

## IFSA Newsletter Vol. 2, No. 4, December 2005



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In this issue, we offer a report on the BISCSE 2005 Conference, organized in honor of Prof. Zadeh, then bring a report about IFSA Membership in 2005 prepared by Prof. Imre J. Rudas, we also have a detailed report on FNG'2005; the conference organized by one of our institutional members. Finally there are interesting news about our recent institutional member The Russian Association for Fuzzy Systems and Soft Computing.

### REPORT ON THE BISCSE 2005 CONFERENCE IN HONOR OF PROF. ZADEH

The BISCSE'05 International Conference was held in the University of California, Berkeley, November 2-5, 2005. The event was organized to commemorate the 40<sup>th</sup> anniversary of Prof. Lotfi A. Zadeh's seminal 1965 paper on fuzzy sets. The event was well attended by most of the pioneers in fuzzy logic, and by the most prominent researchers and practitioners around the world who are interested in forging the frontiers by the use of fuzzy logic and soft computing methods. The event provided a unique opportunity for the academic and industry leaders to address new challenges, share vision, foster collaboration, and discuss research directions for the future. On November 2 there were two tutorials given to the interested participants, which were presented by Weldon Lodwick and Rudolf Felix. The same day in the evening a reception for all the participants was held. During the three days of the conference there were about 80 contributed papers presented with themes ranging from theoretical work to applications of fuzzy logic.



Panel Discussion with Prof. Zadeh and some of the pioneers in fuzzy logic.



Prof. Zadeh receiving another Honorary Doctorate at the banquet.



Some of the participants receiving diplomas in a photo with Prof. Zadeh.



Other participants receiving diplomas with Prof. Zadeh.

## IFSA MEMBERSHIP REPORT 2005



2005 was a very active year in view of IFSA and all of its institutional members. Also, on the 40<sup>th</sup> anniversary of fuzzy logic it is time to draw a line, analyze where we are now and which objectives of IFSA were realized. This also can be useful in order to see the future duties of us in order to improve the strategy of IFSA membership development. All these motivated the writing of this report about the current activities of IFSA institutional members.

At the moment IFSA has 14 institutional members, these are being listed below by category:

Category B: SOFT (Japan Society for Fuzzy Theory and Intelligent Informatics), CFSAT (Chinese Fuzzy Systems Association T), KFIS (Korea Fuzzy Logic and Intelligent Systems Society), FMSAC (Fuzzy Mathematics and Systems Association of China).

Category C: EUSFLAT (European Society for Fuzzy Logic and Technology), NAFIPS (North American Fuzzy Information Processing Society), SBA (Brazilian Society of Automatics), VFSS (Fuzzy Systems Society, Vietnam), SIGEF (Internat. Assoc. for Fuzzy Set Management and Economy), HFA (Hungarian Fuzzy Association), FIRST (Fuzzy systems and Intelligent technologies Research Society of Thailand), NSAIS (North European Society of Adaptive and Intelligent Systems), SCI (Soft Computational Intelligence Society), HAFSA (Hispanic-American Fuzzy System Association).

In the following we would like to summarize the activities of all the institutional members. All the IFSA members have a wide range of activities covering membership development, publications, conferences and other activities. Let us summarize in the first table the number of members of all the IFSA institutional members by country/region.

Also, from the scientific point of view, the contributions of the IFSA institutional members are very important in further development of the topic of fuzzy logic. Totally, IFSA members publish 14 journals, all of them of high international reputation and several conferences are (co)-sponsored by each of the societies.

As IFSA has its purpose to join the fuzzy logic community all over the world we analyze the current state of this task. In this view, in the second table we list the geographic distribution of IFSA institutional members. As it can be seen from the table, at this point we need to improve our strategy and bring new members to IFSA, mainly in the continents where there are no IFSA members. This is the main purpose of IFSA membership development strategy at this moment.

Member	Country	Number of individual members	Number of institutional members	Total
SOFT	Japan	1097	38	1135
CFSAT	Taiwan	301	0	301
KFIS	Korea	680	54	734
FMSAC	China	120	0	120
EUSFLAT	Europe	300	0	300
NAFIPS	North America	180	0	180
SBA	Brazil	350	10	360
VFSS	Vietnam	200	0	200
SIGEF	Spain	217	0	217
HFA	Hungary	54	0	54
FIRST	Thailand	44	0	44
NSAIS	Finland	30	2	32
SCI	Turkey			
HAFSA	Mexico	75	1	76
<b>TOTAL</b>		3648	104	3752
Continent	Number of IFSA members	Total number of countries	Percentage of IFSA members/all countries	
Asia	6	47	12%	
Europe	5	43	11%	
North America	2	23	8%	
South America	1	12	8%	
Africa	0	53	0%	
Australia, Oceania	0	14	0%	
<b>TOTAL:</b>	14	192	7.2%	

**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. He is active as a full professor and Head of Institute of Intelligent Engineering Systems. He serves as the Rector of Budapest Tech from August 1, 2003 for a period of four years. He is the Vice President of IFSA for Membership Development. He is the President of Hungarian Fuzzy Association and Steering Committee Member of Hungarian Robotics Association and John von Neumann Computer Society. He serves as an associate editor of IEEE Transactions on Industrial Electronics, member of editorial board of Journal of Advanced Computational Intelligence and Control Engineering Practice, member of various national and international scientific committees. He is the founder of the IEEE International Conference Series on Intelligent Engineering Systems and IEEE International Conference on Computational Cybernetics, and some regional symposia. He has served as General Chairman and Program Chairman of numerous scientific international conferences. His present areas of research activity are: Robotics with special emphasis on Robot Control, Soft Computing, Computer Aided Process Planning, Fuzzy Control and Fuzzy Sets. He has published one book, more than 300 papers in various journals and international conference proceedings.

