

## DAFTAR PUSTAKA

- Alzwar, M., dkk., 1988. *Pengantar Dasar Ilmu Gunungapi*. Bandung : Penerbit Nova.
- Azizi, H., dkk., 2020. Pola Aliran Panas Berdasarkan Analisis Fluida dan Mineral Ubahan di Daerah Panas Bumi Sorik Marapi, Kabupaten Mandailing Natal, Provinsi Ssumatra Utara. *Buletin Sumber Daya Geologi*, 15(3), pp.202-218.
- Barber, A. J. & Crow, M. J., 2005. *Sumatra: Geology, Resources and Tectonic Evolution*. London : The Geological Society.
- Bemmelen, R., V., 1949. *The Geology Of Indonesia*. The Hague: Government Printinng Office.
- Ciptadi, S. dan Patangke, S., 2001. Evaluasi Potensi Silica Scaling Pada Pipa Produksi Lapangan Panasbumi Lahendong – Sulawesi Utara. *Proceeding The 5th Inaga Annual Scientific Conference & Exhibitions 2001*.
- Dipippo, R., 1985. A Simplified Method For Estimating The Silica Scaling Potential in Geothermal Power Plants. *Geothermal Resources Council Bulletin*.
- Fossen, H., 2010. *Structural Geology*. Cambridge : Cambridge University Press.
- Fournier, R.O., 1985. The Behaviour Of Silica In Hydrothermal Solutions. *Economic Geology*, 2, pp. 45-61.
- Fournier, R., O., & Rowe, J., J., 1966. Estimation of Underground Temperatures from the Silica Content of Water from Hot Springs and Wet-steam Wells. *American Journal of Science*, 264 (9), pp. 685-697.
- Giggenbach, W.F., 1991a. *Chemical Techniques In Geothermal Exploration*. UNITAR/UNDP Guidebook: Application Of Geochemistry In Resources Development.
- Giggenbach, W.F., 1988. Geothermal solute equilibria. *Geochem Cosmochem Acta*, 52 (12), pp. 2749-2765.

- Gleamen, T., dkk., 2020. Alterasi Hidrotermal dan Temperatur Bawah Permukaan Pada Sumur TB-03 Lapangan Panas Bumi SMGP Daerah Sorik Marapi, Kabupaten Mandailing Natal, Sumatera Utara. *Padjadjaran Geoscience Journal*, 4(5), pp.470-477.
- Guilbert, G.M & Park, C.F., 1986. *The Geology Of Ore Deposits*. New York : W.H. Freeman and Company.
- Harding, T., P., 1973. Newport-Inglewood Trend, California - An Example of Wrenching Style of Deformation. *The American Association of Petroleum Geologists Bulletin*, 57(1), pp. 97-116.
- Hendri, R., dkk., 2021. The Important Role of Wairakite at Sorik Marapi Geothermal Field. *Proceedings, The 2nd Digital Indonesia International Geothermal Convention (DIIGC) 2021*.
- Hidayatullah, M., S., dkk., 2021. Determination of Geothermal Reservoir Zone of Sorik Marapi, Mandailing Natal, North Sumatra. *IAGI Journal*, 1(1), pp.13-24.
- Hochstein, M., P., & Browne, P., R., L., 2000. Surface Manifestations of Geothermal Systems with Volcanic Heat Sources, In: *Encyclopedia of Volcanoes*. San Diego : Academic Press, pp. 835-855.
- Howard, A., D., 1967. Drainage Analysis in Geologic Interpretation: A Summation. *American Association of Petroleum Geologist Bulletin*, 51, pp. 2246-2259.
- Indonesia, I., A., 1996. *Sandi Stratigrafi Indonesia Edisi 1996*. Jakarta: Ikatan Ahli Geologi Indonesia.
- Jasmita, M. dan Putra, A., 2020. Identifikasi Karakteristik Mata Air Panas Bumi di Sibanggor Tonga Kabupaten Mandailing Natal Menggunakan Diagram Segitiga Fluida. *Jurnal Fisika Unand* , 9(4), pp. 428-435.
- Maulana, A., 2020. *Endapan Mineral*. Yogyakarta : Penerbit Ombak.

