### Curriculum Vitae

# **DIENO DIBA**

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## **EDUCATION**

2022-present The University of Tokyo

PhD, Geophysics (anticipated completion: Mar 2025)

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, ongoing

- 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 SCHOLARHSIPS

- Outstanding Student Presentation Award by Japan Geoscience Union, 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**

<u>Diba D</u>, 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, <u>Diba D</u>, Ogawa Y, Nada Q, Pratama A, Rusdiana R (2024) Resistivity Distribution of Lembang Fault Based on Magnetotelluric Data. *J Phys Conf Ser* 2734 012014

<u>Diba D</u>, 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

<u>Diba D</u>, 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**

<u>Diba D</u>, 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, <u>Diba D</u>, 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, <u>Diba D</u>, 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

<u>Diba D</u>, 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

<u>Diba D</u>, 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

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

<u>Diba D</u>, 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

<u>Diba D</u>, 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

<u>Diba D</u>, 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

<u>Diba D</u>, 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

<u>Diba D</u>, 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

<u>Diba D</u>, 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

<u>Diba D</u>, 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