

Report on ARMS-9 Bali, 2016

1. The 9th ARMS (Asian Rock Mechanics Symposium - Asia Regional ISRM - International Society for Rock Mechanics - Symposium) in The Stones Hotel, Bali in the period of October 17th – 20th has been done without notable difficulties. At this opportunity, I would like to express my gratitude to the President ISRM, Vice President for Asia ISRM and Secretary General ISRM in particular for supporting the Indonesia Rock Mechanics Society (IRMS) to hold the ARMS-9 in Bali. It is also equally important to thank the following,
 - 1.1. All colleagues of the ISRM
 - 1.2. Petromindo (Event Organizer)
 - 1.3. Indonesian paper reviewers: Prof. Budi Sulistianto (ITB); Prof. Irwandy Arif (ITB); Prof. Made Astawa Rai (ITB); Prof. Ridho Kresna Wattimena (ITB); Dr. Barlian Dwinagara (UPN); Dr. Ganda M. Simangunsong (ITB); Dr. Ginting Jalu Kusuma (ITB); Dr. Masagus Ahmad Azizi (Trisakti University); Dr. Nuhindro P. Widodo (ITB); Dr. Pantjanita Novi Hartami (Trisakti University); Dr. Singgih Saptono (UPN); Dr. Sugeng Wahyudi (ITB-Kyushu University); Dr. Suseno Kramadibrata (BRM); Dr. Tri Karian (ITB); Mr. Eman Widijanto (PTFI-ITB); Mr. Rudhy Andry Tanjung (ITB); Mr. Simon Heru Prasetyo (ITB-CSM); Mr. Yudhidya Wicaksana (ITB-SNU)
 - 1.4. International paper reviewers: Prof. Hideki Shimada (Japan); Prof. Norikazu Shimizu (Japan); Prof. Resat Ulusay (Turkey); Prof. Seokwon Jeon (Korea); Prof. Takashi Kyoya (Japan); Dr. Takashi Sasaoka (Japan); Prof. Xia-Ting Feng (China); Prof. Yingxin Zhou (Singapore); Prof. Yuzo Ohnishi (Japan)
 - 1.5. International Committee members: Prof. Xia-Ting Feng (China); Dr. David Beck (Australia); Dr. Paul Hagan (Australia); Prof. Ernesto Villaescusa (Australia); Prof. Yossef Hatzor (Israel); Dr. Gareth Swift (UK); Prof. Seokwon Jeon (Korea); Dr. Luis Lamas (Portugal); Dr. Jacques Lucas (South Africa); Dr. Pawel Nawrocki (Middle East Asia); Prof. Takashi Kyoka (Japan); Prof. Yuzo Ohnishi (Japan); Prof. Norikazu Shimizu (Japan); Dr. Takashi Sasaoka (Japan); Dr. Krishna Kanta Panthi (Nepal-Norway); Prof. Frederic Pellet (France); Prof. Qihu Qian (China); Dr. Antonio Samaniego (Peru); Dr. John Tinucci (USA); Dr. Manoj Verman (India); Prof. Ivan Vrkljan (Croatia); Prof. Yingxin Zhou (Singapore); Prof. Resat Ulusay (Turkey)
 - 1.6. Sponsors and exhibitors: Groundprobe, IDS Australasia, Leica Geosystem, J Resources Nusantara, PT. Dua Tiga Makmur, PT Freeport Indonesia, Atlas Copco, ACE Instrument, Trumer Schutzbauten GmbH, APS GmbH Geotechnik, ACE Instrument, Kajima Corporation, Leopard (safety gears) and Laboratory of Geomechanics and Mining Equipment of Institut Teknologi Bandung (ITB)
 - 1.7. Faculty members and students of local universities: Mulawarman University, State of Padang University, Pembangunan Nasional "Veteran" Yogyakarta University, Trisakti University, Hasanuddin University, Sriwijaya University, Gadjah Mada Yogyakarta University, Institut Teknologi Bandung (ITB)
 - 1.8. The “working students” of the Laboratory of Geomechanics and Mining Equipment of ITB
2. Total participants registered were 241 people representing 23 countries (Europe, Asia, Africa, Australia-New Zealand, North America, and South America). The participants consist of 10

accompanying persons, 172 people from universities, and 69 people from companies/professionals.

