DINI ADYASARI

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ORCID: 0000-0002-3114-4053

EDUCATION

2015-2019 **PhD in Geosciences,** Universität Bremen, Germany

2012-2014 **M.Sc in Environmental Technology,** University of Stavanger, Norway

2006-2010 **B.Sc in Environmental Engineering**, Bandung Institute of Technology, Indonesia

ACADEMIC APPOINTMENT

2023-present **Texas A&M University, USA**
Assistant Professor, Department of Marine and Coastal Environmental Science

2020-2023 **University of Alabama, USA**
Postdoctoral Fellow, Department of Geological Science

2019-2020 **Leibniz Centre for Tropical Marine Research, Germany**
Postdoctoral Researcher, Department of Biogeochemistry and Geology

RESEARCH FOCUS

Coastal hydrogeology; groundwater recharge and discharge; biogeochemistry of coastal aquifers; public health risks associated with contaminated domestic wells; and climate change impacts on coastal groundwater quality and quantity.

PUBLICATIONS

Peer-reviewed publications

S. Anderson, N. Dimova, **D. Adyasari**. 2025. *Hydrological and geochemical controls of surface water and suspended sediment toxic metal fluxes from nearshore large coal ash pond*. Science of the Total Environment, 979, 179411. DOI: https://doi.org/10.1016/j.scitotenv.2025.179411

D. Adyasari, N. Dimova, H. Waska, S. Ni Chadhain. 2024. *Microbial assemblages and metabolic activity in organic-rich subterranean estuaries: Impact of climate and land use changes.* Journal of Geophysical Research: Biogeosciences, 129(3), e2023JG007660. DOI: https://doi.org/10.1029/2023JG007660.

D. Adyasari, N. Dimova, H. Waska, S. Ni Chadhain.et al. 2023**.** *Dissolved organic matter and nutrient processing in organic-rich subterranean estuaries: implications for future climate scenarios*. Geochimica et Cosmochimica Acta, 362, 65-76. DOI: https://doi.org/10.1016/j.gca.2023.10.025

A.Sabdaningsih, **D. Adyasari**, et al. 2023. *Environmental legacy of aquaculture and industrial activities in mangrove ecosystems*. Journal of Sea Research, 196, 102454. DOI: https://doi.org/10.1016/j.seares.2023.102454

D. Adyasari, N. Dimova, H. Dulai, B. S. Gilfedder, I. Cartwright, T. McKenzie, P. Fuleky. 2023. *Radon-222 as a groundwater discharge tracer to surface waters*. Earth-Science Reviews. DOI: https://doi.org/10.1016/j.earscirev.2023.104321

D. Adyasari, D. Montiel, B. Mortazavi, N. Dimova. 2021. *Storm-driven fresh submarine groundwater discharge and nutrient fluxes from a barrier island.* Frontiers in Marine Science, 8, 857. DOI: https://doi.org/10.3389/fmars.2021.679010

D. Adyasari, M.A. Pratama, N.A. Teguh, A. Sabdaningsih, M.A. Kusumaningtyas, N. Dimova. 2021. *Anthropogenic impact on Indonesian coastal water and ecosystems: Current status and future opportunities*. Marine Pollution Bulletin (171), DOI: https://doi.org/10.1016/j.marpolbul.2021.112689

D. Adyasari, et al. 2021. *Terrestrial nutrient and dissolved organic matter input into a coral reef ecosystem via submarine springs.* ACS ES&T Water, 1(8): 1887–1900. DOI:https://doi.org/10.1021/acsestwater.1c00134

N. Moosdorf, M. Böttcher, **D. Adyasari**, et al. 2021. *A state-of-the-art perspective on the characterization of subterranean estuaries at the regional scale*. Frontiers in Earth Science, 9(95). DOI: https://doi.org/10.3389/feart.2021.601293

D. Adyasari, C. Hassenrück, D. Montiel, N. Dimova. 2020. *Microbial community composition across a coastal hydrological system affected by submarine groundwater discharge (SGD).* Plos One 15(6): e0235235. DOI: https://doi.org/10.1371/journal.pone.0235235.

D. Montiel, A. Lamore, J. Stewart, J. Lambert, J. Honeck, Y. Lu, O. Warren, **D. Adyasari**, et al. 2019. *Natural groundwater nutrient fluxes exceed anthropogenic inputs in an ecologically impacted estuary: Lesson learned from Mobile Bay, Alabama.* Biogeochemistry, 145(1-2):1- 33. DOI: https://doi.org/10.1007/s10533-019-00587-0.

D. Adyasari, C. Hassenrück, T. Oehler, A. Sabdaningsih, N. Moosdorf. 2019. *Microbial community composition associated with submarine groundwater discharge site in northern Java (Indonesia).* Science of the Total Environment, 689:590-601. DOI: https://doi.org/10.1016/j.scitotenv.2019.06.193.

D. Adyasari, T. Oehler, N. Afiati, N. Moosdorf. 2019. *Environmental impact of nutrient fluxes associated with submarine groundwater discharge at an urbanized tropical coast.* Estuarine, Coastal and Shelf Science, 221: 30-38. DOI: https://doi.org/10.1016/j.ecss.2019.03.009.

V. A. Razafimanantsoa, **D. Adyasari**, A. K. Sahu, B. Rusten, T. Bilstad, L. Ydstebø. 2019. *Pilot-scale study to investigate the impact of rotating belt filter upstream of a MBR for nitrogen removal.* Water Science and Technology, 79(3): 458-465. DOI:
https://doi.org/10.2166/wst.2019.069.

