

Ferenc Forgó: Honoree of the Egerváry Jenő Memorial Award in 2014

Vita

Born in Pécs on 16 April 1942. Holder of the following academic degrees:

- Diploma (MSc-equivalent) in Economics from Karl Marx University of Economics, 1965;
- Candidate of Economics, 1974.

Ferenc Forgó has been spending all his academic career in one institution, only the name of the institution changed during the years: Karl Marx University of Economics, Budapest School of Economics, Budapest School of Economics and Public Administration, Corvinus University of Budapest. He has been loyal not only to one institution but also to one department, needless to say, only the name of the department has changed, nowadays it is called Department of Operations Research and Actuarial Sciences.

At that one University he held various positions. He started as a student, then became assistant, associate and then full professor. Since 2012 he is professor emeritus. For almost 15 years he served as the head of that one Department.

He was a visiting professor at USC (1970-71 (by Ford Fellowship), 1989, 1990, 1991, 1994-95) and at Rutgers University (1985-86).

Teaching and organizational activities

Ferenc Forgó has been an active member of the Hungarian operations research community. As a professor he taught many topics of mathematics, practically everything related to operations research. He also taught management science classes too. Last but not least he introduced game theory to generations of students, and made game theory become an accepted discipline at the Corvinus University of Budapest, and in Hungary. He supervised several doctoral students who successfully acquired PhD degree, and has helped many others.

Research and professional activities

Ferenc Forgó's research interest focuses on game theory and related fields. His research activities cover both theory and applications, but even if he considers a theory problem he never misses the essence of science: applications.

His non game theory research topic is mathematical programming. He published on this research field dozens of books, chapters of books, lecture notes and research papers in two languages. His publications were appreciated by journals like *Acta Cybernetica*, *Studia Sci. Math. Hungarica*, *Journal of Optimization Theory and Applications*, among others.

Ferenc Forgó's main research interest is game theory. Game theory itself is a huge field with many branches. Ferenc Forgó has contributed to many subfields of game theory.

First we mention his books on game theory. His book joint with Jenő Szép is a pioneering work of game theory in Hungarian. Generations of students and researchers have consulted this book. Its quality and importance is demonstrated by the fact that during the years this book appeared in three languages. He also authored other books, book chapters and lecture notes on game theory.

His contribution to the theory of games focuses on the most important solution concept in noncooperative game theory, on Nash equilibrium. He considered sufficient conditions for the existence of Nash equilibrium, from the viewpoints of both theory and applications. His results on this topic, with various coauthors, came out in journals like *Acta Math. Hungarica*, *Archiv der Mathematik* and *Journal of Global Optimization*, among others.

Another research field on which Ferenc Forgó has been active is the generalization(s) of correlated equilibrium. Correlated equilibrium itself is a generalization of Nash equilibrium. He introduced the notions of tree correlated equilibrium and soft correlated equilibrium. He also considered real life applications of these new concepts. He has published his findings, with various coauthors, in journals like *Central European Journal of Operations Research*, *European Journal of Operational Research* and *Mathematical Social Sciences*, among others.

Professor Forgó's further research topic focuses on bargaining problem, the Nash bargaining solution and its relation to multi-criteria decision making. He, together with coauthors, considered the implementation of the Nash bargaining solution, that is, how a protocol can result in the Nash bargaining solution, and how mathematical programming methods can be applied to its calculation. These results were published in journals like *Central European Journal of Operations Research* and *European Journal of Operational Research*, among others.

Service for the professional community

Ferenc Forgó has been a member of the Hungarian Operations Research Society for more than 20 years, of the Hungarian Operations Research Society, he served the society as a vice president in 1997-99, and former president in 1990-92 of the Society of Economic Modeling, member of the Econometric Society, and of the Mathematical Programming Society.

He has taken part in the organizing and program committees of many conferences. He was the chair of the Organizing Committee of the SING 8 conference in 2010 (the SING annual conferences are of the most important international game theory conferences) held in Budapest.

He is a member of the Editorial Board of the Central European Journal of Operations Research, and of Szigma (the journal of the Society of Economic Modeling).

He was honored with a Széchenyi Professorship for the period 1997-2000. He was awarded prestigious prizes:

- Albert Szent-Györgyi Prize (1998) by the Minister of Education,
- Béla Kerkó Prize (2000) by the Society of Economic Modelling,
- Golden Cross of Merit of the Republic of Hungary (2007) by the President of Hungary.

We think the scientific achievements of Professor Ferenc Forgó are outstanding. He plays an important role in the professional community. His educational and research activities are valuable contributions to the Hungarian Operational Research.

Hence we decided to give the Egerváry Jenő Memorial Award of 2014 to Professor Ferenc Forgó.

The Management Board of the Hungarian Operations Research Society

Budapest, 16 December 2014.