Yoseph Datu Adiatma, Ph.D.

Postdoctoral Research Associate

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Ph.D.-trained geoscientist with over 5 years of academic and industry experience in geochemical analysis, reservoir modeling, and subsurface exploration. Geologist with expertise in geospatial analysis, isotope geochemistry, and numerical modeling. Passionate about developing innovative subsurface technologies for sustainable energy solutions.

Education

PhD in Earth Science, *The Ohio State University* — Fall 2023
MS in Earth Science, *The Ohio State University* — Fall 2018
BS in Geology, *Institut Teknologi Bandung* — Spring 2014

Professional Experience

Subsurface Geologist, Vico Indonesia (contract-via LAPI ITB) — 2014 – 2016

- Developed static reservoir models for the Semberah Field (Kutai Basin)
- performed petrophysical analysis to guide downhole fluid analysis
- collaborated with multidisciplinary teams to characterize reservoir properties and estimate remaining hydrocarbon resources.

Field Geologist, Noras Nusantara — Summer 2012

- Conducted comprehensive geological mapping and sampling of coal seam formations
- Prepared detailed technical reports documenting coal seam characteristics, geological interpretations, and resource assessments.

Field Engineer Intern, Schlumberger — Summer 2011

- Gained hands-on experience in oilfield operations through direct participation in drilling and measurement activities at Limau Field South Sumatra.
- Assisted senior field engineers with tool lay down procedures and various sensor calibration processes
- Completed comprehensive intern project utilizing Petrel software for reservoir modeling and analysis.

Academic Appointments and Research Experience

Postdoctoral Research Associate, OSU and FSU — 2023 - present

- Conducted a field campaign to collect samples
- perform geochemical analyses (trace metal concentrations, Fe speciation, I/Ca, $\delta^{7}Li$, $^{87}Sr/^{86}Sr$, ε_{Nd}, Sr/Ca, $\delta^{44/40}Ca$) on shale and carbonate samples
- Mentor undergraduate and graduate students.
- Developed various numerical models
- Performed laboratory maintenance and assisted visiting scientists in the Clean Lab and TIMS Lab
- Wrote successfully funded research proposals

Technical Skills

Geochemistry

- Isotope analysis using thermal ionization mass spectrometer (Sr, Nd, Sm, and Ca isotopes)
- High-precision trace element analysis using ICP MS and ICP OES
- Column chemistry (Sr, Li, Nd, Sm, Ca, U, Tl)

- Ultra-low blank sample processing for sub ppb elemental concentration analysis
- Various shale geochemistry protocols (e.g., Iron speciation, Chromium Reducible Sulphate Extraction)
- Basic mass spectrometer troubleshooting and lab. maintenance

Sedimentology and Stratigraphy

- High-resolution stratigraphic logging, Facies analysis, and sequence stratigraphy

Structural Geology and Tectonics

- Geologic Mapping
- Structural geology mapping and fault kinematic analysis

Programming and Data Analytics Python, Matlab, & QGIS

- Statistical analysis and data visualization using Matplotlib and Seaborn
- Statistical learning techniques (regression and artificial neural network) using Sci-Kit Learn and PyTorch
- Geochemical Modeling (isotope mixing model, reservoir box model, diagenesis model)
- Spatial data analysis using QGIS, cartopy, and GeoPandas

Petroleum Geology

- Static reservoir modeling: Petrel
- Petrophysical analysis: Gelog, TehcLog, and Interactive Petrophysics
- Seismic Stratigraphy: Kingdom

Community Service and Leadership Roles

Reviewer (Geology, Science Advances, Marine & Petroleum Geology, etc)	2023 - present
Session Organizer, GSA Meetings	2019 - 2025
Earth Science Delegate, Council of Graduate Student OSU	2022
Student Representative, Graduate Study Committee, SES OSU	2022
President, AAPG Student Chapter Institut Teknologi Bandung	2012

Selected Latest Publications

Peer-reviewed articles

2024 Adiatma, Y.D., Saltzman, M.R., Liu X-M., Wang, X-K., Edwards, C.T., Lithium isotope stratigraphy and Ordovician weathering. *Earth and Planetary Science Letters* 647, 119030.

2024 Adiatma, Y.D., Saltzman, M.R., Griffith, E.M., 2024. Calcium isotope constraints on a Middle Ordovician carbon isotope excursion. *Earth and Planetary Science Letters* 641, 118805.