

DAFTAR PUSTAKA

- Akbar, S., Khatoon, S., Shehnaz, R., Hussain, T., 1999, Natural Zeolites: Structures, Classification, Origin, Occurrence, and Importance: Science International 11, v.1, p. 73 – 78.
- Atikah, W.S, 2017, Potensi Zeolit Alam Gunung Kidul Teraktivasi Sebagai Media Adsorben Pewarna Tekstil: Jurnal Arena Tekstil, v.32, p. 17-24, Politeknik STTB Bandung.
- Babak, K., Rahim, Anuar, A., Wahid, S.A., Balasundram, S.K dan Afyuni, M, 2013. Sorption and Desorption of Zinc by Clinoptilolite and Clinoptilolite – Tridymite: Malaysian Journal of Soil Science, V.17, p.69 -83.
- Badan POM RI., 2010, Mengenal Logam Beracun. BPOM, Jakarta.
- Beliles, R.P., 1978, The lesser metals, in: F.W. Oehme (Ed.), Toxicity of Heavy Metals in the Environment, Part 2, p. 547- 616.
- Breck, D.W., 1974, Zeolite Molecular Sieves: Structure, Chemistry and Use: New York, John Wiley and Sons.
- Castaldi, P., Santona, L., Enzo, S., Melis, P, 2008, Sorption Process and XRD Analysis of a Natural Zeolite Exchanged with Pb^{2+} , Cd^{2+} and Zn^{2+} cations: Journal of Hazardous Materials 156, p. 428 – 434.
- Chen, P.Y., 1977, Table of Key Lines In X-Ray Diffraction Patterns of Mineral in Clays and Associated Rocks: Indiana, Department of Natural Resources, 67 p.
- Cincotti, A., Mameli, A., Locci, M.A., Orru, R., Cao, G. 2006, Heavy Metal Uptake by Sardinian Natural Zeolites: Experiment and Modelling: Industry Engineering Chemical, v. 45, p. 1074 – 1084.
- Darmono., 1995. Logam Dalam Sistem Biologi Makhluk Hidup: Jakarta, Universitas Indonesia Press.
- Darmono., 2001. Lingkungan Hidup dan Pencemaran: Hubungan Dengan Toksikologi Logam Berat: Jakarta, Universitas Indonesia Press.
- Effendi, L., 2015, Geologi dan Sifat Keteknikan Tufa Zeolitik Daerah Tegalrejo dan Sekitarnya, Kecamatan Gedangsari, Kabupaten GunungKidul, Yogyakarta Serta Kegunaannya Sebagai Landfill Liner.[Skripsi tidak dipublikasikan]: Yogyakarta, Universitas Gadjah Mada, 101 p.
- Englert, A.H., and Rubio, J. 2005, Characterization and Environmental Application of a Chilean Natural Zeolite: International Journal of Mineral Processing, v.75, p. 21 - 29.
- Erdem, E., Karapinar, N., Donat, R. 2004.The Removal Of Heavy Metal Cations by Natural Zeolites: Journal of Colloid and Interface Science 280, p. 309 – 314.
- Fatkhiandari, I.A., 2011. Studi Karakteristisasi dan Genesa Zeolit Desa Tegalrejo, Kecamatan Gedangsari, Kabupaten Gunungkidul, Daerah Istimewa Yogyakarta.[Skripsi tidak dipublikasikan]: Yogyakarta, Universitas Gadjah Mada, 149 p.
- Heping, C, Loretta, Li.Y., John, G.R. 2006. Exploration of Remediation of Acid Rock Drainage with Clinoptilolite as Sorbent in a Slurry Bubble Column

