

PREFACE

2006 Hang Lung Mathematics Awards (HLMA) marked the second occasion that the Department of Mathematics at The Chinese University of Hong Kong and Hang Lung Properties collaborated and jointly held the biennial mathematics research competition for secondary school students in Hong Kong. We were pleased not only by the growing participation and interest among students and teachers, but also by the creativity and ingenuity of the students in carrying out their research. We were particularly delighted to hear that some schools have even started interest groups in mathematics research.

This book has collected the research papers of the winners of the 2006 HLMA which have met a high level of academic standards comparable to that of the top-tier university level thesis. It was gratifying to see that many gifted young students have risen to the challenge and have delivered excellent results under the quality guidance of their teachers.

We believe that mathematics is the foundation upon which scientific discoveries are built. By encouraging secondary students to engage in intellectual research, we hope to promote and cultivate a sense of serious scholarship among the younger generations.

We wish to take this opportunity to thank the editors for their tireless efforts, dedication and patience throughout the editing process. We hope the publishing of these excellent papers would serve to inspire more students to engage in academic discovery, and to enlist the support of teachers, schools, government, and the community in this process.

Professor Shing-Tung Yau
Director, The Institute of Mathematical Sciences
The Chinese University of Hong Kong

Mr. Ronnie C. Chan
Chairman
Hang Lung Properties

October 2012