**Fall 2022 - Research Opportunities**

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The Warsinger Water Lab is recruiting motivated undergraduate students interested in conducting research in the topics of HVAC and air purification. We are looking to hire **1-2 undergraduate researchers** for the 2022-2023 academic year (and beyond). Applicants with a passion for research or a career in water, energy, or sustainability are strongly preferred.

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| **Projects Overview** |

1. **Photocatalysis for Air Purification:** Photocatalysis is one method for helping degrade harmful airborne particles, like COVID-19, which our lab is investigating in a partnership with a start-up company. Undergraduates interested in designing experimental setups and microbiological experiments are well-suited for this project. Candidates with experience in culturing microorganism/relevant wet lab experience is preferred.

**Interests/Qualifications:** All applicants should have an interest in photochemistry, microbiology, aerosol sciences and fluid mechanics. In addition to the required skills mentioned in the points above, applicants with additional experience with some of the following programs are preferred: Python and Adobe Illustrator.

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| **What experience will you gain?** |

* Hands on research experience and potential co-authorship in high impact journals
* Application of engineering fundamentals to important societal problems
* Research credit hours (and potential opportunities for financial compensation in the summer)
* Networking opportunities with academic and industry leaders

**Role/Responsibilities:** (1) Learning the techniques of viral surrogate culturing (2) conducting experiments in HVAC wind tunnel. **Qualifications:** Rising juniors/seniors in EEE with an interest in microbiology, aerosol science and photochemistry. Experience with Python and Adobe Illustrator preferred.

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**Please contact Sudharshan Anandan (****sanandan@purdue.edu****) with your resume or questions.**