# INTERNATIONAL CONFERENCE ON FUZZY LOGIC, NEURAL NETWORKS AND GENETIC ALGORITHMS FNG 2005

**October 13, 14, 2005, Tijuana México**

The International Conference on Fuzzy Logic, Neural Networks, and Genetic Algorithms (FNG 2005) was organized for the first time by the Hispanic American Fuzzy Systems Association (HAFSA) and Tijuana Institute of Technology. The event was held in Tijuana, Mexico on October 13, 14, 2005. For the inauguration event on October 13<sup>th</sup>, our Association's president, Prof. Oscar Castillo, participated with an inauguration speech for the conference. The academic and administrative deans of Tijuana Institute of Technology were also present at the event.



Prof. Patricia Melin and Prof. Oscar Castillo with the Academic and Administrative Deans of Tijuana Institute of Technology



Graduate Students with their Certificates of Participation after the closing ceremony.

After the inauguration event, Prof. Vladik Kreinovich from UTEP was the plenary speaker and gave an interesting lecture on his area of research. Prof. Kreinovich talked about “Combining Interval, Probabilistic, and Fuzzy Uncertainty: Foundations, Algorithms, Challenges-An Overview”. The attendance for the opening ceremonies and these lectures was about 50 persons, including 25 HAFSA members.



Prof. Vladik Kreinovich in his plenary speech.



Organizers of the event with some invited speakers

The International Conference had 4 invited papers on interesting theoretical and applied themes related to fuzzy logic, neural networks and genetic algorithms. The invited speakers were Prof. Mahmoud Tarokh “A Genetic Rover Path Planner with Fuzzy Logic Adaptation for Operation in Rough Terrain” from SDSU, USA, Prof. Thompson Sarkodi-Gyan “Object Recognition using Fuzzy Inferential Reasoning” from UTEP, USA, Dr. Olga Kosheleva “Processing Educational Data: From Traditional Statistical Techniques to an Appropriate Combination of Probabilistic, Interval and Fuzzy Approaches” from UTEP, USA, Prof Eduardo Gómez-Ramirez, “Simple Tuning of Fuzzy Controllers” from LaSalle University, Mexico and Prof. Cesar Cruz “Encryption via Chaotic Circuits for Private Communications” from CICESE, Ensenada, Mexico.



The Authorities of Tijuana Institute of Technology giving the Diplomas to the speakers.





Prof. Vladik Kreinovich and Prof. Thompson Sarkodi-Gyan with graduate students at the closing ceremony.

There were also 30 regular paper presentations on the technical program of the conference, the web page is located at [www.hafsamx.org/fng05](http://www.hafsamx.org/fng05). The proceedings in CD format were distributed to all participants of the conference. A meeting of the members of the association was also held on October 14<sup>th</sup>, to discuss the activities already done and to plan future events and activities.



Prof. Oscar Castillo receiving the congratulations from the authorities for the organization of the international conference.



Prof. Patricia Melin delivering some final words at the closing ceremony.

The participants did come from several cities of Mexico like Monterrey, Ensenada, Mexico City, Puebla, Tijuana, and some Latinamerican countries, from Universidad Santo Tomas de Aquino-Colombia, Universidad del Valle, Cali-Colombia, Universitaria Rafael Núñez, Cartagena, Colombia and Instituto Superior Politécnico José Antonio Echaverría, La Habana. Cuba. The HAFSA's website is located at [www.hafsamx.org](http://www.hafsamx.org) .

## Welcome to the Russian Association for Fuzzy Systems and Soft Computing as a member of IFSA

On December 4, 2005 it was decided by the Council of IFSA to accept as a new institutional member The Russian Association for Fuzzy Systems and Soft Computing (RAFSSoftCom). The main aim of the RAFSSoftCom is to provide a platform for Russian researchers working on Fuzzy Systems (FS), Soft Computing (SC), Computational Intelligence (CI) and in several related research areas, however, it is open for researchers from other countries as well. RAFSSoftCom has identified a number of essential goals: establishment of good relationships with international associations, and establishment of the Journal of "Fuzzy Systems and Soft Computing". The recent developments and initiatives of RAFSSoftCom show a very strong commitment and an exceptional power of work. Currently RAFSSoftCom organizes next year two conferences, and they will start publishing the Russian Journal of Fuzzy Systems and Soft Computing. We welcome RAFSSoftCom to IFSA and hope to start a fruitful collaboration with this association.