

Iterams project. Scientific production

List of publications, papers sent for review, articles and posters in conferences

Date: Sept 4th 2020

1. Bengü, I. Ö. Bıçak, S. Özçelik, M. Can, Z. Ekmekçi (2020) Sulphate Removal from Flotation Process Water using Ion Exchange Resin Column System. Minerals, 10, FOR PEER REVIEW.
2. Bomberg, M., Hanna Miettinen , Benjamin Musuku , Päivi Kinnunen (2020) First insights to the microbial communities in the plant process water of the multi-metal Kevitsa mine. Research in Microbiology <https://doi.org/10.1016/j.resmic.2020.07.001>
3. Bomberg, M., Hanna Miettinen (2020) Data on the optimization of an archaea-specific probe-based qPCR assay. VTT.
4. Bomberg M., Miettinen H., Musuku B., Kinnunen P. 2019. First insight to the microbial communities in the plant process water of the multi-metal Kevitsa mine. Proceedings of International Biohydrometallurgy Symposium 2019. Fukuoka, Japan.
5. Di Noi, C., A. Ciroth (2018) The Importance of a Three-dimension Approach in LCA. A Screening Study on Mining addressing Environmental, Social and Cost Aspects LCA XVIII Conference (ACLCA) Fort Collins, Colorado, September 25th-27th 2018.
6. Di Noi, C., A. Ciroth, M. Rääkkönen, S. Horn, R. Molarius (2019) The experience of two European projects on how to combine social, environmental, and economic values in mining. SETAC EUROPE 29th ANNUAL MEETING 26-30 May 2019 | Helsinki, Finland
7. Di Noi, C., Franziska Eisfeldt , Andreas Ciroth (2018) Sustainable mining: how to quantify social issues in the mining industry and metals supply chain. 70th LCA Discussion Forum , ETH Zürich Social LCA – Challenges and solutions in application and implementation. November 22, 2018
8. Falaha, M., Katja Ohenoja a, Robert Obenaus-Emlerb, Paivo Kinnunena, Mirja Illikainen (2019) Sub-micron tailings as accelerators in alkali-activated cements from low-alumina mine tailings. Submitted to Cement and concrete research Journal
9. Falaha, M., Robert Obenaus-Emlerb, Paivo Kinnunena, Mirja Illikainen (2019) Effect of activator concentration and curing conditions on alkali-activation of low-alumina mine tailings. Journal of Waste and Biomass Valorization. <https://link.springer.com/article/10.1007/s12649-019-00781-z>
10. Falaha, M., Robert Obenaus-Emlerb, Paivo Kinnunena, Mirja Illikainen (2019) Alkali activation of low-alumina mine tailings for more sustainable raw material supply. Submitted to “International Journal of Mining and Mineral Engineering (IJMME)”.
11. Falaha, M., Robert Obenaus-Emlerb, Paivo Kinnunena, Mirja Illikainen (2019) Alkali activation of low-alumina mine tailings for more sustainable raw material supply. Proceedings of the 14th International Symposium of Continuous Surface Mining, ISCSM2018

