The International Conference on Stochastic Programming

Praque, September 15—19, 1986

The International Conference for Stochastic Programming was held in Praque during the 15—19 September. The conference was organized by the Faculty of Mathematics and Physics of the Charles University in Praque, by the sponsorship of the Committee for Stochastic Programming of the Mathematical Programming Society and the International Institute for Applied Systems Analysis — IIASA — Laxenburg, Austria. The previous conferences took place in Oxford (1974), Köszeg (1981) and Laxenburg (1983).

About 64 participants were joint at the conference, from 19 countries concerned with the mathematical programming, in general and the stochastic programming, in particular. The distribution by countries of the participants was as follows: Czechoslovakia (20), USSR (8), USA (8), Hungary (6), Canada (1), France (1), FRG (3), Switzerland (2), Norway (2), Japan (2), Holland (1), Austria (1), Romania (1), Argentina (1), Brasil (1), GDR (2), Poland (2), Italy (1), Belgium (1).

Out of the 47 papers submitted to the conference, 11 were invited papers, each lasting 45 minutes, and 36 papers lasting 30 minutes each.

The papers on the basis of an invitation have been presented by prestigious personalities in stochastic programming, such as: Yu M. Ermoliev, V. S. Michalevich and N. Chepurnoi (USSR), A. Prékopa (Hungary), R. T. Rockafellar (USA), S. M. Robinson (USA), F. Louveaux and Y. Smeers (Belgium), G. Dantzig (USA), P. Kall (Switzerland), G. Pflug (FRG), R. Wets (USA), T. Szántai (Hungary) and B. Polyak (USSR).

Among the other personalities submitting papers we mention: Jitka Dupačovä, Vlasta Kaňková, J. Štěpán and V. Beneš (Czechoslovakia), A. Ruszozyński and W. Syski (Poland), K. Marti and D. Solte (FRG), L. Bazhenov, N. Novikova, V. Kabanov, I. Evstigneev (USSR), D. Haugland and S. W. Wallace (Norway), I. Deák, P. Kelle, Beáta Strazicky, Eva Komaromi, D. Monhor (Hungary), H. Ishii and S. Shiode (Japan), S. D. Flăm (France), J. Birge, A. King (USA), W. K. Klein Heneveld (Holland), W. Römish and R. Schultz (GDR), A. Gaivoronski (Austria), K. Frauendorfer (Switzerland), M.A.H. Dempster (Canada).

From our country, dr. I. M. Stancu-Minasian from the Laboratories of Economic Cybernetics Department — Academy of Economic Studies — has presented the paper "A Stochastic Approach to Some Goal Programming Problems" worked out together with St. Ţigan from C.T.C.E. — Cluj-Napoca.

All the papers have covered a comprehensive image of the actual stage of the stochastic programming, including related parts of the mathemátical statistics, probability theory and mathematical programming.

Many of these papers referred to theoretical problems of stochastic programming as: duality in probabilistic constrained linear programming; new approximation schemes for probabilities and expectations in stochastic programming, stability of convex programs under a probabilistic constraint qualification, stability and approximative methods in two-stage stochastic nonlinear programming problems, confidence regional method in stochastic programming, efficient solutions in stochastic programming, asymptotic properties of stochastic problems when integrals are estimated using Monte Carlo simulation, variant of stochastic quasigradient methods in two stage stochastic programming, penalty functions technique in two-stage stochastic programming etc.

Also, a series of applications of stochastic programs and experience with their numerical solutions have been presented. Thus, stochastic models for production and investment planning, stochastic models for optimal capacity expansion of electrical power networks, probabilistic estimations for the completion time in PERT and solution procedures for stochastic facility location problems under aspiration level criterion were presented.

The Committee on Stochastic Programming (COSP) whose chirman is prof. Andras Prékopa has stated that the Fifth International Conference on Stochastic Programming be held in August 1989 in USA and it will be organized by prof. J. Birge from Michigan University.

Dr. I. M. Stancu-Minasian