

Honorary Chairs Welcome Message

Lotfi A. Zadeh, University of California, USA

In my capacity as Honorary Chair, It is my pleasure and privilege to extend a very warm welcome to participants in the Fourth IEEE International Workshop on Soft computing as Transdisciplinary Science and Technology. The workshop has a special significance for me. First, because it is held in Japan, a country for which I have deep admiration and affection. Japan was the first country in the world to take interest in fuzzy set theory, and ever since has played a leading role in the development and applications of fuzzy theory and fuzzy logic. And second, because the Workshop is being held at Muroran Institute of Technology, an academic institution which has played and is continuing to play a leading role in promoting research and education in soft computing and its applications. I should like to take this opportunity to pay a personal tribute to Professor Yasuhiko Dote, his colleagues and the administration of the Institute for contributing so much and in so many important ways to the advancement of soft computing in Japan and world.

Soft computing is transdisciplinary in spirit and substance. Its genesis was the realization that to deal with the complex problems which arise in the conception and design of intelligent systems, it is necessary to marshal all of the intellectual resources at our disposal. This realization led to the formation of an alliance of methodologies whose principal members are fuzzy logic, neurocomputing, evolutionary computing, probabilistic computing, chaotic computing and machine learning. An important understanding which underlies this alliance is that, in general, superior performance can be achieved through the use of constituent methodologies of soft computing in combination rather than in a stand-alone mode. This understanding is reflected in the program of the Workshop.

Soft computing is more than an alliance of methodologies. It is also an alliance of researchers working in different fields and in different countries, united by a quest for progress through cooperation and exchange of ideas. On behalf of all of the participants I should like to express our deep appreciation to Professor Dote, his associates and the administration of the Institute for organizing and hosting a Workshop that advances soft computing and fosters international cooperation.

Lotfi A. Zadeh
<http://www.cs.berkeley.edu/~zadeh/>

April 2005