

Dr. Apisada Chulakadabba

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EDUCATIONAL BACKGROUND

Year A.D. 2024 Ph.D. (Environmental Science and Engineering), Harvard University, USA
Year A.D. 2023 S.M. (Environmental Science and Engineering), Harvard University, USA
Year A.D. 2019 S.B. (Civil and Environmental Engineering) & S.B. (Earth, Atmospheric,
and Planetary Science), Massachusetts Institute of Technology, USA

RESEARCH INTEREST

Air pollution chemistry, Environmental physics, Waste as fuel

WORK EXPERIENCE

2024 - Present Postdoctoral Researcher, Technical University of Munich
June 2024 - December 2025 Postdoctoral Fellow, Harvard University, USA
2025 – Present Research Associate, Harvard University, USA
June 2026 – Present Lecturer, The Joint Graduate School of Energy and Environment,
King Mongkut's University of Technology Thonburi, Thailand

PUBLICATIONS

International Journal

- Pérez-Carrasco, M., Nasr, M., Roche, S., Chan Miller, C., Zhang, Z., Chulakadabba, A., et al. (2026). "Plume segmentation in methane satellite imagery using cross-sensor transfer learning", submitted to *IEEE Transactions on Geoscience and Remote Sensing*, 2026.
- Smale, P., Geddes, A., Mikaloff-Fletcher, S., Zhang, Z., Chulakadabba, A., Sargent, M.A., Wofsy, S., Rudek, J., Franklin, J. and Warren, J. (2026). "Agricultural methane plume detection using MethaneAIR: A targeted scene-based approach with wavelet denoising and divergence integral methods", *EGUsphere* [preprint], <https://doi.org/10.5194/egusphere-2025-6237>.
- Manninen, E., Chulakadabba, A., Sargent, M., Zhang, Z., Kamdar, H., Warren, J., et al.: (2026). "Probabilities of Detection of Methane Plumes by Remote Sensing and Implications for Inferred Emissions Distributions", *EGUsphere* [preprint], <https://doi.org/10.5194/egusphere-2026-115>.
- Zhang, Z., Sargent, M., Warren, J. D., Chulakadabba, A., Russi, M., Ayvazov, S., et al. (2026), "Automatic Methane Plume Masking Based on Wavelet Transform Image Processing: Application to MethaneAIR and MethaneSAT data", *EGUsphere* [preprint], <https://doi.org/10.5194/egusphere-2026-141>.
- Guanter, L., Warren, J., Omara, M., Chulakadabba, A., Roger, J., Sargent, M., Franklin, J. E., Wofsy, S. C., and Gautam, R. (2025). "Remote sensing of methane point sources with the MethaneAIR airborne spectrometer", *Atmospheric Measurement Techniques*, Volume 18, issue 15, pp. 3857–3872, <https://doi.org/10.5194/amt-18-3857-2025>.