



DAFTAR PUSTAKA

- Amiri, F., Yaghmaei, S., Mousavi, S. M., & Sheibani, S. (2011). Recovery of metals from spent refinery hydrocracking catalyst using adapted *Aspergillus niger*. *Hydrometallurgy*, 109(1-2), 65-71.
- Aung, K. M. M., & Ting, Y. P. (2004). Bioleaching of Spent Hydroprocessing Catalyst by Acidithiobacillus ferrooxidans and Acidithiobacillus thiooxidans. 16th International Congress of Chemical and Process Engineering, Prague, Czech Republic.
- Aung, K. M. M., & Ting, Y. P. (2005). Bioleaching of spent fluid catalytic cracking catalyst using *Aspergillus niger*. *Journal of biotechnology*, 116(2), 159-170.
- Beolchini, F., Fonti, V., Ferella, F., & Vegliò, F. (2010). Metal recovery from spent refinery catalysts by means of biotechnological strategies. *Journal of Hazardous Materials*, 178(1-3), 529-534.
- Blaustein, B. D., Hauck, J. T., Olson, G. J., & Baltrus, J. P. (1993). Bioleaching of molybdenum from coal liquefaction catalyst residues. *Fuel*, 72(12), 1613-1618.
- Bosecker, K. (1997). Bioleaching: metal solubilization by microorganisms. *FEMS Microbiology reviews*, 20(3-4), 591-604.
- Brandl, H. (2001). Microbial leaching of metals. *Biotechnology*, 10, 191-224.
- Brandl, H., Krebs, W., Brombacher, C., Bosshard, P. P., & Bachofen, R. (1997). Microbiological systems for metal recycling. *Proceedings of R*, 16-20.
- Brandl, H., Bosshard, R., & Wegmann, M. (2001). Computer-munching microbes: metal leaching from electronic scrap by bacteria and fungi. *Hydrometallurgy*, 59(2-3), 319-326.
- Brierley, J. A. (2008). A perspective on developments in biohydrometallurgy. *Hydrometallurgy*, 94(1-4), 2-7.
- Brombacher, C., Bachofen, R., & Brandl, H. (1997). Biohydrometallurgical processing of solids: a patent review. *Applied microbiology and biotechnology*, 48(5), 577-587.
- Burgstaller, W., & Schinner, F. (1993). Leaching of metals with fungi. *Journal of Biotechnology*, 27(2), 91-116.
- Burgstaller, W., Strasser, H., Woebking, H., & Schinner, F. (1992). Solubilization of zinc oxide from filter dust with *Penicillium simplicissimum*: bioreactor leaching and stoichiometry. *Environmental science & technology*, 26(2), 340-346.
- Castro, I. D. M., Fietto, J. L. R., Vieira, R. X., Trópia, M. J. M., Campos, L. M. M. D., Paniago, E. B., & Brandão, R. L. (2000). Bioleaching of zinc and nickel from silicates using *Aspergillus niger* cultures. *Hydrometallurgy*, 57(1), 39-49.
- Chaudhary, K., Ethiraj, S., Lakshminarayana, K., & Tauro, P. (1978). Citric acid production from Indian cane molasses by *Aspergillus niger* under solid state fermentation conditions. *Journal of fermentation technology*, 56(5), 554-557.



- Dronawat, S. N., Svihla, C. K., & Hanley, T. R. (1995). The effects of agitation and aeration on the production of gluconic acid by *Aspergillus niger*. *Applied Biochemistry and Biotechnology*, 51(1), 347-354.
- European Chemicals Agency. (2016). Molybdenum trioxide. <<https://wwwecha.europa.eu/en/web/guest/registrationdossier/-/registered-dossier/15499/1>>. Diakses pada Desember 2021.
- Ehrlich, H. L. (1992). Metal extraction and ore discovery. *Encyclopedia of microbiology*, 3, 75-80.
- Elzeky, M., & Attia, Y. A. (1995). Effect of bacterial adaptation on kinetics and mechanisms of bioleaching ferrous sulfides. *The Chemical Engineering Journal and the Biochemical Engineering Journal*, 56(2), B115-B124.
- Furimsky, E. (1996). Spent refinery catalysts: environment, safety and utilization. *Catalysis Today*, 30(4), 223-286.
- Gadd, G. M., & White, C. (1989). Heavy metal and radionuclide accumulation and toxicity in fungi and yeasts. *Special publications of the Society for General Microbiology*.
- Gadd, G. M. (1994). Interactions of fungi with toxic metals. *The Genus Aspergillus*, 361-374.
- Gholami, R. M., Mousavi, S. M., & Borghei, S. M. (2012). Process optimization and modeling of heavy metals extraction from a molybdenum rich spent catalyst by *Aspergillus niger* using response surface methodology. *Journal of Industrial and Engineering Chemistry*, 18(1), 218-224.
- Gough, K., Holmes, S., Matosky, N., Oney, T., & Rutledge, J. 2013. Pressure Oxidation of Molybdenum Concentrates.
- Grace, M. R. (1977). Cassava processing (No. 3). Rome: Food and Agriculture Organization of the United Nations.
- Grewal, H. S., & Kalra, K. L. (1995). Fungal production of citric acid. *Biotechnology advances*, 13(2), 209-234.
- Gutnikov, G. (1971). Method of recovering metals from spent hydrotreating catalysts. U.S. Patent No. 3,567,433. Washington, DC: U.S. Patent and Trademark Office.
- Haynes, W. M. (Ed.). (2014). CRC handbook of chemistry and physics. CRC press.
- Hendalia, E., & Latief, A. Adrizal. 1998. Upaya Peningkatan Nilai Nutrisi Onggok Bioproses dengan Menggunakan Probiotik Starbio. *Jurnal Ilmu Peternakan*. Fakultas Peternakan Universitas Jambi.
- Holleman, A. F. (1985). Holleman-Wiberg Lehrbuch der Anorganischen Chemie, 91–100 ed.
- Hubred, G. L. (1985). U.S. Patent No. 4,514,368. Washington, DC: U.S. Patent and Trademark Office.
- Hughes, M. N., & Poole, R. K. (1991). Metal speciation and microbial growth—the hard (and soft) facts. *Microbiology*, 137(4), 725-734.
- Kappoor, K. K., Chudhary, K., & Tauro, P. (1982). Citric Acid In: "Prescott and Bunns Industrial Microbiology".



