

Name : Roy Andreas, S.Si, M.Si, Ph.D  
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Universitas Jenderal Soedirman, Indonesia

General Activities on Liaison Professor University of Toyama:

- a. Designing an academic exchange agreement between University of Toyama and Universitas Jenderal Soedirman
- b. Collaborated in the establishment of a University Liaison Office Toyama at Universitas Jenderal Soedirman.
- c. Collaborate in the selection of Japanese Government Scholarship international students who will continue their master's and doctoral studies at University of Toyama.
- d. Conducting international research collaboration with professors from University of Toyama.

2026

- Collaborate in the selection of Japanese Government Scholarship international students who will continue their master's in University of Toyama. (Student name: **Risca Nur Rahmawati and Muhammad Tsaqib Khairullah**)
- “Distribution And Supply of Nutrients In the Indonesian Sea: Predict the Availability of Renewable Energy Sources Based On Marine Biota”; **Dr Roy Andreas - Prof Jing Zhang** (International Research Collaboration-Funding from Indonesian Government- 3<sup>rd</sup> Year).
- Co-authored Papers with researchers of University of Toyama: Local Oceanic Processes on Macronutrient Behavior in a Semi-Enclosed Tropical Sea. “Intan Megasari, **Roy Andreas**, Anung Riapanitra, Tien Setyaningtyas<sup>1</sup>, **Michael Julian Haryanto**”; Indonesian Journal of Marine Science; 2026.

2025

- Building capacity in the field of biogeochemical oceanography, with a particular focus on trace elements and isotope research and the use of advanced analytical instruments in University of Toyama, Japan. **Dr Roy Andreas - Prof Jing Zhang -Prof Keiji Horikawa – Zaskia Alifia** (15-23 November 2025)
- “Distribution And Supply of Nutrients In the Indonesian Sea: Predict the Availability of Renewable Energy Sources Based On Marine Biota”; **Roy Andreas - Prof Jing Zhang** (International Research Collaboration-Funding from Indonesian Government- 2<sup>nd</sup> Year).
- Co-authored Papers with researchers of University of Toyama: Unveiling method-derived element fractionation in determining seawater REEs using chelating resin and ICP-MS: Enhanced accuracy for finer-scale water mixing “**Michael Julian Haryanto, Jing Zhang, Zaskia Alifia, Shigehiro Kagaya, Keiji Horikawa, Roy Andreas**”; Journal of Talanta; Elsevier; May, 2025.

- Spatial distribution of micronutrients in Pekalongan coastal waters: water quality and environmental impact assessment. "**Roy Andreas**, Intan Megasari, Bayu Tricahyo, Mukti Trenggono, **Michael Julian Haryanto**"; Journal of DEPIK, 2025.

## 2024

- IOC-WESTPAC Workshop: Role of human-activities on the marine environment through the exchange materials between land and the ocean, and Forum: Nutrient Management of Coastal Oceans Under Global Climate Change; University of Toyama, Japan on 6th to 8th of December 2024; **Roy Andreas-Jing Zhang- Keiji Horokawa**
- Co-authored Papers with researchers of University of Toyama: Macronutrient Distribution on the North Coast of Pekalongan City, Central Jawa, Indonesia: Implications for Water Quality. "**Roy Andreas**, Intan Megasari, Mukti Trenggono, Hendrayana Hendrayana, **Ade S Oktaviani**"; Journal of E3S Web of Conferences; 2024.
- "Distribution And Supply of Nutrients In the Indonesian Sea: Predict the Availability of Renewable Energy Sources Based On Marine Biota" **Dr Roy Andreas - Prof Jing Zhang** (International Research Collaboration-Funding from Indonesian Government- 1<sup>st</sup> Year).

