

Staff Handbook

Geophysics Study Program

Name	Drs. Erfan Syamsuddin, M.Si			
Post	Geotechnics – Associate Professor			
Academic career		Institution	Year	
	Initial Academic Appointment	Hasanuddin University	2001	
	Master Degree	Bandung Institute of Technology	1997-2000	
	Undergraduate Degree	Hasanuddin University	1986-1992	
Employment	Position	Employer	Period	
	Associate Professor	Hasanuddin University		
Research and development projects over the last 5 years	1. Research Project: Kedaireka Matching Fund Research Title: Implementasi Rekayasa Eksplorasi Endapan Nikel Laterit melalui Integrasi Data ERT dan Data Geologi dalam Menyokong Industri Baterai di Indonesia Period: 2024 Fund: Rp. 744.830.000			
Industry collaborations over the last 5 years	Project title		Partners	
	-		-	
Patents and proprietary rights	Title		Year	
	-		-	
Important publications over the last 5 years	Title	Journal/Book	Year	Author/Co-author(s)
	<i>Geochemical Trends of CaO and MgO in Marine Carbonates: Insights from XRF Analysis</i>	IOP Conference Series: Earth and Environ	2025	Author: Erfan Syamsuddin Co-author(s): Adi Maulana, Ulva Ria Irfan, Muhammad Alimuddin Hamzah Assegaf
	Spatial Autocorrelation (SPAC) Method for Subsurface Shear Wave Velocity Profiling: A Non-invasive Approach to Site Characterization	IOP Conference Series: Earth and Environ	2025	Author: Erfan Syamsuddin Co-Authors: Ahmad Fauzy Arif, Makhrani,

				Ardy Arsyad, Rustan Effendi
	Optimizing maize cultivation through Fuzzy AHP: Balancing land suitability, land use, and environmental sustainability	Journal of Degraded and Mining Lands Management	2024	Sumbangan Baja, Nurmiaty Nurmiaty, Erfan Syamsuddin, Syamsuddin
	Seasonal wave dynamics and model validation at Galesong Beach, south Sulawesi: Evaluating the accuracy of wave prediction	Ecological Engineering & Environmental Technology	2025	Author: Sakka Sakka Co-authors: Cut Mauliditya Fachtya Rizky Mawnad, Alimuddin Hamzah Assegaf, Erfan Syamsuddin, Saaduddin Saaduddin
	Integrating random forest and irrigation management in geographic information systems-based land suitability and rice productivity modeling in tropical landscapes	Ecological Engineering & Environmental Technology	2025	Author: S Arif Co-authors: Sakka Sakka, Rahmad Nurmiaty, Nurmiaty, Rahmad, Erfan Syamsuddin, Muh. Farid Wajedy, Andri Moh. Wahyu Laode, Syamsuddin Syamsuddin
	Integrating electrical resistivity tomography and x-ray fluorescence for characterizing limestone in the Wapulaka Formation, Central Buton, Indonesia	Journal of Degraded and Mining Lands Management	2025	Author: Erfan Syamsuddin Co-authors: Adi Maulana, Alimuddin Hamzah Assegaf, Ulva Ria Irfan
	Random waves propagation over a	THE 5TH INTERNATIONAL CONFERENCE ON	2024	Author: H. Assegaf Co-authors:

