

## **PREFACE**

Intensive investigation in several fields of communications and electronics are carried out every day around the world by researchers of developed and developing countries and reported in many international conferences, workshops or specialized journals.

This journal also publishes several times per year some special issues about different topics, which provide, to the researchers interesting information about recent scientific results regarding to the area of communications and electronics.

Mostly these special issues are concerned with research results produced in developed countries and practically never with ones produced in developing countries. By now many researchers from developing countries take part in international conferences and present interesting papers in the specific journals.

To fill this gap, and allow the international scientific community to know the most recent results obtained in developing countries, like Mexico, the Journal "Telecommunications and Radio Engineering" has prepared this special issue with some of the most important research works, in the field of communications and electronics, of National Polytechnic Institute, the most important technical University in Mexico and Latin America. All papers published in this issue have been presented at International Seminar "Mathematical Methods of Signal Processing and its Applications", held from October 3 to October 5, 2000 in Mexico-city, Mexico.

This special issue contains 10 papers related with topics listed below

- Atomic Functions
- Pattern Recognition
- Adaptive Filters
- Neural Network Structures
- Data Processing in Remote Sensing
- Security and Cryptography
- Medical Applications of Signal Processing
- Electronic Development

As editor of the journal "Telecommunications and Radio Engineering" I would like to thank the authors for their contribution to this special issue.

*Editor-in-Chief,*  
*Victor Kravchenko*