

Third Asia-Pacific Symposium on Wind Engineering

December 13-15, 1993

Hong Kong

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Volume I

Edited by

K.M. Lam Y.K. Cheung

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December 13-15, 1993 Hong Kong

Edited by

K.M. Lam and Y.K. Cheung
The University of Hong Kong

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Professor Y.K. Cheung
Department of Civil and Structural Engineering
The University of Hong Kong
Pokfulam Road
Hong Kong
Telephone: (852) 859 2666
Fax. No.: (852) 559 5337

FOREWORD

The Third Asia-Pacific Symposium on Wind Engineering (APSOWE III) is jointly organized by the Department of Civil and Structural Engineering, The University of Hong Kong and The Hong Kong Institution of Engineers from December 13 to 15, 1993 in Hong Kong. The choice of Hong Kong as the location for the Symposium is by no means accidental. As we all know, Hong Kong is one of the great cities in Asia on the Pacific rim, and this region is the only area in the world that is experiencing rapid economic growth and infrastructure development. With her clusters of ultra-tall buildings, her many steep slopes, the frequent onslaught of tropical cyclones or typhoons, her concern for air pollution from factory and vehicle emissions, Hong Kong is definitely the ideal city to hold such a meeting on wind engineering. In addition, Hong Kong is now receiving worldwide attention for her replacement airport at Chek Lap Kok which also includes other core projects such as the Tsing-Ma Bridge which is going to be one of the longest suspension bridges in the world.

Following the objectives of the previous two Symposiums in Roorkee and Beijing, this Symposium aims to bring together scientists and engineers in Asia-Pacific area as well as other parts of the world to discuss and exchange ideas and experience related to the research and practice of wind engineering. In the past decade, there has been rapid development on wind engineering research and practice in the Asia-Pacific region. Learned bodies representing wind engineers and scientists have been formed in many countries. Among which, the Australian Wind Engineering Society, the Chinese Society for Wind Engineering and Industrial Aerodynamics and the Japan Association of Wind Engineering are kindly sponsoring the present Symposium. We are confident that the Asia-Pacific Symposium has become and will remain an important conference for wind engineers and scientists regionally as well as internationally.

This year, the organizing committee has received over 250 abstracts covering all topics of wind engineering from over 20 countries. Based on the submitted abstracts, about 180 papers were selected and authors were invited to submit six-page manuscripts for inclusion in the Proceedings. The present Proceedings in two volumes contain these contributing papers, together with three keynote papers and three invited papers. A noticeable feature is the large number of papers on bridges, probably due to the importance of infrastructure development in the coastal cities in the Asia-Pacific rim. We would like to take this opportunity to thank the authors of all papers as well as those who have submitted abstracts.

In addition, we would like to thank the precious assistance of members of the Scientific Advisory Board and the Organizing Committee. Special appreciation goes to Professor T.F. Sun and the Chinese Society for Wind Engineering and Industrial Aerodynamics who organized the paper submission in China and the participation of the members of his society. We would also like to thank the Hong Kong Institute of Architects for being an honorary sponsor of this Symposium.

Last but not least, the success of the Symposium also depends on the generous support of various organizations. The donations are largely used to subsidize those participants from the developing countries, and we would like to acknowledge their kindness with our deepest gratitude.

Y.K. Cheung Chairman Organizing Committee

Acknowledgement

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