- for both Heavy Metal Capture and Regeneration: *Water Res.* 40 , p 3359 – 3366.
- Ibrahimi, Muhammad Mahmood., Sayyadi, Azam Salih. 2015, Application of Natural and Modified Zeolites in Removing Heavy Metal Cations From Aqueous Media: an Overview of Including Parameters Affecting the Process: *International Journal of Geology, Agriculture and Environmental Sciences Kurdistan Institution fo Strategic Studies and Scientific Research*, V.3, p.1-7.
- Idrus, A., Titisari, A.D., Sudiyo, R., Soekrisno, R., 2008, Geology Characterization Quality Improvement and Recommended Utilization of Natural Zeolite (Zeolitic Tuff) Deposits from Gunung Kidul Yogyakarta : Special Territory Indonesia, 2nd IASME / WSEAS International Conference, p .21-25.
- Iijima, A., 1980, Geology of Natural Zeolites and Zeolitic Rocks: *Pure & Applied chemical.*, v.52, p .2115-2130.
- Inglezakis, V.J., Loizidou, M.D., Grigoropoulou, H.P. 2002, Equilibrium and Kinetic Ion Exchange Studies of Pb^{2+} , Cr^{3+} , and Cu^{2+} on Natural Clinoptilolite: *Water Res.*, v.36, p. 2784 – 2792.
- Kacmaz, Hulya. 2018, Mineralogical and petrographic study of zeolitic tuffs from YeniceSaraycik (Demirci, Manisa), Turkey: *Journal of Science and Engineering, Dokuz Eylul University-Faculty of Engineering*, v.20, p 647-653.
- Kantiranis, N., Filippidis, A., Stamatakis, M., Drakoulis, A ., Tzamos, E. 2007, The Cation Exchange Capacity of The Greek Zeolitic Rocks, in *Proceedings of the 11th International Congress*, Athena: *Bulletin of The Geological Society of Greece*, v. 40, p. 723 – 735.
- Kase, R.M., 2018, Karakteristik Mineral Zeolit Kecamatan Gedangsari dan Sekitarnya, Kabupaten Gunungkidul, Daerah Istimewa Yogyakarta: *Jurnal Teknologi Technoscintia* , v.11, p. 1-6.
- Kraus, E.D., Hunt, W.F., Ramsdell, L.S, 1959, *Mineralogy An Introduction to the Study of Minerals and Crystals*, 5th ed: New York, McGraw-Hill Book Company, Inc, 559 p.
- Previdello, L., Salvagio, M, D., Sprovieri, M. 2008, Atomic Emission Spectrometry Methods for Determination of Heavy Metals (As, Cd, Co, total Cr, Cr (IV), Cu, Hg, Ni, Pb, Se, V, Zn) in Marine Sediments. CNR – I.A.M.C. Istituto per l' Ambiente Marino Costiero Napoli (Tidak diterbitkan).
- Leyva-Ramos, R., Aguilar – Armenta, G., Gonzales- Gutierrez L.V., Guerrero – Coronado, J.M., Mendoza- Barron, J. 2004, Ammonia Exchange on Clinoptilolite from Mineral Deposits Located in Mexico: *Journal Chemical Technology Biotechnology*, v. 79, p. 651-657.
- Lihareva, N., Dimova, L., Petrov, O., Tzvetanova, Y. 2009, Investigation of Zn Sorption by Natural Clinoptilolite and Mordenit: *Bulgarian Chemical Communications*, v. 41, no. 3, p. 266 – 271.
- Moshoeshoe, M., Nadiye T., Obuseng, V. 2017, A Review of the Chemistry, Structure, Properties and Applications of Zeolites: *American Journal of Materials Science*, v. 7, no. 5, p. 196 – 221.