- Kida, A., Noma, Y., & Imada, T. (1996). Chemical speciation and leaching properties of elements in municipal incinerator ashes. *Waste management*, 16(5-6), 527-536.
- Kim, D. J., Pradhan, D., Ahn, J. G., & Lee, S. W. (2010). Enhancement of metals dissolution from spent refinery catalysts using adapted bacteria culture—effects of pH and Fe (II). *Hydrometallurgy*, 103(1-4), 136-143.
- Kompiang, I. P., Sinurat, A. P., Kompiang, S., Purwadaria, T., & Darma, J. (1994). Nutrition value of protein enriched cassava: Cassapro. *Ilmu dan Peternakan*, 7, 22-25.
- Krebs, W., Brombacher, C., Bosshard, P. P., Bachofen, R., & Brandl, H. (1997). Microbial recovery of metals from solids. *FEMS Microbiology reviews*, 20(3-4), 605-617.
- Llanos, Z. R., & Deering, W. G. (1995). Processes for the recovery of metals from spent hydroprocessing catalysts (No. CONF-951105-). Minerals, Metals and Materials Society, Warrendale, PA (United States).
- Marafi, M., & Furimsky, E. (2005). Selection of organic agents for reclamation of metals from spent hydroprocessing catalysts. *Erdoel, Erdgas, Kohle*, 121(2), 93-96.
- Marafi, A., Hauser, A., & Stanislaus, A. (2007). Deactivation patterns of Mo/Al₂O₃, Ni–Mo/Al₂O₃ and Ni–MoP/Al₂O₃ catalysts in atmospheric residue hydrodesulphurization. *Catalysis Today*, 125(3-4), 192-202.
- Marcantonio, P. J. (2009). U.S. Patent No. 7,485,267. Washington, DC: U.S. Patent and Trademark Office.
- Mulligan, C. N., Galvez-Cloutier, R., & Renaud, N. (1999). Biological leaching of copper mine residues by *Aspergillus niger*. In *Process Metallurgy* (Vol. 9, pp. 453-461). Elsevier.
- Munshi, M. K., Hossain, F., Huque, R., Rahman, M. M., Khatun, A., Islam, M., & Khalil, M. I. (2013). Effect of biomass and sugar in citric acid production by *Aspergillus niger* using molasses and jackfruit as substrates. *The American Journal of Food and Nutrition*, 1(1), 1-6.
- Park, K. H., Reddy, B. R., Mohapatra, D., & Nam, C. W. (2006). Hydrometallurgical processing and recovery of molybdenum trioxide from spent catalyst. *International Journal of Mineral Processing*, 80(2-4), 261-265.
- Park, K. H., Mohapatra, D., & Reddy, B. R. (2006). Selective recovery of molybdenum from spent HDS catalyst using oxidative soda ash leach/carbon adsorption method. *Journal of hazardous materials*, 138(2), 311-316.
- Pradhan, D., Kim, D. J., Ahn, J. G., Chaudhury, G. R., & Lee, S. W. (2010). Kinetics and statistical behavior of metals dissolution from spent petroleum catalyst using acidophilic iron oxidizing bacteria. *Journal of Industrial and Engineering Chemistry*, 16(5), 866-871.
- Rokukawa, N. (1983). Method for selective recovery of molybdenum and vanadium values from spent catalysts. U.S. Patent No. 4,382,068. Washington, DC: U.S. Patent and Trademark Office.



- Santhiya, D., & Ting, Y. P. (2005). Bioleaching of spent refinery processing catalyst using *Aspergillus niger* with high-yield oxalic acid. *Journal of Biotechnology*, 116(2), 171-184.
- Santhiya, D., & Ting, Y. P. (2006). Use of adapted *Aspergillus niger* in the bioleaching of spent refinery processing catalyst. *Journal of biotechnology*, 121(1), 62-74.
- Sayer, J. A., & Gadd, G. M. (1997). Solubilization and transformation of insoluble inorganic metal compounds to insoluble metal oxalates by *Aspergillus niger*. *Mycological Research*, 101(6), 653-661.
- Scherzer, J., & Gruia, A. J. (1996). Hydrocracking science and technology. Crc Press.
- Schinner, F., & Burgstaller, W. (1989). Extraction of zinc from industrial waste by a *Penicillium* sp. *Applied and Environmental Microbiology*, 55(5), 1153-1156.
- Strasser, H., Burgstaller, W., & Schinner, F. (1994). High-yield production of oxalic acid for metal leaching processes by *Aspergillus niger*. *FEMS Microbiology letters*, 119(3), 365-370.
- Valix, M., Usai, F., & Malik, R. (2001). Fungal bio-leaching of low grade laterite ores. *Minerals Engineering*, 14(2), 197-203.
- Vandenbergh, L. P., Soccol, C. R., Pandey, A., & Lebeault, J. M. (2000). Solid-state fermentation for the synthesis of citric acid by *Aspergillus niger*. *Bioresource Technology*, 74(2), 175-178.