# Developments in Structural Engineering and Construction Technology

Editors: **Djwantoro Hardjito Antoni Ima Muljati** 

Proceedings of the Benjamin Lumantarna Symposium on Structural Engineering and Construction Technology, Surabaya, Indonesia 14 September, 2012

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Edited by

Djwantoro Hardjito, Antoni & Ima Muljati

Department of Civil Engineering Petra Christian University Surabaya, Indonesia

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### **PREFACE**

In recognition of Prof. Dr. Benjamin Lumantarna's outstanding contribution to Structural Engineering, Construction Technology, and to his four decades service in Civil Engineering Education at Petra Christian University, a number of longtime friends, colleagues and former students from around the world were invited to present papers on the Benjamin Lumantarna Symposium on Structural Engineering and Construction Technology, a theme that has been a major part of his research, deep involvement and profound contributions.

The symposium was held at Petra Christian University, Surabaya, Indonesia, on Friday, 14 September 2012; hosted by the Civil Engineering Department of the university in conjunction with the Golden Jubilee Celebration of the Department.

We would like to thank the authors, the session chairmen and the sponsors for their contribution, which enable this symposium to be held. Our thanks also go to Civil Golden Jubilee Organizing Committee, Petra Christian University, for their hard work.

As this publication represents a wealth of knowledge of eminent researchers and engineers involved in Structural Engineering, Construction Technology and Civil Engineering Education, it is hoped that this symposium volume will become a useful resource for the construction industry and Civil Engineering Education.

Djwantoro Hardjito, Antoni & Ima Muljati Petra Christian University, Surabaya, Indonesia September 2012

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