

## EDITORIAL

This special issue of **MATHWARE & SOFT COMPUTING** contains a selection of the scientific and applied papers presented at the Fifth Spanish Congress on Fuzzy Logic and Technology. This edition of the congress was held at the University of Murcia, from september 19th to the 22nd, 1995, coinciding with the 30th anniversary of the publication of the first work on fuzzy set theory by L. A. Zadeh. As in previous editions, the symposium has been organized in cooperation with the Spanish Association of Fuzzy Logic and Technology, and this year it has been officially recognized by the International Fuzzy Systems Association (IFSA).

The 57 articles accepted for presentation in this congress indicated an unceasing increase of quality and quantity, confirming the trends of the last few years. The contributions presented encompassed such diverse fields as learning, optimization, theoretical and methodological aspects of fuzzy logic, hardware and a wide and interesting group of applications. In particular, the presentation of a variety of perspectives in the application of fuzzy technology was one of the objectives of this edition, and it reached a total of 30% of the contributions. This proportion reflects a growing trend, but a trend that is still far from the world level situation, where just fuzzy control applications are 50% of the total. Although the Spanish scientific community maintains a relevant presence in international forums at the level of theoretical and methodological contributions, applied contributions are much fewer. In any case, as a reference we have to point out that for the first time the Symposium on the Transference of Fuzzy Technology have taken place in parallel with the congress and enjoyed a very positive acceptance by the business and industry world.

It goes without saying that given their high quality and interest we would have liked to include in this volume all of the papers presented in this symposium. This was not possible for obvious reasons. We are sure that many of the remaining papers will find room in other international journals of this field. In any case, having to choose a small number of articles, we have tried to make the selection in this issue a representative sampling of the different fields addressed in the congress and of the different research lines in fuzzy logic and technologies that are currently being undertaken in Spain. The twelve papers we publish here are distributed into three main sections: Theory, Methodology and Applications. In the section on Theory, three interesting topics are treated, namely Fuzzy Measures, Concept lattices and Inequality Indexes. The section devoted to Methodology covers some of the presently most promising topics: Knowledge Representation, Reason Maintenance, Learning, Decision-Making and Natural Languages. The section on Applications includes some papers devoted to the relevant subjects of Image Processing, Database Management Systems and Hardware Controllers.

We wish to express our gratitude to the authors for their valuable contributions and cooperation throughout the editorial process. We would also wish to specially mention the labor being carried out by the Spanish Association of Fuzzy Logic and Technology, under whose auspices this congress took place, and which among other important tasks, has fostered the creation and continued edition of the journal

through which we are addressing you. Finally, we wish to express our gratitude to Prof. J. Jacas, editor in chief of MATHWARE & SOFT COMPUTING, for his help in the edition of this special issue.

We would like to transmit our desire that the work included in this issue is useful for you and that you find in it what we believe is an ever growing value within the science and technology community of Spain. We are referring to the field of Fuzzy Logic and Technology.

Roqué Marín and Senén Barro  
Editors