, the Public Lecture, one General Lecture and quite a few tutorials, directly or indirectly relate to radio communication. The articles assembled in this volume also reflect the scope of the research that is on the one hand quite diverse, but on the other hand clearly indicates that many mathematical tools and techniques are common. Thus, "visiting" activities of other URSI Commissions, either as represented in this book or during the scientific sessions, often can greatly benefit our own research.

I trust that the readers who attend the 1999 URSI General Assembly, as well as other scientists, will find the articles in this volume not only interesting but stimulating new ideas and perhaps scientific collaborations.

Sincere thanks go to the authors for their timely submission of manuscripts, and to Ms. Donna Shannon of University of Victoria for her expert technical editing.

Victoria, BC
April, 1999

Maria A. Stuchly

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Dr. John T. Evans
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