EDITORIAL

This special issue of Mathware & Soft Computing contains a selection of the papers presented at the Third Hispano-Polish Symposium on System Analysis and Computer Science held at the Institut d'Investigació en Intel.ligència Artificial of the Spanish Research Council in October 1995. After the initial contacts established in the two precedents Symposiums (Granada 1988 and Rozalin 1990) this one was intended to consolidate the mutual scientific relations of both communities, specially those of Spanish research council and the Polish Academy of Science that support the Symposiums. The main topic of the third Symposium was the formal grounding of complex systems with special emphasis in rough set and fuzzy logic and its application to optimisation and knowledge-based systems.

This special issue contains only a few papers that show the wide variety of topics covered by the Symposium talks and communications.

Two papers are devoted to multistage control. The paper by Wierzchon presents a method based on the concept of Valuations-Based Systems introduced by Shenoy. The paper by Kacprzyk proposes a genetic algorithms for solving a multistage fuzzy control problem.

Two papers are devoted to problems of machine learning. In the work of Krawczak the Neural Network methodology is used, while in the paper of González and Herrera the genetic algorithms approach is discussed.

The paper of Gibert and Cortes is devoted to cluster analysis. In this paper the KLASS system is described. "KLASS" is oriented to the classification of ill-structured domains combining quantitative and qualitative descriptions of the individuals to be classified.

One paper is devoted to fuzzy statistics. The paper of Hryniewicz and Grzegorzewski after reviewing classical methods for testing statistical hypothesis they present an extension for testing hypothesis in fuzzy environments.

There are two papers devoted to Knowledge-based systems. The paper of Riaño, Torra and Valls is devoted to theoretical studies on semantics for ordered linguistic labels in Knowledge-based systems and the paper of Puyol and Sierra describes MILORD II, a modular, multilevel shell for expert systems.

The last paper of Agustí, Puigsegur and Schorlemmer is devoted to formal specification with inclusions. This is a generalization of formal specification by equations allowing the incremental refinement of specifications. Moreover inclusional specifications admit a natural visual syntax which can also be used to visualize the reasoning process.

In the Symposium we also talk about present and future collaborations between spanish and polish research teams. We hope the symposium and this publication will promote future joint works.

Olgierd Hryniewicz and Francesc Esteva
Guest Editors