T. Oehler, E. Eiche, D. Putra, **D. Adyasari**, U. Mallast, N. Moosdorf. 2018. *Seasonal variability of land-ocean groundwater nutrient fluxes from a tropical karstic region (southern Java, Indonesia).* Journal of Hydrology, 565: 662-671. DOI: 10.1016/j.jhydrol.2018.08.077.

D. Adyasari, T. Oehler, N. Afiati, N. Moosdorf. 2018. *Groundwater nutrient inputs into an urbanized tropical estuary system in Indonesia.* Science of the Total Environment, 627: 1066- 1079. DOI: 10.1016/j.scitotenv.2018.01.281.

Non-peer-reviewed publications

D. Adyasari, N. Moosdorf, 2019. Policy Brief: Coastal water management related to submarine groundwater discharge: a study case in Indonesia (https://cris.leibniz-zmt.de/id/eprint/5620/1/2019-3%20EN.pdf).

D. Adyasari, N. Moosdorf, 2019. Policy Brief: Pengelolaan kualitas sumber daya air pesisir berkaitan dengan keluaran air tanah lepas pantai (KALP): studi kasus di Indonesia (https://cris.leibniz-zmt.de/id/eprint/5621/1/2019-3%20INDO.pdf).

GRANTS AND FUNDING

- **Assessment of coastal groundwater quality and dynamics in San Jacinto River Waste Pit Superfund Site**
  (proposal recommended for funding, pending contract)
  Role: Principal Investigator ($99,976)
  Sponsor: Texas Commission on Environmental Quality
  Period: 9/2025-8/2027
- **Tracking Sources of Fecal Contamination to Galveston Bay**
  (proposal recommended for funding, pending contract)
  Role: Co-Principal Investigator ($108,000 to TAMUG)
  Sponsor: Environmental Protection Agency
  Period: 9/2025-8/2028
- **Assessment of groundwater quality and dynamics near Formosa plant and Alcoa Superfund Site, Lavaca Bay**
  Role: Principal Investigator ($470,925)
  Sponsor: Matagorda Bay Mitigation Trust
  Period: 9/2025-8/2028
- **Acquisition of Metrohm Ion Chromatograph for coastal aquatic system research**
  Role: Principal Investigator ($25,000)
  Sponsor: Texas Comprehensive Research Fund
  Period: 7/2025
- **Hurricane impacts on hydrogeology and nutrient geochemistry in karstic coastline**
  Role: Principal Investigator ($30,000)
  Sponsor: National Science Foundation (Rapid Response Research Grant)
  Period: 11/2024-8/2025
- **Acquisition of Skalar SanCompact nutrient analyzer for aquatic ecosystem research**
  Role: Principal Investigator ($57,000)
  Sponsor: Texas Comprehensive Research Fund
  Period: 7/2024

AWARD, FELLOWSHIP, AND SCHOLARSHIP

2020-2023	Walter Benjamin Postdoctoral Fellowship from the German Research Foundation (DFG)
2019	Bernd Rendel Prize from the German Research Foundation (DFG)
2015-2019	Sustainable Water Management Research Scholarship from the German Academic Exchange Service (DAAD)

TEACHING

MARS 454 – 654 Coastal Hydrology (3 credits)
MARS 460 – 461 Capstone Undergraduate Research Experience (1 credit)
MARS 489 – 689 Water Quality Management (3 credits)

MENTORSHIP

Graduate Student

2024-present Adelide Rianda, PhD, Committee chair
2024-present Ifeanyi Eze, PhD, Committee chair
2025-present Lauren Kinzy, MSc, Committee member

Undergraduate Student

2024-2025 Renee Grix, Thesis: "Groundwater Discharge and Quality in Dickinson Bayou, Texas"

SERVICE

Department and University Service

2025-present Member, Graduate Recruiting and Admission Committee, Department of Marine and Coastal Environmental Science
2025-present Member, Curriculum Committee for Coastal Environmental Science and Society (CESS) program
2025-present Disability Resources Liaison for Department of Marine and Coastal Environmental Science

Professional Service

2025 Session co-chair, AGU Fall Meeting 2025. Session title: *Advances in Understanding Seawater-Groundwater Interactions within Coastal Aquifers: Consequences for Water Quality and Ecological Sustainability.*
2024-present Member, NSF Research Coordination Networks : Water Security and Health of Private Well Users on the Gulf Coast
2023 Session co-chair, AGU Fall Meeting 2023. Session title: *Advancement in coastal hydrogeology and implications for water quality and ecosystems*.
2023-2024 Guest editor, Regional Studies in Marine Science
2020-present Ad hoc reviewer (Scientific Reports, Communications Earth and Environment, Journal of Hydrology, Journal of Geophysical Research – Oceans, Chemical Geology, Science of the Total Environment, Journal of Environmental Management, Plos One, Regional Studies in Marine Science, Estuarine, Coastal, and Shelf Science, Estuaries and Coasts, FEMS Microbiology Review, Environmental Microbiology, Molecular Ecology)

PROFESSIONAL AFFILIATIONS

2022-present Association for the Sciences of Limnology and Oceanography (ASLO), American Geophysical Union (AGU), Geological Society of America (GSA), International Association of Hydrogeologist (IAH)

MEDIA COVERAGE

- Eos, research was featured in an article "The Unexplored Microbial Life in Subterranean Estuaries" (https://eos.org/editor-highlights/the-unexplored-microbial-life-in-subterranean-estuaries), 2024.
- University of Alabama News, research was featured in an article "Barrier Island Marine Ecosystem Altered by Storm Events" (https://news.ua.edu/2021/08/barrier-island-marine-ecosystem-altered-by-storm-events/), 2021.