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The 2nd Mineral Processing and Technology International Conference

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Preface

Mineral Processing and Technology International Conference (mineprocèt) 2018 was a scientific meeting that is technically organized by Research Unit for Mineral Technology in conjunction with Indonesian Science Expo (ISE) 2018 organized by Indonesian Institute of Sciences (LIPI). mineprocèt 2018 was held on November 1, 2018 at Indonesia Convention Exhibition (ICE), BSD City, Serpong, Tangerang, Indonesia.

This symposium aimed to bring together researchers, academicians, and scholars all around the world to share information and their research results. This event was also expected to become a beneficial media in exchanging their innovative ideas and build research collaborations in the future. The symposium covered all scientific and technical activities in mineral processing and technology – from basic to the advanced applications – to pitch ideas, insight and findings for optimal and sustainable use of sub-economic mineral resources especially those related to mineral beneficiation, extractive metallurgy (bio-hydrometallurgy, pyrometallurgy, electrometallurgy), separation and purification, physical metallurgy and foundry, powder and nano technology, mineral industry application, energy and coal technology, mineral economy and policy, phytoextraction and environmental remediation, control and modelling for mineral processing.

We specially invited 4 scientists as keynote speakers from various countries to share their knowledge to all participants. The total participants attending this symposium were 51 people. This symposium has successfully attracted 46 submitted papers. Papers that have been presented in the mineprocèt 2018 were eligible for publishing in IOP Journal of Material Science and Engineering: Conference Series. The editorial board has decided to accept 41 papers from Indonesia and Philipines. The accepted papers have passed through strict reviewing process by scientific committee of this symposium. EDAS system has been used to facilitate the submission, reviewing, and revision processes.

We would like to appreciate all of our co-organizers, supporting societies, sponsors, and Research Unit for Mineral Technology staffs who have contributed generous amount of grants and effort to support us during the symposium. We hope this symposium has successfully enabled us to share and communicate our knowledge and skills and to build collaboration among the participants. We are looking forward to welcoming you in Indonesia again. See you in the next mineprocèt!

Erik Prasetyo, Ph.D.

Editor-in-Chief

Research Unit for Mineral Technology
Indonesian Institute of Sciences



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Keynote Speaker I

Assoc. Prof. Dr. Sabine Willscher

Martin Luther University Halle-Wittenberg, Germany

Subject Area

Phytoremediation; Phytoextraction; Bioremediation;
Mining Remediation; Microbiotechnology;
Biometallurgy

Biography

Sabine Willscher was born in Eisenach, Germany. She received her Ph.D degree in Technology University Mareburg in 1988. Her education and scientific career was started as Scientific Assistant and Lecturer in Technology University Mareburg. She was also a visiting scholar in Federal Institute Geophysical Society & Natural Resources, Hanover, Germany, 2000 and Colorado School Mines, Golden, Colorado, 2001—2002. From 2001-2016, she was a science researcher and lecturer in Technology University Dresden, Pirna, Germany. Now, she is a senior lecturer in Martin Luther University Halle-Wittenberg, Germany. She also has some other scientific and education activities such as a Member curriculum committee United Nations Environmental Program, Dresden, since 2004 and a member International Science Committee Biohydrometallurgy, Germany, since 2005. She is an author/co-author of some publications in International Journals. She is also a reviewer of some International Journal and Conference Proceedings.



Keynote Speaker II

Assoc. Prof. Ir. Siti Khodjah Chaerun, Ph.D.

