

## *Curriculum Vitae*

### **DIENO DIBA**

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### **EDUCATION**

2022-2025	The University of Tokyo PhD, Geophysics
2020-2022	The University of Tokyo MS, Geophysics
2015-2019	Bandung Institute of Technology BS, Physics

### **RESEARCH ACTIVITIES**

#### **Doctoral Program, Geophysics, The University of Tokyo, 2022-2025**

- Investigate the electrical resistivity structure beneath the southern part of Tohoku, Northeast Japan, using the magnetotelluric method
- Develop a three-dimensional magnetotelluric inversion scheme with weighted roughness operator to impose structural information from guiding models to the resistivity inversion

#### **Master's Program, Geophysics, The University of Tokyo, 2020-2022**

- Developed a two-dimensional magnetotelluric inversion code using MATLAB and Julia
- Utilized the inversion code to invert a two-dimensional magnetotelluric dataset in the southern part of Tohoku, Northeast Japan

#### **Undergraduate Program, Physics, Bandung Institute of Technology, 2018-2019**

- Mapped the spatial distribution of thermal demagnetization areas of Papandayan Volcano, Indonesia, from magnetic susceptibility using the geomagnetic total intensity method

## OTHER ACTIVITIES

- Chairman, Indonesian Student Association at the University of Tokyo, 2021-2022
- Laboratory Assistant, Advanced Physics Laboratory, Bandung Institute of Technology, 2019
- Research Student, Ministry of Energy and Mineral Resources of Indonesia, 2018

## AWARDS AND SCHOLARSHIPS

- Excellent Student Presentation by Society of Geomagnetism and Earth, Planetary and Space Sciences (SGPESS), 2024
- Outstanding Student Presentation Award by Japan Geoscience Union (JpGU), 2024
- Full Scholarship for doctoral program by the SPRING-GX Project of the University of Tokyo, 2022-2025
- Full scholarship for master's program by the Indonesian Endowment Fund for Education (LPDP) of the Ministry of Finance of Indonesia, 2020-2022
- Sakura Science research internship program to Earthquake Research Institute, the University of Tokyo, by Japan Science and Technology (JST), 2019
- Cumlaude distinction, Bandung Institute of Technology, 2019

## REVIEWED PAPERS

Diba D, Song H, Uyeshima M, Usui Y (2025), Three-dimensional magnetotelluric inversion with structurally guided regularization constraint, *Phys Earth Planet Inter* 361 107333

Diba D, Nurhasan, Uyeshima M, Usui Y (2024) Two-dimensional magnetotelluric inversion using unstructured triangular mesh implemented in Julia. *J Phys Conf Ser* 2734 012008

Nurhasan, Naufal MR, Srigutomo W, Mustopa EJ, Diba D, Ogawa Y, Nada Q, Pratama A, Rusdiana R (2024) Resistivity Distribution of Lembang Fault Based on Magnetotelluric Data. *J Phys Conf Ser* 2734 012014

Diba D, Uyeshima M, Ichiki M, Sakanaka S, Tamura M, Yuan Y, Gresse M, Yamaya Y, Usui Y (2023) On a large magmatic fluid reservoir oblique to the volcanic front in the southern part of NE Japan revealed by the magnetotelluric survey. *Earth Planets Space* 73 146

Diba D, Nurhasan, Sutarno D, Ogawa Y (2021) Subsurface Structure around Mas Crater of Papandayan Volcano based on Magnetotelluric and Geomagnetic Data. *J Conf Phys Ser* 1949 012013

## CONFERENCE PRESENTATIONS

Diba D, Song H, Uyeshima M, Usui Y, Ichiki M, Sakanaka S, Tamura M, Yuan Y, Gresse M (2024) MT study in the southern part of Tohoku region: Unveiling electrical resistivity structure and its geological implications, *156<sup>th</sup> Society of Geomagnetism and Earth, Planetary and Space Sciences (SGEPSS) Fall Meeting*, Oral

Diba D, Song H, Uyeshima M, Usui Y (2024) 3D magnetotelluric inversion with structurally guided regularization constraint, *26<sup>th</sup> EM Induction Workshop*, Poster

Song H, Yu P, Diba D, Usui Y, Uyeshima M (2024) 3D joint inversion of MT and seismic with hybrid structural and petrophysical couplings, *26<sup>th</sup> EM Induction Workshop*, Poster

Song H, Usui Y, Koyama T, Diba D, Uyeshima M, Baba K, Yu P, Yang B (2024) The use of L-curve criteria in non-linear inverse problem, *26<sup>th</sup> EM Induction Workshop*, Poster

Diba D, Song H, Uyeshima M, Usui Y (2024) Structurally constrained magnetotelluric inversion using a modified regularization constraint: An alternative to the cross-gradient, *Japan Geoscience Union (JpGU) Meeting 2024*, Poster

