

Staff Handbook

Geophysics Study Program

Name	Prof. Dr. Ir. Muhammad Altin Massinai, MT., Surv.		
Post	Geomorfology – Professor		
Academic career		Institution	Year
	Initial Academic Appointment	Hasanuddin University	1989
	Doctor Degree	Padjadjaran University	2012
	Master Degree	Institut Teknologi Bandung	1996
	Undergraduate Degree	Hasanuddin University	1988
Employment	Position	Employer	Period
	Professor	Hasanuddin University	2024
Research and development projects over the last 5 years	Research Title: Evaluasi Potensi Longsor di Desa Lonjoboko, Kabupaten Gowa Berdasarkan Integrasi Metode Mikrotremor (HVSr dan SPAC) dan Analisis SMORPH Period: 2025 Research Title: Integrated Study of Hydrothermal Iteration Zones in Volcanic Area by Geophysical Methods Period: 2024 Partners: ITB and BRIN Research Title: Analisis Komprehensif Kawasan Rawan Bencana Gempabumi di Wilayah Sulawesi Bagian Tengah. Period: 2024 Partners: ITB, BRIN and University of California Berkeley Research Title: Analisis Kerentanan Tanah dan Risiko Likuifaksi di Mamuju, Sulawesi Barat Menggunakan Metode 2D MASW dan Mikrotremor. Period: 2024 Research Title: Pemetaan Daerah Resiko Dampak Gempabumi Rendah Di Maluku Utara Period: 2023 Research Title: Analisis Tegasan Coloumb pada Sesar Poso Akibat Gempa 2017 Mw 6.7 Poso dan 2018 Mw 7.5 Palu-Donggala : Implikasinya Terhadap Mitigasi Resiko Gempabumi di Sulawesi. Period: 2023 Research Title: Land subsidence assessment on karst based on resistivity and geotechnical parameters in Bone, South Sulawesi. Period: 2022 Research Title: Identification of Parangloe fault using the Wenner-Schlumberger configuration resistivity method. Period: 2022		

	9. Research Title: Identifikasi Zona Lemah Dengan Menggunakan Metode Geolistrik Resistivitas Pada Daerah Sekitar Amblesan Di Desa Lebbo Tengae, Kecamatan Cenrana, Kabupaten Maros Period: 2021 10. Research Title: Characteristics of Rock Minerals of the Camba Formation. Period: 2021	
Industry collaborations over the last 5 years	Project title	Partners
	Potensi Endapan Mineral Emas di Bastem	Pemda Luwu
	Pemetaan Zona Rawan Gempa di MORUT	Pemda Morowali Utara
	Pemetaan Zona Rawan Gempa di Masamba	HAGI & Pemda Luwu Utara
	Studi Kelayakan Pembangunan Smelter di Lampia	PT CLM (PT Citra Lampia Mandiri)
Patents and proprietary rights	Title	Year
	Subsurface Interpretation Based On Shear Wave Characteristics (HAKI)	2025
	Analysis of stress changes on the Poso fault caused by large inland earthquakes: Case study of the 2017 Mw 6.6 Poso and the 2018 Mw 7.5 Palu-Donggala earthquakes (HAKI)	2025
	Identification of Parangloe Fault using the Wenner- Schlumberger Configuration Resistivity Method (HAKI)	2024
	Land subsidence assessment on karst based on resistivity and geotechnical parameters (HAKI)	2023
	Characteristics of Joints on the Saddang Fault in Tana Toraja (HAKI)	2023
	Interpretasi Data Geokimia Mata Air Panas Di Daerah Geothermal Wala: Studi Kasus Di Kabupaten Tana Toraja (HAKI)	2023
	Shallow Depth Study Using Gravity & Magnetism Data In Central Java - Yogyakarta (HAKI)	2023
	Characteristics Of Rock Minerals Of The Camba Formation (HAKI)	2022
	Fracture Orientation In Maros, South Sulawesi, Indonesia (HAKI)	2021
	Mapping Groundwater Potential based on Geospatial Analysis and Multi-criteria Decision Analysis in Gowa Regency, South Sulawesi, Indonesia (HAKI)	2021
	Geophysical investigation for groundwater in the hard rocks of Abepura Area, Papua (HAKI)	2021

