PhD Student Opportunity in Aquatic Biogeochemistry & Remote Sensing

We are looking for motivated, independent students interested in research on aquatic biogeochemistry and remote sensing to join the Carbon & (H₂)Optics Lab at Cleveland State University. Our lab focuses on advancing our spatiotemporal and mechanistic understanding of the drivers of water quality and aquatic carbon cycles in inland and coastal waters using optical, chemical and satellite datasets. We currently have active projects with field components across the Great Lakes (Lakes Erie, Superior, and Michigan) and the Hawaiian Islands, alongside projects considering global processes through the use of in situ and satellite data. Successful applicants will have the opportunity to participate in and lead field and lab-based research, along with learning and applying computational tools suitable for analyzing satellite data and other large, geospatial environmental datasets.

A BS in a relevant science field (e.g., biology, environmental science, computer science) is required. Preference will be given to candidates with: 1) a passion for water quality, carbon cycle science, or remote sensing; 2) prior experience with coding (e.g., Python, Matlab, R) or geospatial software; 3) dedication to a field campaign with intermittent long days in the field and lab; and 4) demonstrated proficiency in quantitative, writing and communication skills. Students should be enthusiastic to work in a variety of settings, from fieldwork on coastal class research vessels to lab and computer-based research. Members from groups underrepresented in STEM are highly encouraged to apply; further, consideration will be given to personal circumstances that have challenged the ability to succeed in one or more of the preferred applicant categories. A competitive research stipend will be provided, and students will be encouraged to apply for external funding to foster increased independence and self-efficacy.

Interested applicants can learn more about potential research experiences at our website ([https://www.coffeandoptics.com/](https://www.coffeandoptics.com/)). Applicants should submit a single PDF that includes (1) a cover letter outlining your interests in water quality, carbon cycle and/or remote sensing science, research topics/questions you are interested in pursuing as part of your graduate work and relevant experience/skills for the position; (2) your CV; (3) a copy of your unofficial transcripts; and (4) contact information for three professional references to Brice Grunert ([b.grunert@csuohio.edu](mailto:b.grunert@csuohio.edu)). Priority will be given to applications received by December 10, 2023, with an expected start date in May 2024. Only selected applicants will be asked to formally apply to Cleveland State’s graduate school ([https://grad.engagecsu.com/](https://grad.engagecsu.com/)).