Song H, Uyeshima M, Yu P, Diba D, Usui Y, Huang Z, Zhao C, Zhang L (2024) 3-D joint inversion framework with hybrid structural and petrophysical couplings, *Japan Geoscience Union (JpGU) Meeting 2024*, Poster

Usui Y, Uyeshima M, Sakanaka S, Hashimoto T, Kaneko S, Ichiki M, Kaida T, Yamaya Y, Kihara S, Koyama T, Miyakawa K, Hirase K, Hoshino G, Tomioka Y, Ide K, Shimizu R, Terai A, Yoshie Y, Ogawa Y, Kitaoka N, Masuda M, Akiyama T, Diba D, Hitotsumatsu H, Murakita T, Nakayauchi K, Watanabe A, Sakiyama R (2023) Characteristic features of the magnetotelluric response functions in the northern Kanto region, *153<sup>rd</sup> Society of Geomagnetism and Earth, Planetary and Space Sciences (SGEPSS) Fall Meeting*, Poster

Song H, Uyeshima M, Yu P, Usui Y, Diba D, Zhang L, Zhao C, Huang Z (2023) Integrated interpretation of structure around the Atotsugawa Fault by multi-physics joint inversion of MT,

Seismic, Magnetic, and Gravity data, *153<sup>rd</sup> Society of Geomagnetism and Earth, Planetary and Space Sciences (SGEPSS) Fall Meeting*, Poster

Diba D, Uyeshima M, Ichiki M, Sakanaka S, Tamura M, Yuan Y, Gresse M, Yamaya Y, Usui Y (2023) Constrained inversion of MT data with seismic velocity model in the southern part of NE Japan, *153<sup>rd</sup> Society of Geomagnetism and Earth, Planetary and Space Sciences (SGEPSS) Fall Meeting*, Poster

Diba D, Uyeshima M, Ichiki M, Sakanaka S, Tamura M, Yuan Y, Gresse M, Yamaya Y, Usui Y (2023) Magnetotelluric imaging for fluids in the crust and upper mantle beneath the southern part of Northeast Japan subduction zone, *The 28<sup>th</sup> International Union of Geodesy and Geophysics (IUGG) General Assembly*, Oral

Diba D, Uyeshima M, Ichiki M, Sakanaka S, Tamura M, Yuan Y, Gresse M, Yamaya Y, Usui Y (2023) 3-D resistivity structure of the southern part of NE Japan, *Japan Geoscience Union (JpGU) Meeting 2023*, Oral

Diba D, Uyeshima M, Ichiki M, Sakanaka S, Tamura M, Yuan Y, Gresse M, Yamaya Y, Usui Y (2022) Resistivity structure beneath Southern Tohoku imaged by joint inversion of magnetotelluric and geomagnetic transfer functions, *151<sup>st</sup> Society of Geomagnetism and Earth, Planetary and Space Sciences (SGEPSS) Fall Meeting*, Oral

Diba D, Uyeshima M, Ichiki M, Sakanaka S, Tamura M, Usui Y (2022) Electrical resistivity structure beneath the southern Tohoku, Northeast Japan, inferred from a joint inversion of magnetotelluric and geomagnetic transfer functions, *25<sup>th</sup> EM Induction Workshop*, Poster

Diba D, Uyeshima M, Ichiki M, Sakanaka S, Tamura M, Usui Y (2022) Subsurface electrical resistivity structure beneath the southern part of Tohoku, NE Japan, revealed by magnetotelluric and geomagnetic transfer functions, *Japan Geoscience Union (JpGU) Meeting 2022*, Oral

Diba D, Uyeshima M, Ichiki M, Sakanaka S, Tamura M, Usui Y (2021) Electrical resistivity structure beneath the southern part of Tohoku, NE Japan, revealed by magnetotelluric (MT) survey, *150<sup>th</sup> Society of Geomagnetism and Earth, Planetary and Space Sciences (SGEPSS) Fall Meeting*, Oral

Diba D, Uyeshima M, Ichiki M, Sakanaka S, Tamura Y, Yamaya Y, Usui Y (2021) Characteristic features of the response functions estimated from a wide band magnetotelluric (MT) data in the southern Tohoku area, *Japan Geoscience Union (JpGU) Meeting 2021*, Oral

Diba D, Nurhasan, Sutarno D, Mustopa EJ, Srigutomo W, Ogawa Y (2019) Investigation of 2D resistivity structure based on magnetotelluric data around Mas Crater area of Papandayan Volcano, Indonesia, *2<sup>nd</sup> International Congress on Earth Sciences*, Oral

Diba D, Nurhasan (2019) Subsurface structure around Mas Crater area of Papandayan Volcano, Indonesia, based on magnetotelluric (MT) and geomagnetic data, *8<sup>th</sup> Asian Physics Symposium*, Oral