



Onja Davidson Raelison

Postdoctoral Scholar, Economics

Bio

BIO

Onja Davidson Raelison is a Postdoctoral Fellow at the King Center on Global Development. Prior to joining Stanford, she earned her PhD in Environmental Engineering from the University of California, Los Angeles. She holds a joint MSc in Civil and Environmental Engineering from UCLA and in Civil Engineering from ESTP Paris, France.

Her overarching research focuses on the connection between wildfires, the environment, and human health, aiming to develop sustainable engineering solutions to mitigate the negative impacts of wildfires on water quality. Specifically, her research agenda at the Stanford Department of Medicine aims to understand how wildfires increase the risk of infectious diseases through their impacts on the environment

HONORS AND AWARDS

- Outstanding Alumni Laureate, ESTP Paris au Féminin Trophy — Top Choice of the Jury and Board Members, ESTP Paris (2025)
- Women In Science Incentive Prize Winner, The Story Exchange (2024)
- Outstanding Ph.D. Student in Civil and Environmental Engineering Award, UCLA (2024)
- Engineering Achievement Award for Student Welfare, UCLA (2024)
- ASCE Los Angeles Younger Member Forum Dr. Bill Goodin Outstanding Mentor Scholarship, American Society of Civil Engineers (2024)
- UCLA Dissertation Year Fellowship, UCLA (2023)
- UCLA Distinguished Teaching Award for Teaching Assistants, UCLA (2023)
- AWWA Woodard and Curran Scholarship, American Water Works Association (2023)
- CWEA Kirt Brooks Memorial Water Environment Scholarship, California Water Environment Association (2023)
- ESCSI John Ries Scholarship, Expanded Shale, Clay, and Slate Institute (2023)
- AEESP Travel Grant Award, Association of Environmental Engineering and Science Professors (2023)
- UCLA Civil and Environmental Engineering Martin Rubin Scholarship, UCLA (2022)
- SWE-LA Inaugural Graduate Academia Research Symposium, 2nd Place Winner, Society of Women Engineers (2022)
- SWE-LA Graduate Scholarship, Society of Women Engineers (2022)
- NSBE 49th National Convention, Elevator Pitch Competition, 1st place, National Society of Black Engineers (2022)
- NSBE Academic Improvement Scholarship, National Society of Black Engineers (2022)
- ASCE Los Angeles Section Outstanding Graduate Student Award, American Society of Civil Engineers (2022)
- ASCE Los Angeles Younger Member Forum Outstanding Graduate Student Award, American Society of Civil Engineers (2022)
- ASCE Le Val Lund Memorial Graduate Scholarship Award, American Society of Civil Engineers (2022)

- Society for the Advancement of Biology Education Research West CIRTL@UCLA Travel Award, UCLA (2022)
- NSBE Region VI Fall Regional Conference Technical Research Competition, 1st place, National Society of Black Engineers (2022)
- Affiliates Private Endowment Scholarship, UCLA (2022)
- ASCE International Women in Engineering Day Supporter Scholarship, American Society of Civil Engineers (2022)
- California Stormwater Quality Association Fellowship, California Stormwater Quality Association (2022)
- Malcolm R. Stacey Scholarship, UCLA (2022)
- AWWA Arcadis Scholarship, American Water Works Association (2022)
- UCLA GradSWE Empowerment Scholarship, Society of Women Engineers (2021)
- Cross-Campus Innovation Challenge in Sustainability, 2nd place, UCLA Anderson School of Management (2021)
- Los Angeles Urban Center Science Fellowship, Los Angeles Center for Urban Natural Resources Sustainability (2021)
- Summer Mentored Research Fellowship, UCLA (2020)
- ESTP Paris Fellowship, France (2016)
- Federation Nationale des Travaux Publics Fellowship, France (2016)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Global Health Postdoctoral Affiliate, Center for Innovation in Global Health, Stanford University School of Medicine (2024 - present)

PROFESSIONAL EDUCATION

- Ph.D., University of California, Los Angeles , Environmental Engineering (2024)
- M.S., University of California, Los Angeles , Civil & Environmental Engineering (2019)
- M.S., Ecole Speciale des Travaux Publics Paris , Civil Engineering (2019)
- B.S., Ecole Speciale des Travaux Publics Paris , Civil Engineering (2017)

STANFORD ADVISORS

- Jason Andrews, Postdoctoral Research Mentor
- Katherine Casey, Postdoctoral Faculty Sponsor

LINKS

- LinkedIn: <https://www.linkedin.com/in/onja-davidson/>

Publications

PUBLICATIONS

- **Resilience of stormwater biofilters following the deposition of wildfire residues: Implication on downstream water quality management in wildfire-prone regions.** *Journal of hazardous materials*
Raelison, O. D., Das, T. K., Guyett, K., Merrifield, R., Visweswaran, A., Indiresan, S., Lin Yang, K., Pierce, G., Mohanty, S. K.
2024; 465: 132989
- **PFAS release from the subsurface and capillary fringe during managed aquifer recharge.** *Environmental pollution (Barking, Essex : 1987)*
Das, T. K., Han, Z., Banerjee, S., Raelison, O. D., Adeleye, A. S., Mohanty, S. K.
2024; 343: 123166
- **Do drinking water treatment residuals underperform in the presence of compost in stormwater media filters?** *The Science of the total environment*
Raelison, O. D., Das, T. K., Visweswaran, A., Guyett, K., Spallone, S., Ramos, R., Merrifield, R., Dittrich, T. M., Mohanty, S. K.
2023; 904: 166635

- **Use of expanded shale, clay, and slate aggregates and biochar in the clear zone of road infrastructures for sustainable treatment of stormwater** *JOURNAL OF CLEANER PRODUCTION*

Das, T. K., Raelison, O. D., Rehman, H., Zhang, Y., Chau, W., Thamiz, L., Stenstrom, M. K., Mohanty, S. K.
2023; 428

- **Wildfire impacts on surface water quality parameters: Cause of data variability and reporting needs.** *Environmental pollution (Barking, Essex : 1987)*

Raelison, O. D., Valenca, R., Lee, A., Karim, S., Webster, J. P., Poulin, B. A., Mohanty, S. K.
2023; 317: 120713