Special Issue in Honor of the 65th Birthday of Professor Imre J. Rudas

Foreword

This special issue of *Acta Polytechnica Hungarica* is dedicated to Professor Imre J. Rudas on the occasion of his 65th birthday and in recognition of his outstanding contributions to computational intelligence, robotics with special emphasis on robot control, soft computing, computer-aided process planning, fuzzy control and fuzzy sets. The issue can be considered as a complement to the edited volume *J. Fodor and R. Fullér (Eds.), Advances in Soft Computing, Intelligent Robotics and Control (Topics in Intelligent Engineering and Informatics, vol. 8) (Springer-Verlag, Berlin, Heidelberg, 2014)*. The manuscripts were submitted in response to direct invitations from the Editor-in-Chief, containing contributions from some of Imre's past collaborators. The guest editors are grateful to the authors for their excellent work.

It is almost impossible to summarize in a short foreword the accomplishments of the honoree. At the age of 65 he is an author of books, book chapters, journal papers, conference proceedings papers, all together over 700 scientific publications in the mentioned fields.

Professor Imre J. Rudas graduated from Bánki Donát Polytechnic, Budapest in 1971, received the Master Degree in Mathematics from the Eötvös Loránd University, Budapest, the Ph.D. in Robotics from the Hungarian Academy of Sciences in 1987, while the Doctor of Science degree from the Hungarian Academy of Sciences in 2004. He received his first Doctor Honoris Causa degree from the Technical University of Košice, Slovakia and the second one from "Politehnica" University of Timisoara, Romania.

He founded Acta Polytechnica Hungarica, an international peer-reviewed scientific journal, which started to own impact factor after 6 years of its existence. He is the founder of seven IEEE sponsored international conference and symposium series. He is the only rector in the Hungarian higher-education who could establish a new university (Óbuda University) by upgrading an existing institution (Budapest Tech), through the fulfillment of high standards.

Imre is a Fellow of IEEE, Senior Administrative Committee member of IEEE Industrial Electronics Society, member of Board of Governors of IEEE SMC Society. He was the Chair of IEEE Hungary Section, Vice-President of IFSA (International Fuzzy System Association), the President of Hungarian Fuzzy Association for ten years, Steering Committee Member of the Hungarian Robotics Association and the John von Neumann Computer Society.He serves as an associate editor of diverse scientific journals, member of various national and international scientific committees.

His present areas of research activity are Computational Cybernetics, Robotics with special emphasis on Robot Control, Soft Computing, Computer-aided Process Planning, Fuzzy Control and Fuzzy Sets. He has published books, more than 700 papers in books, various scientific journals and international conference proceedings. Imre J. Rudas' personal qualities of commitment, integrity, leadership and initiate leave lasting impression on his colleagues, students and friends.

The present issue is a collection of 15 papers written by respectable experts of the fields. Professor Rudas's wide spectrum of interests is reflected in the variety of these contributions, dealing with three major topics: intelligent robotics; fundamental aspects of soft computing; and issues and methods of applied mathematics.

We wish Imre the best of health, energy and happiness in the years ahead, and we count on his activities and contributions to scientific projects for many years to come.

János Fodor and Róbert Fullér

Guest editors