	sandbars using the SWASH model	SCIENCES: ICOS2022		W. Samad, A. Haddade, E. Syamsuddin
	Assessing soil bearing capacity using the multichannel analysis of surface waves (MASW) method	THE 5TH INTERNATIONAL CONFERENCE ON SCIENCES: ICOS2022	2024	Authors: E. Syamsuddin Co-authors: S. Aswad, M. Nasri, S. Rasimeng, M. F. Shihab
	Assessing soil vulnerability in Petobo post-liquefaction zone, Palu, Central Sulawesi: A microzonation study utilizing microtremor measurements	JOURNAL OF DEGRADED AND MINING LANDS MANAGEMENT	2024	Authors: Erfan Syamsuddin Co-authors: Adi Maulana, Alimuddin Hamzah, Ulva Ria Irfan
	A site-specific earthquake ground response analysis and relations to collapsing buildings in the 2021 Mw. 6.2 Mamuju-Majene Earthquake Sulawesi Indonesia	Japanese Geotechnical Society Special Publication	2024	Authors: Ardy Arsyad Co-authors Erfan Syamsuddin, Mufidatul Azmi, Muhammad Asyhari, Rizqhie Wiryadiputra Suryadi
	Analysis of stress changes on the Poso fault caused by large inland earthquake: Case study of the 2017 Mw 6.6 Poso and the 2018 Mw 7.5 Palu-Donggala earthquakes	Annals of Geophysics	2023	Authors: Muh Altin Massinai Co-authors: Muhammad Taufiq Rafie, Tsaqif Razin, M Alimuddin Hamzah Assagaf, Erfan Syamsuddin, Maria Maria
	Ground penetrating radar application for identification of subsurface deformation and fractures at	THE 3RD INTERNATIONAL SEMINAR ON SCIENCE AND TECHNOLOGY	2023	Authors: Rustan Efendi Co-authors: Erfan Syamsuddin,

	Tadulako University Campus, Palu, Central Sulawesi	2021: The Path of Sustainable Development for a Better Life		Alimuddin Assegaf, Abd Rahman
	The importance of detail fault geometry in modelling the stress change caused by large earthquake: Case Study of 2017 Mw 6.7 Poso earthquake	IOP Conference Series: Earth and Environmental Science	2023	Authors: T Razin Co-authors: M T Rafie, M A Massinai, M A Hamzah, Erfan Syamsuddin
	Land subsidence assessment on karst based on resistivity and geotechnical parameters	Journal of Degraded and Mining Lands Management	2023	Authors: Muh Altin Massinai Co-authors: Muhammad Fawzy Ismullah Massinai, Erfan Syamsuddin
	Seismic Site Classification Using the Multichannel Analysis of Surface Waves Method	Physics Department Faculty of Mathematics and Natural Sciences Universitas Tanjungpura	2022	Authors: Erfan Syamsuddin Co-authors: Aswad Sabrianto, Alimuddin Hamzah, Syamsurijal Rasimeng, Sakka Sakka, Syamsuddin Syamsuddin, Mufly Fadla Muhammad Nasri, Syihab
	Water availability analysis of Walanae River	Anjoro: International Journal of Agriculture and Business	2022	Authors: Syamsul Arifin Lias Co-authors: A Assegaf, Sakika, Paharuddin, E Syamsuddin
	Petrophysical Analysis Using Deterministic and Probabilistic Methods in	Indonesian Petroleum Association	2022	Authors: Khusnul Khatimah

	Low Resistivity Zone of Gumai and Talang Akar Formations in Jambi Subbasin South Sumatra			Co-authors: Lia Reulina Ketaren, Sabrianto Aswad, Erfan Syamsuddin
	Pemanfaatan Frekuensi Alamiah Tanah Menggunakan Pengukuran Mikrotremor Tiga Komponen dalam Mendeteksi Kedalaman Batuan Dasar	Journal Geoelebes	2021	Authors: Syamsuddin Erfan Co-Authors: Puji Astuti Aulia, Sofian Sofian, Muhaimin Aziz Dede, Habibullah Muhammad, Linggi Sindy Yustin
	Determination of Aquifer Layer Using Geoelectric Resistivity Method in Lappae, Bone Regency, South Sulawesi, Indonesia	IOP Conference Series: Materials Science and Engineering	2021	Authors: MA Massinai Co-authors: MFI Massinai, E Syamsuddin, AH Baso, H Cottang
	Determination of rock dynamics characteristics using microtremor array measurement data (A case study: Biromaru Sigi Region, Central Sulawesi)	Journal of Physics: Conference Series	2021	Authors: R Efendi Co-authors: M Rusydi, E Syamsuddin, A Rahman, A Hamzah, Vilia, Fatwa, Ismail
Activities in specialist bodies over the last 5 years	Organisation	Role		Period
	Himpunan Ahli Geofisika Indonesia (HAGI)	Chairperson of the HAGI Sulserlbar Commission		2019-Present