- Morrison, K., 1997. *Importance Hydrothermal Minerals and their Significance (7th ed.)*. New Zealand: Geothermal and Mineral Services Division, Kingston Morrison Limited.
- Mulyani, S., dkk., 2019. Calibrated Natural State Model in Sorik Marapi Geothermal Field, Indonesia. *International Petroleum Technology Conference (IPTC) 2019*.
- Nicholson, K., 1993. *Geothermal Fluids Chemistry and Exploration Techniques*. Berlin: Springer-Verlag.
- Permana, M., A., I., dkk., 2017. Kajian Potensi Silica Scaling Pada Pipa Produksi Pembangkit Listrik Tenaga Panas Bumi (Geothermal). *Jurnal Material dan Energi Indonesia*, 07(01), pp.38-43.
- Pirajno, F., 2009. *Hydrothermal Processes and Mineral Systems*. Australia : Springer Science.
- Polimpung, P., W., dkk., 2021. Analisis Terjadinya *Scaling silica* Pada Condenser Dan Cooling Tower. *Jurnal Fista: Fisika Dan Terapannya*, 2(1), pp. 38-42.
- Powell, T., & Cumming, W., 2010. Spreadsheets For Geothermal Water And Gas Geochemistry. *Proceedings Thirty-Fifth Workshop On Geothermal Reservoir Engineering Stanford University, Stanford, California 2010*.
- Reyes, A., 2000. *Petrology and Mineral Alteration In Hydrothermal Systems: From Diagenesis To Volcanic Catastrophes*. New Zealand : Institute Of Geological And Nuclear Sciences, Lower Hutt.
- Rezky, Y. dan Hermawan, D., 2015. Geothermal System of Sorik Marapi - *Roburan - Sampuraga*, North Sumatera, Indonesia. *Proceedings World Geothermal Congress Melbourne, Australia 2015*.
- Rock, N.M.S., dkk., 1983. Peta Geologi Lembar Lubuk Sikaping, Sumatera. Bandung : Pusat Penelitian dan Pengembangan Geologi.

- Sagala, B., D., dkk., 2018. Conceptual Model Of Sorik Marapi Geothermal System Based On 3-G Data Interpretation. *Geoscience Department, Sorik Marapi Geothermal Power*.
- Saptadji, M., N., 2012. *Teknik Panasbumi*. Bandung : ITB Press.
- Sarmiento, Z. F., dkk., 2017. Update on the Exploration and Development Drilling at the Sorik Marapi Geothermal Field, North Sumatra, *Indonesia. Proceedings: The 5th Indonesian International Geothermal Convention and Exhibition (IIGCE) 2017*.
- Soetoyo. Hubungan Struktur Sesar Dengan Terbentuknya Endapan Aliran Piroklastik Di Daerah Panas Bumi Sampuraga, Madailing Natal - Sumatera Utara. *Kelompok Program Penelitian Panas Bumi Pusat Sumber Daya Geologi*.
- Sofyan, A., dkk., 2021. Analysis of Silica Saturation Index (SSI), Scale Formation Rate, and Scale Formation Time Based on Geothermal Production Wellhead Pressure at Well "X". *Indonesian Journal of Petroleum and Mineral*, 1(1), pp.26-33.
- Sutrisno, L., dkk., 2019. Assessing The Role Of Pull-Apart Basins For High-Temperature Geothermal Resources In Transcurrent Tectonic Setting: Sumatra And California Compared. *European Geothermal Congress 2019 Den Haag, The Netherlands*.
- Thompson, A., J., B., Thompson, J., F., H., 1996. *Atlas of Alteration: A Field and Petrographic Guide to Hydrothermal Alteration Minerals*. Newfoundland: Mineral Deposits Division, Geological Association of Canada.
- Van Zuidam, R., A., 1985. *Aerial Photo – Interpretation in Terrain Analysis and Geomorphologic Mapping*. The Hague : Smith Publisher.
- Wahyudityo., R., dkk., 2013. Analisis Scaling Silika pada Pipa Injeksi Brine di Lapangan Panas Bumi Dieng dengan Studi Kasus di PT. Geo Dipa Energi. *Jurnal Teknofisika*, 2(1), pp. 7-19.

Zobin, V., 2017. *Introduction to Volcanic Seismology Third Edition*. Amsterdam :  
Elsevier.