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## Editorial

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**Biographical notes:** Adil Baykasoglu received his BSc and MSc in Mechanical Engineering in 1993 and 1995, respectively. He received his PhD in Manufacturing Engineering and Operations Management from The University of Nottingham in 1999. From 1993 to 1996, he was with the Department of Mechanical Engineering and Industrial Engineering at the University of Gaziantep, first as a Research Assistant, later as an Instructor. Currently, he is a Full Professor in the Department of Industrial Engineering at the University of Gaziantep. He has published around 275 academic papers, 3 books and edited several conference books on operational research, computational intelligence, meta-heuristics, quality management and manufacturing systems design. He is also an Active Referee for many scientific journals and serving on the board of several academic journals.

Turkay Dereli is currently a Professor in the Department of Industrial Engineering at the University of Gaziantep in Turkey. He received his BSc and MSc in Mechanical Engineering from the Middle East Technical University, University of Gaziantep, in 1992 and 1994, respectively. He earned his PhD from the University of Gaziantep in 1998. From 1992 to 1998, he was with the Department of Mechanical Engineering at the University of Gaziantep. He was then employed at the Turkish Military Academy as a Lecturer for one year. He has published numerous papers in professional academic journals and conferences, and has some textbooks on CAD/CAM, IT, brand and quality management. He is an Active Referee for many professional journals and also organised several national/international conferences. His current research interests include: technology management, CAD/CAM, process planning, feature technology, quality planning and control, TQM, agile/responsive manufacturing, management, informatics and applications of artificial intelligence.

I. Burhan Turksen received the BS and MS in Industrial Engineering and the PhD in Systems Management and Operations Research all from the University of Pittsburgh, PA. He joined the Faculty of Applied Science and Engineering at the University of Toronto and became Full Professor in 1983. In 1984–1985 academic year, he was a Visiting Professor at the Middle East Technical

University and Osaka Prefecture University. Since 1987, he has been the Director of the Knowledge/Intelligence Systems Laboratory. During the 1991–1992 academic year, he was a Visiting Research Professor at LIFE, Laboratory for International Fuzzy Engineering and the Chair of Fuzzy Theory at Tokyo Institute of Technology. During 1996 academic year, he was a Visiting Research Professor at the University of South Florida, USA, and Bilkent University, Ankara, Turkey. Since December 2005, he is appointed as the Head of the Department of Industrial Engineering at TOBB Economics and Technology University. He has won many awards on fuzzy sets and systems area. He has published hundreds of papers and many books on fuzzy sets and related areas. He has also taken many active roles in academia as editor, editorial board memberships of many scientific journals.

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Welcome to the *Int. J. Industrial and Systems Engineering*'s Special Issue on 'Modelling with Fuzzy Logic' which contains the best papers collected from FUZZYSS'2009: *1st International Fuzzy Systems Symposium*.

Fuzzy logic was proposed by Prof. Lotfi A. Zadeh as a novel approach to handle vagueness in any kind of systems. Since its introduction, fuzzy logic and systems have found innumerable number of applications in many diverse scientific areas. Fuzzy logic is still a promising research area with lots of challenging problems and applications. It is a challenging activity to understand and properly model fuzziness in complex systems. We have lots of tools and techniques for modelling and analyses of fuzziness. However, proper use of these tools and techniques needs some expertise which needs to be shared among researchers and practitioners in order to enhance fuzzy logic theory and its usefulness. Based on this motivation, we have organised FUZZYSS'2009 and prepared the present Special Issue. In this Special Issue, the readers will find some of the innovative modelling applications of fuzzy logic and systems to several interesting problems.

This Special Issue contains some of the good quality original research papers, which were presented orally and discussed during the 'FUZZYSS'2009: *1st International Fuzzy Systems Symposium*, 1–2 October 2009, Ankara, Turkey', were selected as candidates for the present Special Issue. After the re-submission of the revised manuscripts, and rigorous refereeing processes, five papers out of eight papers were finally considered for the publication in the scheduled Special Issue of *Int. J. Industrial and Systems Engineering*. We would like to thank to Prof. Angappa Gunasekaran (Editor, *Int. J. Industrial and Systems Engineering*) for giving us the opportunity to prepare this Special Issue. This Special Issue provides the reader a collection of five articles, which offers an exclusive perspective on the topics ranging from determination of students' fuzzy rating points and qualification levels; fuzzy approach for the assessment of academic performance; sustainability modelling of forestry with fuzzy approaches and fuzzy multiple regression.