

Operations Research in the region of Szeged

Research in the various fields of operations research is mostly connected to universities and colleges of the region of Szeged. The Hungarian Academy of Sciences has a research group in Szeged which works in part also on OR problems. Some of the ventures also employ experts of OR in their logistics departments (e.g. Pick Rt.).

The strongest subfield of operations research studied in the region is bin packing (János Csirik, Gábor Galambos, Balázs Imreh, Eörs Máté). Data compression is represented by József Békési and Gábor Galambos. György Turán and Péter Hajnal are working on complexity theory and discrete optimization. Tamás Solymosi and András Pluhár investigate game theory. Tibor Csendes and András Csallner are active on global optimization. There is an ongoing project on chemical process network synthesis (Balázs Imreh, Zoltán Kovács, András Csallner and Tibor Csendes). Fuzzy theory is represented by József Dombi, Lóránt Porkoláb and Zoltán Alexin.

Operations research is taught at the József Attila University (JATE) for mathematics and computer science students (2-4 semesters, 2+1 hours a week), and it is present in the curriculum of the Gyula Juhász College too. The Computer Science PhD Program of JATE has a specialization (applied mathematics) with some OR courses. Acta Cybernetica, published by JATE, is devoted to a small extent also to OR papers.

The last Hungarian Conference on Operations Research was held in Szeged (october 1993, 3 days, about 90 papers, over 120 participants — in part from the neighbouring countries). OR researchers of the region publish over ten papers each year in leading international journals.

The international collaboration is extended to the Erasmus University, Rotterdam, TU-Graz, University of Washington, Seattle, University of Bern, University of Chicago. Since years, young employees from the

József Attila University receive their PhD. in operations research at the RUTGERS University. Several international programs supported also OR activities (Tempus, Cost, Humboldt-fellowship etc.), and some more are now under consideration (e.g. a project proposal for the Austro-Hungarian Action Fund).