BOOK ANNOUNCEMENT


About the contents. Discrete optimization is an area which has tremendous practical importance, and which has grown from several fields of mathematics, operations research, and computer science. The practical importance comes about because modelling problems involving logical choices, discrete units, or non-linear functions lead naturally to optimization problems with discrete elements.

Developments have come from combinatorics, graph theory, group theory, boolean algebra, and convexity in mathematics. Integer programming has become an important part of mathematical programming and a tool in some operations research studies. Computer scientists have begun to study combinatorial optimization algorithms in a systematic way.

The present volumes have a broad scope. The 24 survey papers reveal the diversity of approaches as well as some important application areas and the current state of computer codes for solving these problems. The surveys are by leading contributors and point out major developments.

In addition to the surveys, there are reports from the NATO Advanced Research Institute on Discrete Optimization and Systems Applications. These reports are concerned with directions needed to successfully address the difficult, practical problems arising in industry and government. Many of these problems involve a discrete aspect; the types of problems and how they are currently treated is a part of these reports.

The volumes are unique in this area in presenting elementary surveys of broad scope with discussion material. They very well summarize the state-of-the-art and give valuable insight into trends and important developments.

About the readers. The two volumes should be of interest to students, researchers, professors, and practitioners. Novice researchers can find current thinking, at an elementary level of presentation, by leading researchers, or the major developments during the last several years. Experts can broaden their knowledge in areas related to their own and can use the book as a reference. Practitioners can learn about the diverse approaches being taken in problem solving and can compare their experiences with other practical ongoing work.


**Contents.** *Discrete Optimization II:*

