

DAFTAR PUSTAKA

- Anonim, 2014, *The Electromagnetics EM Method*, The University of Queensland.
- Anonim, 2021, *KMS Company Overview*, KJT Enterprises Inc., Texas.
- Anonim, 2024, *Internal Report*, Project CSEM TIANT, *Geoseismal Research Center* (GRC) dan Pertamina Hulu Energi *Upstream Innovation*, Yogyakarta: s.n.
- Betancourt, M., 2017, A Conceptual Introduction to Hamiltonian Monte Carlo, *arXiv preprint arXiv:1701.02434v2*, 16 Juli 2018, diakses 7 April 2025.
- Biswas, R. dan Sen, M. K., 2017, 2D Full Waveform Inversion and Uncertainty Estimation using the Reversible Jump Hamiltonian Monte Carlo, *SEG International Exposition and Eighty-Seventh Annual Meeting*, pp. 1280-1285, doi:10.1190/segam2017-17680416.1.
- Comeau, M. J., 2015, *Electrical Resistivity Structure of the Altiplano-Puna Magma Body and Volcan Uturuncu from Magnetotelluric Data*, Department of Physics University of Alberta, Edmonton.
- deGroot-Hedlin, C. dan Constable, S., 1990, Occam's Inversion to Generate Smooth, Two-Dimensional Models from Magnetotelluric Data, *Geophysics*, Nomor 12, Volume 55, pp. 1613-1624.
- Egbert, G. D. dan Kelbert, A., 2012, Computational Recipes For Electromagnetic Inverse Problems, *Geophys. J. Int.*, Nomor 1, Volume 189, pp. 251–267, doi:10.1111/j.1365-246X.2011.05347.x.
- Eidesmo, T., Ellingsrud, S., MacGregor, L. M., Constable, S., Sinha, M. C., Johansen, S., Kong, F. N., Westerdahl, H., 2002, Sea Bed Logging (SBL), A New Method for Remote and Direct Identification of Hydrocarbon Filled Layers in Deepwater Areas. *First Break EAGE*, Volume 20, pp. 144-152. <https://doi.org/10.3997/1365-2397.20.3.25008>.
- Fichtner, A., Zunino, A., Gebraad, L., 2018, Hamiltonian Monte Carlo Solution of Tomographic Inverse Problems, *Geophys. J. Int.*, Volume 216, pp. 1344-1363, doi: 10.1093/gji/ggy496.
- Gebraad, L., Boehm, C., Fichtner, A., 2020, Bayesian Elastic Full-Waveform Inversion Using Hamiltonian Monte Carlo, *Journal of Geophysical Research: Solid Earth*, Volume 125, <https://doi.org/10.1029/2019JB018428>.

- Grandis, H. dan Sumintadireja, P., 2012, A Brief Review For Proper Application of Magnetotelluric (MT) and Controlled-Source Audio-Frequency Magnetotelluric (CSAMT) In Geothermal Exploration. *The twelfth Annual Indonesian Geothermal Association Meeting and Conference*, Bandung.
- Griffiths, D. J., 1999, *Introduction to Electrodynamics*, 3rd edition, Prentice Hall, New Jersey.
- Groom, R. W. dan Bailey, R. C., 1989, Decomposition of Magnetotelluric Impedance Tensors in The Presence of Local Three-Dimensional Galvanic Distortion. *Journal of Geophysical Research*, Nomor B2, Volume 94, pp. 1913-1925, <https://doi.org/10.1029/JB094iB02p01913>.
- Haber, E., 2015, *Finite Volume Discretization in 3D*, Allen, A. M., *Computational Methods in Geophysical Electromagnetics*, Society for Industrial and Applied Mathematics, Philadelphia, pp. 31-49.
- Hesthammer, J., Stefatos, A., Boulaenko, M., Fanavoll, S., Danielsen, J., 2010a. CSEM Performance in Light of Well Result. *The Leading Edge*, pp. 34-41, doi: 10.1190/1.3284051.
- Hesthammer, J., Stefatos, A., Boulaenko, M., Vereshagin, A., Gelting, P., Wedberg, T., Maxwell, G., 2010b, CSEM Technology as a Value Driver for Hydrocarbon Exploration. *Marine and Petroleum Geology*, Volume 27, pp. 1872-1884, doi:10.1016/j.marpetgeo.2010.08.001.
- Hidayati, S., Guritno, E., Argenton, A., Ziza, W., Campana, I. D., 2007, Re-Visited Structural Framework Of The Tarakan Sub-Basin Northeast Kalimantan - Indonesia, *Proceeding Indonesian Petroleum Association Thirty-First Annual Convention and Exhibition*.
- Hidayat, S., Amiruddin, Satrisnas, D., 2011, *Geologi Lembar Sebatik dan Tarakan, Kalimantan Skala 1:250000*, Pusat Survei Geologi.
- Husein, S., 2017, Sedimentology and Stratigraphy of Upper Tarakan Formation, Tarakan Island, North Kalimantan, Indonesia. *Seventh Annual Engineering Seminar (InAES)*, Yogyakarta.
- Ismail, A., Ewida, H. F., Al-Ibiary, M. G., Zollo, A., 2020, Application of AVO Attributes for Gas Channels Identification, West Offshore Nile Delta, Egypt, *Petroleum Research*, pp. 112-123, doi:10.1016/j.ptlrs.2020.01.003
- Jones, A. G., 1993, The COPROD2 Dataset: Tectonic Setting, Recorded MT Data, and Comparison of Models, *J. Geomag. Geoelectr*, Volume 45, pp. 933-955, doi:10.5636/jgg.45.933.

