remarks, the importance of such a first, well organized and very informative 'guide' to a major part of a highly diverse and active field of research can hardly be overestimated.

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8[65–06, 65Kxx, 90Cxx].—JEAN-PAUL PENOT (Editor), *New Methods in Optimization and Their Industrial Uses*, International Series of Numerical Mathematics, Vol. 87, Birkhäuser, Basel, 1989, ix+227 pp., 24 cm. Price $55.00.

These are the proceedings of two symposia, one held in Pau, October 19–29, 1987, the other in Paris, November 19, 1987. Included are 14 contributions, all in English except for three, which are in French. Among the recent advances discussed are Karmarkar's algorithm in linear programming, methods for global optimization, simulated annealing methods and trust region algorithms. Also represented are topics related to computer science, such as expert systems developments and the automatic analysis of the effects of round-off and data errors. Industrial applications include those to biomedicine, structural problems in the automotive industry, and stock management problems.

W. G.

9[33–06, 33A65].—JAIME VINUESA (Editor), *Orthogonal Polynomials and Their Applications*, Lecture Notes in Pure and Appl. Math., Vol. 117, Marcel Dekker, New York and Basel, 1989, x+207 pp., $25\frac{1}{2}$ cm. Price $99.75.

This volume is the proceedings of the International Congress on Orthogonal Polynomials held in Laredo, Spain, September 7–12, 1987. It contains the text of six invited lectures and eleven contributed papers.

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