Institut Teknologi Bandung (ITB), Indonesia

Subject Area

Environmental Geomicrobiology; Mineral

Biotechnology; Bioremediation; Biocorrosion

Biography

Siti Khodijah Chaerun received her Bachelor and Master of Engineering in Environmental Engineering from Institut Teknologi Bandung (ITB), Bandung, Indonesia. Her Ph.D degree in Environmental Geomicrobiology was received from Kanazawa University, Japan in 2004. After finished her doctoral studies, she obtained DAAD Fellowship to conduct the post doctoral researches at the Leibniz Centre for Agricultural Landscape Research (ZALF), Institute of Landscape Matter Dynamics & Institute of Soil Landscape Research, Munchenberg, Germany in 2006. She was also awarded as Visiting Scientist at some research centers that are the Graduate School of Bio-applications and Systems Engineering, Tokyo University of Agriculture and Technology, Japan in 2007; the Department of Earth Sciences, Faculty of Science, Kanazawa University, Japan in 2008; and Department of Energy and Resources Engineering, College of Engineering, Peking University, Beijing, China in 2012-2014. In 2008-2009, she also received IDB Fellowship for Postdoctoral Associate at the Department of Microbiology, the University of Georgia, Athens, GA, USA. Now, she is a senior lecturer in Department of Metallurgy Engineering, Institut Teknologi Bandung (ITB), Indonesia with the special field of biominerolgy, biomining, biometallurgy, and bioremediation. She is also a head of Laboratory of Geomicrobiology, Biomining, and Biocorrosion. She is an author/co-author of more than 50 publications in International Journals. She is also a reviewer of some International Journal and Conference Proceedings.



Keynote Speaker IV

Bouman Tiroi Situmorang, S.T., M.T., IPU

Asosiasi Perusahaan Industri Pengolahan & Pemurnian Indonesia (AP3I)

Subject Area

Metallurgy; Mining

Biography

Bouman Tiroi Situmorang received his Bachelor of Engineering in Metallurgy from Institut Teknologi Bandung (ITB), Bandung, Indonesia in 1996. Next, he pursued his Master of Engineering in Industry from Institut Teknologi Sepuluh November (ITS), Surabaya, Indonesia in 2006. He also obtained the prominent professional engineer degree from Indonesian Engineer Society in 2018. He is a metallurgist in industry especially in smelting industries. Since 1997, he works in PT. Smelting Gresik that is a biggest copper smelting industry in Indonesia. Now, he is a Senior Manager of Technical External Relation in PT. Smelting Gresik. Besides his professional work, he also has many activities that are related to his professional expertise. He is member of The Minerals, Metals, and Material Society (TMS), Indonesian Engineer Society (PII), and Perhimpunan Ahli Pertambangan Indonesia (PERHAPI). Now, he is a chairman of Metallurgical Engineering Alumni Association of ITB, a co-chairman of PERHAPI East Java, a chairman of Copper Committee of Asosiasi Perusahaan Industri Pengolahan & Pemurnian Indonesia (AP3I), and also a member team of professional certification of metallurgy in PII. He has great attention to the development of metallurgical engineering education, so that he also join in the Department of Metallurgical Engineering, ITB as a member of Advisory Board.



Keynote Speaker III

Assoc. Prof. Dr. Anwaruddin Hisyam

Universiti Malaysia Pahang, Malaysia

Subject Area

Process Integration; Rare Earth Separation Processes;
Gold Mining and Processing

Biography

Anwaruddin Hisyam received his Bachelor of Engineering in Chemical Engineering from Universitas Gadjah Mada (UGM), Yogyakarta, Indonesia. He pursued his Master of Science in Process Integration from University of Manchester Institute of Science and Technology (UMIST), England. His Ph.D degree in Chemical and Natural Resources Engineering was received from Universiti Malaysia Pahang, Malaysia. Now, he is a senior lecturer in the Faculty of Chemical and Natural Resources Engineering. He is also a Principal Fellow and Reserach Fellow in Rare Earth Research Center. In addition, he is also an Editor and Reviewer some International Journals and Conference Proceedings. He has delivered some Keynote Speeches in some International Conferences such as Engineering International Conference (Universitas Negeri Semarang, Indonesia) in 2018 and International Conference Industrial, Mechanical and Chemical Engineering (Universitas Sebelas Maret, Indonesia) in 2017.