- Jones, A. G. dan Groom, R. W., 1993, Strike-Angle Determination From The Magnetotelluric Tensor in Presence of Noise and Local Distortion: Rotate at Your Peril!, *Geophys. J. Int.*, Volume 113, pp. 524-534, doi:10.1111/j.1365-246X.1993.tb00905.x.
- Kolditz, O., 2002, *Computational Methods in Environmental Fluid Mechanics*, Springer-Verlag Berlin Heidelberg, Tübingen.
- Li, Y., Slob, E., Werthmüller, D., Wang, L., Lu, H., 2023, An Introduction to the Application of Marine Controlled-Source Electromagnetic Methods for Natural Gas Hydrate Exploration, *J. Mar. Sci. Eng*, Nomor 1, Volume 11, doi: 10.3390/jmse11010034.
- MacGregor, L., Sinha, M., Constable, S., 2001, Electrical Resistivity Structure of The Valu Fa Ridge, Lau Basin, from Marine Controlled-Source Electromagnetic Sounding. *Geophys. J. Int.*, Volume 146, pp. 217 - 236, doi:10.1046/j.1365-246X.2001.00440.x.
- MacInnes, S. dan Raymond, M., 2006, *Zonge Data Processing Smooth-Model CSAMT Inversion Version 2.20*, Zonge International, Arizona.
- Maulin, H. B., Sapiie, B., Gunawan, I., 2019, The Neogene Deformation, Unconformity Surface and Uplift Features In Delta Tectonics, Tarakan Sub Basin, *Proceeding Indonesian Petroleum Association Forty-Third Annual Convention and Exhibition*.
- Menezes, P.T.L., Ferreira, S.M., Correa, J.L., Menor, E.N., 2023, Twenty Years of CSEM Exploration in the Brazilian Continental Margin, *Minerals*, Nomor 7, Volume 13, doi:10.3390/min13070870.
- Morley, R. J., Morley, H. P., Swiecicki, T., 2017. *Constructing Neogene Paleogeographical Maps for The Sunda Region*, *Seapex Exploration Conference*, Singapura.
- Mosegaard, K. dan Tarantola, A., 1995, Monte Carlo Sampling of Solutions to Inverse Problems, *J. geophys. Res.: Solid Earth*, Volume 100, pp. 12431–12447, doi:10.1029/94JB03097.
- Neal, R. M., 2011, MCMC Using Hamiltonian Dynamics, *Handbook of Markov Chain Monte Carlo*, Chapman and Hall, doi: 10.1201/b10905.
- Niasari, S. W., 2023, Modul Mata Kuliah Metode Geolistrik dan Elektromagnetik: Magnetotellurik, Departemen Fisika, Universitas Gadjah Mada.
- Oryński, S., Józwiak, W., Nowożyński, K., Klityński, W., 2022, Comparison of 3D, 2D, and 1D Magnetotelluric Inversion Results on the Example of Data from

Fore-Sudetic Monocline, *International Journal of Geophysics*,
doi:10.1155/2022/3400950.

Parker, R. L., 1983, The Magnetotelluric Inverse Problem, *Geophys. Surv.*, Nomor 1, Volume 6, pp. 5-25, doi:10.1007/BF01453993.

Peng, R., Han, B., Hu, X., Li, J., Liu, Y., 2024, 2-D Probabilistic Inversion of MT Data and Uncertainty Quantification Using Hamiltonian Monte Carlo Method, *Geophys. J. Int.*, Volume 237, pp. 1826 - 1841, doi:10.1093/gji/ggae131.

Permatasari, E. A., Yuliasongko, M. F., Kamil, R. I., Prasetya, A. Y., Niasari, S. W., 2025, CSEM Four Components of Impedance Tensor Data: Practical Application for Imaging Subsurface Geological Structures in The Tarakan Basin, Indonesia, *Proceeding Indonesian Petroleum Association Forty-Nine Annual Convention and Exhibition*, Tangerang.

Putra, P. R., Sapiie, B., dan Ramdhan, A. M., 2018, Relationship Between Pore Pressure and Structural Model in "Passive Margin" Offshore Tarakan Sub-Basin, Northeast Kalimantan, Indonesia, *AAPG Asia Pacific Region GTW*, Perth, doi:10.1306/11207Putra2019.