- Motsi, T., Rowson, N.A., Simmons, M.J.H. 2009, Adsorption of Heavy Metals from Acid Mine Drainage by Natural Zeolite: *International Journal Miner Process*, v. 92, p. 42- 48.
- Motsi, T. 2010, Remediation of Acid Mine Drainage Using Natural Zeolite. [unpublished Doctor of Philosophy. Thesis]: School of Chemical Engineering The University of Birmingham United Kingdom, 215 p.
- Mumpton, A., 1986, Natural zeolite, *Review in Mineralogy: Mineralogical Society of America, Washington, DC*, v. 4, p. 1-15.
- Oren, A. H., Kaya, A. 2006, Factors Affecting Adsorption Characteristics of Zn^{2+} on two natural zeolites: *Journal of Hazardous Materials B* 131 59 -65.
- Palar, H., 1994, Pencemaran dan Toksikologi Logam Berat: Jakarta, Penerbit Rineka Cipta, p. 23-25.
- Perego, C., Bagatin, R., Tagliabue, M., Vignola, R. 2013, Zeolites and Related Mesoporous Materials for Multitalented Environmental Solution. *Microporous and Mesoporous Materials*, v.166, p. 37 - 49.
- Pratomo, S.W., Mahatmanti, S.W., Sulistyaningsih, T., 2017, Pemanfaatan Zeolit Alam Teraktivasi H_3PO_4 Sebagai Adsorben Ion Larutan logam Cd (Li) dalam Larutan: *Indonesian Journal Of Chemical Science, Universitas Negeri Semarang*, v. 6, no.2, p. 161 – 167.
- Setiawan, N.I., Sriyanto., Saputro, A.A., 2016, Teknik Pembuatan Sayatan Tipis Batuan di Departemen Teknik Geologi, Fakultas Teknik, Universitas Gadjah Mada: dalam *Proceeding Seminar Nasional Kebumihan - 9*, Yogyakarta, p. 378-388.
- Smical, I. 2011. Properties of Natural Zeolites in Benefit of Nutrition and Health. *Journal of HVM Bioflux*, v.3, p. 51 -57.
- Sukandarrumidi., 2009, *Bahan Galian Industri: Yogyakarta, Gadjah Mada University Press*, p. 262.
- Suminta, S., 2006, Karakterisasi Zeolit Alam dengan Metode Difraksi Sinar – X: *Jurnal Zeolit Indonesia, Pusat Teknologi Bahan Industri Nuklir Batan*, v. 4, no. 2, p. 52 – 68.
- Surono, T.B., Sudarno, I., dan Wirjosujono, 1992, Peta Geologi Lembar Surakarta – Giritontro, Jawa: Bandung, Pusat Pengembangan Geologi, skala 1:100.000, 1 lembar.
- Surono, 2008, Litostratigrafi dan Sedimentasi Formasi Kebo dan Formasi Butak di Pengunungan Baturagung, Jawa Tengah, Bagian Selatan: *Jurnal Geologi Indonesia*, v. 3, no.4, p. 183-193.
- Tchobanoglous G., Burton F.L. 2001, *Wastewater Engineering: Treatment, Disposal Reuse: Singapore, McGraw- Hill International Editions*, p. 3-24.
- Thepghnothy, M., Putra, D.P.E., Wilopo, W. 2017, Removal of Selenium (Se) and Zinc (Zn) in Water by Using Natural Zeolitic Tuff as Adsorbent from Tegalrejo Area, Gedangsari District, Gunungkidul Regency, Special Province Yogyakarta, Indonesia: *Journal of Applied Geology*, v. 2, no. 2, p. 70 – 77.
- Trgo, M., Peric, J. 2003, Interaction of the Zeolitic Tuff with Zn- containing Simulated Simulated Pollutant Solutions: *Journal Colloid Interface Scientific*, v. 260, p. 166 – 175.

- Wicaksono, D.D., Setiawan N.I., Wilopo, W., Harijoko, A., 2017, Teknik Preparasi Sampel dalam Analisis Mineralogi dengan XRD (X-Ray Diffraction) di Departemen Teknik Geologi, Fakultas Teknik, Universitas Gadjah Mada: dalam *Proceeding Seminar Nasional Kebumihan -10*, Yogyakarta, p. 1864-1880.
- Widianti, T., 2006, Pengujian Kapasitas Tukar Kation Zeolit Sebagai Penukar Kation Alami Untuk Pengolahan Limbah Industri: Publikasi Ilmiah Lembaga Ilmu Pengetahuan Indonesia Pusat Penelitian Sistem Mutu dan Teknologi Pengujian, p. 92-106.
- Yulianis., Maihidin., dan Muhammad, S. 2017, Adsorpsi Ion Logam Tembaga Menggunakan Nano Zeolit Alam Yang Diaktivasi: Jurnal Litbang Industri, Universitas Syiah Kuala Banda Aceh v. 7, no.1, p. 61-69.