

CATHLEEN ARIELLA SIMATUPANG

Postdoctoral Research Associate

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EDUCATION

Macquarie University - Sydney, Australia Ph.D. in Natural Science	2024
Mahidol University - Thailand Ph.D in Environmental and Water Resources Engineering	2023
Mahidol University - Thailand Master of Engineering in Environmental and Water Resources Engineering	2019
Lambung Mangkurat University - Indonesia S.T (equivalent to B.Eng) in Environmental and Water Resources Engineering	2016

RESEARCH PUBLICATIONS

- **Simatupang, C. A.**, Strezov, V., Kitpati, S., Pongkiatkul, P., Boontanon, N., & Jindal, R. (2024). *Numerical Analysis of Indoor Air Characteristics and Window Screen Influence on Particulate Matter Dispersion in a Childcare Center Using Computational Fluid Dynamics*. Environmental Health Insights. <https://doi.org/10.1177/11786302241259352>
- **Simatupang, C. A.**, Santhaweesuk, K., Strezov, V., Pongkiatkul, P., Boontanon, N., Jindal, R., & Boontanon, S. K. (2024). *Health Risk Assessment of Soil Contamination with Heavy Metals in a Child Care Center co-located in Vicinity to Small Scale Industrial Area: Case Study of Thailand*. Case Studies in Chemical and Environmental Engineering, 100727. <https://doi.org/10.1016/j.cscee.2024.100727>.
- **Simatupang, C.A.**, Santhaweesuk, K., Pongkiatkul, P. et al. (2024). *Source Identification Using Principal Component Analysis and Health Risk Assessment of Heavy Metals Contamination in PM_{2.5} Near an Industrial Area in Thailand*. Expo Health. <https://doi.org/10.1007/s12403-024-00657-1>
- **Simatupang, C. A.**, Piyaviriyakul, P., Strezov, V., Pongkiatkul, P., Boontanon, N., Jindal, R., & Boontanon, S. K. (2023). *Assessment of the impact of COVID-19 Lockdown on the Spatio-temporal distribution of PM_{2.5} in Thailand*. 2023 8th Asia Conference on Environment and Sustainable Development (ACESD 2023), November 3-5, 2023, Sapporo, Japan.
- Dharmayasa, I. G. N. P., **Simatupang, C. A.**, & Sinaga, D. M. (2022). *NASA Power's: an alternative rainfall data resources for hydrology research and planning activities in Bali Island, Indonesia*. Journal of Infrastructure Planning and Engineering (JIPE), 1(1), 1-7.
- **Simatupang, C.**, Jindal, V. K., & Jindal, R. (2021). *Biosynthesis of Silver Nanoparticles Using Orange Peel Extract for Application in Catalytic Degradation of Methylene Blue Dye*. 10.32526/enrj/19/202100088. Environment and Natural Resources Journal, 19(6), 468-480.
- **Simatupang, C.**, Jindal, V. K., & Jindal, R. (2019). *Optimization of Factors Affecting The Biosynthesis of Silver Nanoparticles Using Orange Peel Extract*. The 5th EnvironmentAsia International Conference on Transboundary Environmental Nexus: From Local To Regional Perspectives, June 13-15, 2019, Chiang Mai, Thailand.

HONOURS & AWARDS

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|---|-----------|
| • International Macquarie Research Excellence Scholarship Program (iMQRES), Macquarie University, Sydney, Australia | 2022-2023 |
| • Guest speaker CaF-Youth (Youth C Asean Forum) "From Crisis to Next Normal : Coronavirus and the environment "- Thailand | 2020 |
| • Best graduate student, Lambung Mangkurat University, Indonesia | 2016 |
| • Cumlaude, Lambung Mangkurat University, Indonesia | 2016 |

WORK EXPERIENCE

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|---|------|
| • Research Associate , Mahidol University, Thailand | 2024 |
| • Research Assistant, Macquarie University, Sydney, Australia | 2023 |

SOFTWARE KNOWLEDGE

- | | |
|-------------|--------------|
| • MS.Office | • ImageJ |
| • Matlab | • SolidWorks |
| • ArcGIS | • ANSYS |