

Transit Development in Rock Mechanics

Recognition, Thinking and Innovation

MEIFENG CAI, GENG SHE YANG & JIN'AN WANG — EDITORS



Transit Development in Rock Mechanics—Recognition, Thinking and Innovation

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CRC Press

Taylor & Francis Group

Boca Raton London New York Leiden

CRC Press is an imprint of the
Taylor & Francis Group, an **informa** business

A BALKEMA BOOK

CRC Press/Balkema is an imprint of the Taylor & Francis Group, an informa business

© 2015 Taylor & Francis Group, London, UK

Typeset by V Publishing Solutions Pvt Ltd., Chennai, India

Printed and bound in Great Britain by CPI Group (UK) Ltd, Croydon, CR0 4YY

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Published by: CRC Press/Balkema

P.O. Box 11320, 2301 EH Leiden, The Netherlands

e-mail: Pub.NL@taylorandfrancis.com

www.crcpress.com – www.taylorandfrancis.com

ISBN: 978-1-138-02730-5 (Hbk)

ISBN: 978-1-315-72287-0 (eBook PDF)

TRANSIT DEVELOPMENT IN ROCK MECHANICS—RECOGNITION,
THINKING AND INNOVATION

Preface

This proceedings contain 150 papers accepted for The 3rd ISRM Young Scholars' Symposium on Rock Mechanics, which was held in November 8–10th, 2014, Xi'an, China. The Symposium is organized by the Commission on Education of International Society for Rock Mechanics and Xi'an University of Science and Technology, and sponsored by International Society for Rock Mechanics (ISRM) and Chinese Society for Rock Mechanics and Engineering (CSRME).

The ISRM Young Scholars' Symposium on Rock Mechanics is a series event that was initially proposed by the Commission on Education of ISRM and started through April 28–May 1, 2008. The aims of the Symposium are at providing an ideal platform for exchanging ideas and information, sharing knowledge and experience between young scholars. Through the past two Symposiums, the young researchers acquired fruitful knowledge and information in theoretic advancement and analytic improvement associated with new techniques and new engineering practice. The Symposium stimulates and encourages the Young Scholars so much that they will tackle our understanding rock mechanics and rock engineering problems with renewed vigor.

Rock mechanics is a cross discipline of applied science and engineering. Recent research in rock mechanics focused on the challenges in the transition of mining from surface to underground, rock excavation from shallow to a great depth. The contents of the proceedings present new recognition, thinking and innovation gained by young scholars, whose are the most active and frontier practitioners in the transitional era. None the less, some interesting topics reflect to the recent research achievement on the thermal and frozen properties of rocks, coupled fluid permeating and gas emission, new advanced cements employed in rockmass reinforcement, dynamic response in blasting, and versatile trying in prediction of rock burst and geo-hazards, and so on.

In peer-view of the papers, Prof. F.L. He from China University of Mining and Technology (Beijing), Prof. J.A. Wang, Prof. M.W. Xie, Prof. B. Song, Prof. S.J. Qu, Prof. Z.Y. Tan, Prof. X.M. Zhou, Dr. W.H. Tan, Dr. Y. Liu, Dr. S.J. Miao, Dr. S. You, Dr. Y. Li, Dr. Q.F. Guo from University of Science and Technology Beijing and Prof. X.P. Lai from Xian University of Science and Technology contributed their efforts, which are sincerely acknowledged.

We look forward to continuing the ISRM Young Scholars' Symposium on Rock Mechanics to be held not only in China, but also in other countries in a hope that much more papers can be received from different countries, and fulfill our initiatives in communication between young scholars with their creative thinking and contribution in rock mechanics all around of the world.

Meifeng Cai
The Chairman of ISRM Commission on Education
The member of Chinese Academy of Engineering
August 6, 2014 in Beijing

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Acknowledgements

The 3rd ISRM Young Scholars' Symposium on Rock Mechanics is sponsored by the International Society for rock mechanics (ISRM), and the Chinese Society for Rock Mechanics and Engineering (CSRME), organized by the ISRM Commission on Education as an ISRM specialized conference 2014. University of Science and Technology Beijing and Xi'an University of Science and Technology are co-organizers of the symposium.

Sincere thanks to Professor J.A. Hudson, the former president of ISRM, and Professor X.T. Feng, the President of ISRM, for their support to the Symposium.

The contribution made by the Members of the International Advisory Committee, the Members of the Academic Committee and the Members of the Organizing Committee of the symposium are greatly appreciated.

Thanks are also to Dr Y.X. Wang, Dr J.W. Peng, Ms. J. Tang, Ms. H.F. Ji, Mr Y. Gao, Mr M.T. Ding, Mr K.Z. Qi for their excellent work in compiling the proceedings of the symposium.

Financial support to the Symposium from the state key fundamental research scheme (973 plan in grant No. 2010CB731500) is also deeply appreciated.

Meifeng Cai
Chairman of the Organizing Committee

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