

## Foreword

This volume is dedicated to Hoang Tuy, who was Editor-in-Chief of *Acta Mathematica Vietnamica* from 1980 to 1990, on the occasion of his seventieth birthday.

Hoang Tuy was born in Quang Nam, Vietnam, in 1927. He is essentially a self-taught mathematician though he had spent two years at Moscow State University where he received his Ph. D in 1959 under the supervision of D. E. Menshov. From 1961 to 1968 Hoang Tuy was the Dean of the Department of Mathematics, University of Hanoi. In 1969 he moved to the National Center of Scientific Research (nowaday the National Center of Sciences and Technology) where together with Le Van Thiem he worked for setting up the Institute of Mathematics. He served as Vice Chairman of the Scientific Committee and Head of the Department of Optimization until 1979. From 1980 to 1990 he was Director of the Institute of Mathematics.

Hoang Tuy began his mathematical research on real analysis. Due to his commitments with practical applications he gradually becomes involved with applied mathematics. The main areas of his contributions are convex analysis (minimax problems, inconsistent convex inequalities and stability, fixed point computational theory) and mathematical programming (concave programming, d.c. programming, global optimization). He has written more than 100 research papers and several monographs and lecture notes. His pioneering paper on concave minimization under linear constraints, published in Soviet *Doklady* in 1964, was one of the first steps in deterministic global optimization. There he introduced the concavity cut, now known as Tuy's cut, and conical partition, subsequently to become of frequent use in global optimization.

Hoang Tuy always paid attention to the teaching and the applications of mathematics in Vietnam. He is well known for his excellent lectures. Many of his former students have become established mathematicians themselves. In the early sixties he introduced methods of operations research into Vietnam which now have found broad applications in many areas.

The works of Hoang Tuy have been highly acknowledged in Vietnam as well as abroad. He was one of the founder and the first Secretary General of the Mathematical Society of Vietnam. In 1996 he was awarded the Hochiminh Prize, the highest national prize of Vietnam, in recognition

of his achievements in Natural Sciences. Hoang Tuy has been invited to work and to lecture at many universities and research centers all over the world. He has served in the program committees and was plenary speaker of several international conferences in Mathematical Programming. For many years he was member of the editorial board of the journals *Mathematical Programming* and *Vietnam Journal of Mathematics* and of the Scientific Council of the Banach International Mathematical Center. He still serves in the editorial boards of the journals *Optimization*, *Journal of Global Optimization*, and *Acta Mathematica Vietnamica*. In 1995 he was received the degree Doctor honoris causa of the Linköping Institute of Technology.

The present volume is a collection of research articles of authors close to Hoang Tuy personally and mathematically. We would like to thank them for their contributions to this volume.