3. Reception Night sponsored by J Resources Nusantara was held in Blue Sapphire Lounge, The Stones Entertainment, Bali on the 17th October 2016 and attended by not less than 120 people.
4. Nine keynote lectures as designed, have been well delivered by the following,
 - 4.1. Prof. Resat Ulusay - Chairman of the Commission on Testing Methods ISRM, Hacettepe University, Turkey
 - 4.2. Prof. Seokwon Jeon - VP Asia ISRM, Seoul National University, Korea
 - 4.3. Prof. Ernesto Villaescusa - Western Australian School of Mines, Western Australia
 - 4.4. Prof. Norikazu Shimizu - VP at Large ISRM, Yamaguchi University, Japan
 - 4.5. Prof. Shunsuke Sakurai - former President ISRM, Kobe University, Japan
 - 4.6. Prof. Jian Zhao - former VP ISRM, Monash University, Australia
 - 4.7. Prof. Pinnaduwa H.S.W. Kulatilake - University of Arizona, US
 - 4.8. Prof. Omer Aydan - Selected Member of the Commission of Testing Method ISRM, Ryukyus University, Japan
 - 4.9. Dr. Suseno Kramadibrata - President IRMS
5. Eight of 88 authors did not present their papers due to some reasons. The 88 presentations were classified into 7 session topics, including of energy, infrastructures, rock mass characterization, constitutive model & numerical modeling, rock excavation, underground mine stability, and open pit slope stability. The majority of the papers, 18 papers in total, were categorized in session topic of rock mass characterization, which was the most popular one. Seven slot of posters were empty or was unable to be displayed from total of 44 posters were intended.
6. Two moderators were unable to attend the symposium from 21 moderators were planned. Fortunately, the organizing committees immediately responded to make replacement.
7. The student drilling competition was successfully conducted safely without any accident/injury prior to the Symposium and the competition was participated by 16 students consisting of 3 students from Korea, a student from China, a student from United Arab Emirates, a student from Nepal, 3 students from Japan, and 6 students from Indonesia. It is worth mentioned that 4 participants were biologically female students. Thanks to Dr. Khrisna Kanta Panthi (Nepal-Norway) and Dr. Ganda Simangunsong (ITB) for assessing the safety procedure. It is of importance to note that the drilling competition was the first time performed in the ARMS history. Hopefully, in the next ARMSs the drilling competition can be one of the compulsory agendas.
8. Not less than 80 participants attended the Student Night and the party which was held by the pool of the Stone hotel went well. The committee was able to manage the Student Night according to plan in which all the participant enjoyed the night and hopefully become memorable event.
9. Awarding Night sponsored by PT Freeport Indonesia, was very much appreciated and the art performances were gorgeous for approximately 100 participants.
10. Ten Scholarships, each for 5 million IDR were ceremonially given in the Awarding Night, as well as the winners of the student drilling competition. The individual recipients of such scholarship came from China, Korea, Indonesia, India, Japan (2 students), Malaysia, Russia, Thailand and United Emirate Arab.

11. The two (2) best papers were awarded to individual authors from Japan (General) and China (Young Scientist) and two (2) best posters were awarded to authors, individually, from Japan (General) and Korea (Young Scientist).
12. Asian Council Meeting was held on Monday, October 17th, Chaired by Prof. Seokwon Jeon (VP Asia ISRM) and attended by the representatives from Korea, China, Taiwan (South East Asia), Malaysia, Nepal, Singapore and Indonesia. Regrettably, the council meeting could not be attended by the Japanese representative as there were some flight delays because of repairing the Denpasar-Bali runway on Saturday 15th October 2016.
13. On Wednesday, October 19th, Prof. Resat Ulusay chaired a meeting of the Commission on Testing Methods ISRM and attended by Prof. Omer Aydan, Prof, Seokwon Jeon and Dr. Suseno Kramadibrata.
14. The number of participants from industry who attended and produced papers was significantly below the expectation. It is therefore essential to encourage geotechnical/rock mechanics consultants or geotechnical/rock mechanics academics to carry out further applied rock mechanics related research in rock mechanics laboratory as well as in the mining industry and subsequently produce more joint papers.
15. Upon the completion of the symposium, I received appreciation and praise directly (via conversation) and indirectly (via email and W/A) from a number of participants and senior ISRM members across the globe, and they all did agree to say that the symposium was very successful. It is for that reason for me to sincerely pay tribute to the members of the Organizing Committee that was Chaired by Prof. Ridho Kresna Wattimena, the Excellence Team from Petromindo as well as all the “working students” who have had spare no effort to spend long working hours and put great endeavor bringing the symposium into a very high quality accomplishment. Despite the ARMS-9 was very comfortable and casual and yet from the perspective of scientific and engineering it was still a high grade international rock mechanics symposium. In addition, the ISRM Asian region has, once again, shown its current high level of performance.
16. Photos may be downloaded from <https://goo.gl/2evX2i>

Best Regards,

Suseno Kramadibrata

President of Indonesian Rock Mechanics Society