

The special issue for “Intuitionistic Fuzzy Sets”

Intuitionistic Fuzzy Sets (IFSs) were introduced by me 35 years ago as extensions of Lotfi Zadehs fuzzy sets. Their name, proposed by George Gargov, corresponds to the fact that the sets are fuzzified using one of the basic Brouwers intuitionism ideas: to reject Aristoteles Law of Excluded Middle. Thus, in IFSs there are two degrees of membership and of non-membership, that generate a third degree of uncertainty or indeterminacy. For the last 35 years, a lot of research over the IFSs theory and applications has been published by colleagues from more than 50 countries in the world. The present issue of *Annals of Fuzzy Mathematics and Informatics* contains 9 original papers on IFSs theory (papers of Madiha Qayyum, Atiq ur Rehman, Etienne E. Kerre and Samina Ashraf; and of Gokhan Cuvalcioglu, Sinem Tarsuslu (Yilmaz), Arif Bal and Gizem Artun), on the IFS extension called interval valued IFSs (paper of Krassimir Atanassov), and on the applications of the IFSs in algebra (paper of P. K. Sharma and Kanchan), in graph theory (paper of Muhammad Akram), in topology (papers of S. R. Kim, P. K. Lim, J. H. Kim and K. Hur; and of J. H. Kim, J. G. Lee, P. K. Lim, K. Hur), in decision making (paper of S. Das, M. B. Kar, S. Kar, T. Pal) and in goal programming (paper of Mamata Sahu, Anjana Gupta).

Prof. K. Atanassov, Ph. D.
Bulgarian Academy of Sciences
Bulgaria