Rasmussen, T. M., 1993, Two-Dimensional Occam Model of COPROD2 Data First Order Description of Resolution and Variance, *J. Geomag. Geoelectr.*, Nomor 9, Volume 45, pp. 1027-1037, doi:10.5636/jgg.45.1027.

Reyes, H. S. S., 2019, *Progressive Linear Kinematic Source Inversion Method and Its Perspectives Towards The Uncertainty Quantification*, l'École Doctorale Terre, Univers, Environnement, Université Grenoble Alpes, Grenoble.

Rodi, W. L. dan Mackie, R. L., 2001, Nonlinear Conjugate Gradients Algorithm For 2-D Magnetotelluric Inversion, *Geophysics*, Nomor 1, Volume 66, pp. 174-187, doi:10.1190/1.1444893.

Rosas-Carbajal, M., Linde, N., Kalscheuer, T., Vrugt, J. A., 2014, Two-Dimensional Probabilistic Inversion of Plane Wave Electromagnetic Data: Methodology, Model Constrains, and Joint Inversion with Resistivity Data, *Geophys. J. Int.*, Volume 196, pp. 1508-1524, doi: 10.1093/gji/ggt482.

Røsten, T., Johnstad, S.E., Ellingsrud, S., Amundsen, H.E.F., Johansen, S., Brevik, I., 2003, A Seabed Logging (SBL) Calibration Survey Over The Ormen Lange Gas Field, *EAGE Sixty-Fifth Conference and Exhibition*, Stavanger.

Sambridge, M., 2014, Modul Mata Kuliah Metode Inversi: An Introduction to Inverse Problem, Research School of Earth Sciences, Australian National University.

- Sambridge, M. dan Mosegaard, K., 2002, Monte Carlo Methods in Geophysical Inverse Problems, *Rev. Gephys.*, Nomor 3, Volume 40, pp. 3-1 - 3-29, doi:10.1029/2000RG000089.
- Saputra, I. dan Prasetya, A. Y., 2017, Pulse of Depositional Environment Change in Tarakan Basin: Some Perspective from Onshore Simenggaris Area, *Proceedings Joint Convention Malang HAGI – IAGI – IAFMI- IATMI*, Malang.
- Satyana, A. H., Nugroho, D., Surantoko, I., 1999, Tectonics Controls on The Hydrocarbon Habitats of The Barito, Kutai, and Tarakan Basins, Eastern Kalimantan, Indonesia: Major Dissimilarities in Adjoining Basins, *Journal of Asian Earth Science*, Nomor 1, Volume 17, pp. 99-122, doi:10.1016/S0743-9547(98)00059-2.
- Simpson, F. dan Bahr, K., 2005, *Practical Magnetotellurics*, Cambridge University Press, Cambridge.
- Streich, R., 2016, Controlled-Source Electromagnetic Approaches for Hydrocarbon Exploration and Monitoring on Land, *Surv Geophys*, Volume 37, pp. 47-80, doi: 10.1007/s10712-015-9336-0.
- Sudarmono, Direza, A., Maulin, H. B., Wicaksono, A., 2017, Some New Insights To Tectonic and Stratigraphic Evolution of The Tarakan Sub-Basin, North East Kalimantan, Indonesia, *Proceeding Indonesian Petroleum Association Forty-First Annual Convention and Exhibition*.
- Swift Jr., C. M., 1967, *A Magnetotelluric Investigation of an Electrical Conductivity Anomaly in the Southwestern United States*, Department of Geology and Geophysics, Massachusetts Institute of Technology, Cambridge.
- Tarantola, A., 2005, *Inverse Problem Theory and Methods for Model Parameter Estimation*, Society for Industrial and Applied Mathematics, Philadelphia.
- Vozoff, K., 1972, The Magnetotelluric Method in The Exploration of The Sedimentary Basin, *Geophysics*, Nomor 1, Volume 37, pp. 98-141.
- Vozoff, K., 1990, Magnetotellurics: Principles and Practice, *Proc. Indian Acad. Sci. (Earth Planet. Sci.)*, Nomor 4, Volume 99, pp. 441-471, doi:10.1007/BF02840313.
- Weidelt, P., 1972, The Inverse Problem of Geomagnetic Induction, *Journal of Geophysics*, Volume 38, pp. 257-289.

Wight, D. E., 1987, *Society Exploration of Geophysicist MT/EMAP Data Interchange Standard*, Society Exploration of Geophysicist, Texas.

Zonge, K. L. dan Hughes, L. J., 1991, *Chapter 9 Controlled Source Audio-Frequency Magnetotellurics*, Nabhigian, M. N., *Electromagnetic Methods in Applied Geophysics*, Society Exploration Geophysicist, pp. 713-810, <https://doi.org/10.1190/1.9781560802686.ch9>.

Zunino, A., Gebraad, L., Ghirotto, A. dan Fichtner, A., 2023, HMCLab: a Framework for Solving Diverse Geophysical Inverse Problems using The Hamiltonian Monte Carlo Method, *Geophys. J. Int.*, Volume 235, pp. 2979-2991, doi:10.1093/gji/ggad403.