
Preface

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Biographical notes: Vladislav Kecojevic is an Associate Professor and a holder of Centennial Career Development Professorship in Mining Engineering. He received BS, MS and PhD Degrees in Mining Engineering in 1991, 1996, 2000, respectively, all from University of Belgrade. Before joining academia in 2001, he was employed with Krupp Canada. He published four books and over 100 peer-reviewed journal and conference papers. He is an Associate Editor for the peer review of technical papers for SME Mining Engineering and SME Transactions. He serves as a member and an officer on several SME and various International Committees. He is also a reviewer for numerous professional journals and governmental proposals.

It is with great pleasure that I introduce the inaugural issue of the *International Journal of Mining and Mineral Engineering* (IJMME). This is an interdisciplinary and refereed journal that promotes feasible mining system design, development, and management, bringing together sustainable technologies, the people, and sound processes. It provides cross learning between various scientific and technological, as well as business and economics, disciplines.

With a worldwide growth and increasing demand for coal, metals and non-metals, innovative solutions to the safe, efficient, and environmentally responsible mining matters as much now, if not more, than it ever has. The objective of IJMME is to provide an international forum for academics, industry leaders, and policy makers to investigate and exchange novel ideas and disseminate knowledge and information covering the broad range of activities including exploration, extraction, economics, environment, safety and health, information technologies, and management in mining and mineral engineering.

The planned vision and scope of the IJMME are well-captured in the comments of Dr. Samuel Frimpong, Robert H. Quenon Professor and Chair of Mining and Nuclear Engineering at Missouri University of Science and Technology. Dr. Frimpong states that

“IJMME needs to provide a platform for technological innovations, research incubation, scientific and engineering discussions and a breeding ground for tomorrow’s ideas for advancing knowledge and frontiers, and for supporting the challenging and multi-faceted dimensions of the mining engineering profession.”

A total of eight papers are presented in this inaugural issue of the IJMME. They are co-authored by 21 researchers from USA, Canada, Australia, India, Serbia and Brazil.

Jeff Boisvert and Clayton Deutsch from University of Alberta and Julián Ortiz from the University of Chile presented a methodology and software for assessing recoverable reserves at Selective Mining Unit (SMU) resolution. These reserves and their uncertainty are calculated by performing matrix (LU) simulation at a fine resolution and then scaling these simulated models to SMU size to calculate the expected tonnage and average grade above several cutoffs.

Snehamoy Chatterjee from University of Alaska Fairbanks, Ashis Bhattacharjee, Biswajit Samanta and Samir Kumar Pal from IIT Kharagpur, classified the the rock types of an iron ore deposit using the digital image analysis technique.

Samuel Frimpong and Kwame Awuah-Offei from the Missouri University of Science and Technology, and Ying Li with the Bucyrus International, published their research on cable shovel health and longevity and operator efficiency in oil sands excavation. In this paper, the authors advance the reliability of the cable shovel boom through dynamic and stress modelling using rigid and flexible multi-body dynamics theory.

Erkan Topal from the University of Queensland, presented several project evaluation techniques in order to manage the risk and uncertainty in the decision making process of a mining investment.

David Cliff and Tim Horberry, also from the University of Queensland, considered the principal variations in accident and incident risk in relation to roster design within the Australian coal mining industry.

Antonio Nieto and Alek Duerksen, Virginia Polytechnic Institute and State University, provided a brief introduction of mine safety and health legislation governing the mining industry and how it has affected mining technology in the USA.

Dinko Knezevic and Bozo Kolonja from the University of Belgrade, presented the results of the tests for the determination of the most suitable concentration for the ash and the bottom ash hydromixture transport.

L.R.P. de Andrade Lima from the Federal University of Bahia and Daniel Hodouin from the Laval University, presented the results of the study on multivariate statistical analysis of gold cyanidation plant data.

Each of these fine papers demonstrates the degree of excellence expected in research efforts pertaining to mining and mineral engineering.

I invite the professionals, academics, researchers and policy makers, working in the fields of mining and mineral engineering to submit original papers, review papers, technical reports, case studies, conference reports, management reports, book reviews, notes, commentaries, and news to IJMME. I can assure you that a peer-review process will be carried-out in an efficient and timely manner.

I would like to thank to IJMME associate editors and all the members of the editorial board for their help in building this journal. I would like to extend my special thanks to Mohammed Dorgham, Jim Corlett, Liz Harris, Sue O'Mara, Ian Winship and other great Inderscience people for their continuous help and contribution to this journal.