12. Gafiullina, A., Vehmaanperä, P., Kinarinnen, T., Häkkinen, A. (2020). Pressure filtration properties of sludge generated in the electrochemical treatment of mining waters. *Water Research*, 115992, available on-line.
<https://doi.org/10.1016/j.watres.2020.115922>
13. İlkey Bengü Can, Özlem Bıçak, Seda Özçelik, Metin Can, Zafir Ekmekçi (2020) USE OF ION EXCHANGE RESIN FOR PROCESS WATER TREATMENT. SME Annual Conference & Expo 2020 in attachment. The conference will be in Phoenix, Arizona on 23-26th February.
14. Kinnunen, P., J. Raatikainen, R. Emler, S. Guignot, A. Ciroth, J. Guimerà, M. Paajanen, K. Heiskanen (2018) TOWARDS CLOSED WATER LOOPS, ADVANCED SORTING AND TAILINGS VALORIZATION FOR MORE SUSTAINABLE RAW MATERIAL SUPPLY. Sustainable Minerals conference, Namibia 2018.
15. Kinnunen, P. R. Obenaus-Emler, J. Raatikainen, S. Guignot, J. Guimera, A. Ciroth, K. Heiskanen (2020) Review of closed water loops with ore sorting and tailings valorisation for a more sustainable mining industry. *Journal of Cleaner Production* 278 (2021) 123237. <https://doi.org/10.1016/j.jclepro.2020.123237>
16. Mamelkina, M. (2020), Treatment of mining waters by electrocoagulation. PhD in Chemical and Process Engineering. LUT School of Engineering Science. LUT UNIVERSITY
17. Mamelkina, M.A, ITERAMS project “Waste Valorisation and Water Treatment?”, MineExchange 2019, Aberystwyth University, 28th – 29th November 2019, Wales
18. Mamelkina, M.A., Vasilyev, F., Tuunila, R., Sillanpää, M., Häkkinen, A. (2019). Investigation of the parameters affecting the treatment of mining waters by electrocoagulation. *Journal of Water Process Engineering*. 32, 100929.
<https://doi.org/10.1016/j.jwpe.2019.100929>
19. Mamelkina, M.A., Vehmaanperä, P., Tuunila, R., Sillanpää, M., Häkkinen, A. (2019). Electrochemical treatment of mining waters. International Mine Water Association Conference 2019, July 15-19, Perm, Russia. Conference article. In: Wolkersdorfer, C., Khayrulina, E., Polyakova, S., Bogush, A., ed., *Proceedings of a Conference – open access*. pp. 212-216,
https://www.imwa.info/docs/imwa_2019/IMWA2019_Mamelkina_212.pdf
20. Minh Khanh Le, Thi., H. Miettinen, M. Bomberg, N. Schreithofer 1 and Olli Dahl (2020) Challenge in the assessment of mining process water quality. Submitted to *Minerals* (June 26th 2020)
21. Mhonde, N. P., Mariette Smart, Kirsten Corin and Nora Schreithofer (2020) Investigating the electrochemical interaction of a thiol collector with chalcopyrite and galena in the presence of a mixed microbial community. Submitted to *Minerals*.
22. Mhonde, N. P., N. Schreithofer, K. C. Corin, M. Mäkelä (2019) Assessing the combined effect of water temperature and complex water matrices on xanthate adsorption on chalcopyrite and pentlandite. Flotation 19 conference.
23. Obenaus-Emler, R., M. Falah, M. Illikainen (2019) Assessment of mine tailings as precursors for alkali-activated materials for on-site applications. ICSBM 2019 2nd

International Conference of Sustainable Building Materials 12-15 August, Eindhoven
The Netherlands

24. October, L.L. K.C. Corin, M.S. Manono, N. Schreithofer and J.G. Wiese (2019) Fundamental and Flotation Techniques Assessing the Effect of Water Quality on Bubble-Particle Attachment of Chalcopyrite and Galena. MEI Flotation 19 conference.
25. Öztürk, Y., Zafir Ekmekçi (2020) Removal of Sulfate Ions from Process Water by Ion Exchange Resins. Minerals Engineering.
26. Raatikainen, J., R. Emler, S. Guignot, K. Heiskanen, A. Ciroth, J. Guimerà, M. Paajanen, Päivi Kinnunen (2018) Integrated mineral technologies for more sustainable raw material supply (ITERAMS) Watercongress Santiago de Chile, 9-11 May.
27. Raatikainen, J., R. Emler, S. Guignot, K. Heiskanen, A. Ciroth, J. Guimerà, M. Paajanen, Päivi Kinnunen (2018) Integrated mineral technologies for more sustainable raw material supply (ITERAMS) EU-LA Mining & Exploration Convention and Trade Show, Madrid, April 2018.
28. Saari, E., K. Jansson, B. Musuku (2020) The effect of plant process water quality on the flotation of sulphide ore. Submitted to IMPC 2020 conference.
29. Sánchez-Ortega C., (2019) SOLIDS AND SULFATE IONS REMOVAL FROM MINE WATER BY DISSOLVED AIR FLOTATION. Master's Degree in Chemical and Process Engineering. 87 Pages, 22 Tables and 26 Figures. LUT School of Engineering Science. LUT UNIVERSIT
30. Thi Minh Khanh Le, Nóra Schreithofer, Olli Dahl (2020) Dissolution test protocol for estimating water quality changes in minerals processing plants operating with closed water circulation. Submitted to Minerals journal.