	Distribution Pattern Identification of Mineral using XRF and XRD Method in Jeneberang Watershed, Indonesia (HAKI)		2021	
	Mineralization Of Limestone And Volcanic Rock Of The Tacipi Formation (HAKI)		2021	
Important publications over the last 5 years	Title	Journal/Book	Year	Author/Co-author(s)
	Slope stability analysis by integrating seismic refraction method and geotechnical soil testing: Case study of landslide in Bulobulo Village, Barru Regency, Indonesia	Journal of Degraded and Mining Lands Management	2025	Dwi Nurfajriana Sam, Muhammad Altin Massinai, Andi Muhamad Pramatiadie
	Subsurface Research using Multichannel Analysis of Surface Waves and Seismic Refraction at Hasanuddin University Tamalanrea Campus	AIP Conf. Proc.	2024	Muhammad Altin Massinai, Maria Maria, Melsi Reata, Jihan Faruk Zubedi
	Subsurface Interpretation Based On Shear Wave Characteristics	Journal of Engineering Science and Technology	2024	Muhammad Altin Massinai, Jihan Faruk Zubedi, Jihan Faruk Zubedi. Muhammad Fawzy Ismullah, E Syamsuddin
	Identification of Underground Aquifer Layer using the Geoelectric Resistivity Method, Case Study: Maros Regency, South Sulawesi, Indonesia	AIP Conf. Proc.	2024	Rifnaldo Karangan, Muhammad Altin Massinai, Titien Haryani, Nurul Fhika
	Land Suitability Analysis Based On Geomorphological Aspects For Settlements In Gowa Regency, South Sulawesi	IOP Conf. Series: Earth and Environmental Science	2024	Tri Nurhidayah, Muhammad Altin Massinai, Samsu Arif
	Analysis of stress changes on the Poso fault caused by large	Annals of Geophysics	2024	Muhammad Altin Massinai, Muhammad

	inland earthquakes: Case study of the 2017 Mw 6.6 Poso and the 2018 Mw 7.5 Palu-Donggala earthquakes			Taufiq Rafie, Tsaqif Razin, M. Alimuddin Hamzah Assagaf, Erfan Syamsuddin, Maria Maria
	Identification of Parangloe Fault using the Wenner-Schlumberger Configuration Resistivity Method	IOP Conf. Ser.: Earth Environ. Sci.	2023	Muhammad Altin Massinai, Muhammad Fawzy Ismullah M, Harter Candra Buri
	Characteristics of Joints on the Saddang Fault in Tana Toraja,	Advances in Physics Research: Atlantis Press	2022	Author: M. Altin M. Co-author(s): M. Fawzy I, et. al.
	Peak Ground Acceleration (PGA) and Peak Ground Velocity (PGV) Analyze for Microzonation of Earthquake Hazard Area: Case Study in West Nusa Tenggara	AIP Conf. Proc.	2023	Muhammad Altin Massinai, Rahmat Hidayah Junior, and Muhammad Fawzy Ismullah Massinai
	Drainage Patterns and River Sinuosity in Padang, West Sumatra	SCEJ (Shell Civil Engineering Journal).	2022	Muhammad Fawzy Ismullah M, Muhammad Altin Massinai, Hasanuddin, Dewi Safira
	Fracture orientation in Maros, South Sulawesi, Indonesia	AIP Conf. Proceedings	2021	Muhammad Altin Massinai, Muhammad Fawzy Ismullah M, Ayusari Wahyuni
Activities in specialist bodies over the last 5 years	Organisation	Role		Period
	Society of Exploration Geophysicist (SEG)	Member		2011 – Present
	Society of Petroleum Engineering (SPE)	Member		2014 – Present

	Indonesian Society for Remote Sensing	Member	Present
	Indonesian Association of Geologists (IAGI)	Member	Present
	Indonesian Association Geophysicist (HAGI)	Member	Present