## 2023

- Collaborate in the selection of Japanese Government Scholarship international students who will continue their master's in University Of Toyama. (Student name: **Zaskia Alifia** and **Laras Wijati**)
- Signing Ceremony of MOU between The President of University of Toyama (**Prof Shigeru Saito**) and Rector of Universitas Jenderal Soedirman (**Prof. Akhmad Sodik**); November, 2023.
- Inauguration of the room for the Liaison Professor's office at Universitas Jenderal Soedirman; Followed by: **Dr. Shigeru Saito**, (President UT), **Dr. Masayuki Ikeda**, (Executive Vice President UT), **Dr. Kouhei Matsuda** (Dean of the School of Science UT), **Dr. Takashi Nakagawa** (Vice Dean of the School of Medicine UT), **Dr. Jing Zhang** (Advisor to the President UT), **Mr. Takeru Nishio** (Manager of International Affairs Division UT), **Mr. Akira Yamada** (Section Chief of International Affairs Division UT)
- General Lecturer for Student and Lecturer at Faculty of Mathematic and Natural Sciences, Universitas Jenderal Soedirman, Indonesia; by **Prof. Jing Zhang**.

## 2022

- "Nutrient footprints of primary production – physical and biogeochemical processes in the Asian Marginal Sea" **Roy Andreas – Prof Jing Zhang** (International Research Collaboration, Funding from UNESCO)

- Academic student Exchange from University of Toyama at Universitas Jenderal Soedirman; Learning about Indonesian culture and provide assistance during sampling in coastal and river environments; (UT of student name: **Yuika Kitazawa**)
- Collaborate in the selection of Japanese Government Scholarship international students who will continue their master's in University Of Toyama. (Student name: **Ade S oktaviani** and **Michael Julian Haryanto**)
- General Lecturer for Student and Lecturer at Faculty of Mathematic and Natural Sciences, Universitas Jenderal Soedirman, Indonesia; **By Prof. Jing Zhang**.
- Keynote speaker for The 5th International Conference on Multidisciplinary Approaches for Sustainable Rural Development (ICMA-SURE 2022) held by Universitas Jenderal soedirman, Indonesia; with the topic presentation title: Impact of Climate Changes on Water and Nutrient Transport Into the Coastal Area and Its Leading Adaptation; **By Prof Jing Zhang**.

2021

- "Study on submarine groundwater discharge (SGD) as a potential nutrient for marine biota on the south coast of Central Java"; **Roy Andreas – Prof Jing Zhang** (International Research Collaboration, Funding from the Indonesian government, 2021)

2020

- "Submarine Groundwater Discharge A Potential Source of Nutrient Enrichments in An Indonesian Coastal Ecosystem" **Roy Andreas – Prof Jing Zhang** (International Research Collaboration, Funding from the Indonesian government, 2020)

2016

- Co-authored Papers with researchers of University of Toyama: "Fractionation and environmental risk of trace metals in surface sediment of The East China Sea by modified BCR sequential extraction method" **Roy Andreas – Prof Jing Zhang** (Journal of Molekul Journal, 2016)

2015

- "Biogeochemical study of trace elements in surface sediment from the marginal sea (East China Sea) to the open-ocean (northwestern Pacific)" **Roy Andreas - Prof Jing Zhang** (Doctoral Thesis, 2015)

2014

- "Characteristics of adsorption interactions of cadmium (II) onto humin from peat soil in freshwater and seawater media" **Roy Andreas - Jing Zhang** (Bulletin of environmental contamination and toxicology, 2014)
- "Bioavailability of Trace Metals in the Surface Sediment of the Northwestern North Pacific Ocean By BCR Sequential Methods with ICP-MS" **Roy Andreas,**

**Jing Zhang** (Asia Oceania Geosciences Society (AOGS) 11th Annual Meeting, 2014)

- "Mobility and Environmental Risk of Trace Metals in Surface Sediment of the East China Sea" **Roy Andreas, Jing Zhang** (Asia Oceania Geosciences Society (AOGS) 11th Annual Meeting, 2014)
- "Concentration and Potential Mobility of Trace Metals in Surface Sediment of the North Pacific Ocean By BCR Sequential" **Roy Andreas, Jing Zhang** (Japan Geoscience Union Meeting (JpGU), 2014)