THE OHIO STATE UNIVERSITY

Dr. Andy May, in the Department of Civil, Environmental, and Geodetic Engineering at The Ohio State University (OSU), is searching for a post-doctoral scholar to work on a project sponsored by NOAA's Atmospheric Chemistry, Carbon Cycle & Climate program related to data analysis of recent airborne measurements of atmospheric aerosols. Specifically, the project seeks to further the development of statistical models for the prediction of the mass-absorption cross-section of black carbon (MAC_{BC})^{*}. This

work builds upon our previous efforts applied to long-term, ground-based monitoring sites The position is fully-funded for 18 months, with the possibility for extension, pending funding availability. The anticipated start date for this position is late 2024.

Primary responsibilities of the scholar will be to:

- Build upon existing models and explore alternative models to reduce prediction biases of MAC_{BC} across a range of atmospheric environments
- Conduct a targeted evaluation of data collected during the <u>FIREX-AQ</u> campaign and other campaigns focusing on open biomass burning smoke
- Explore the applicability of the best statistical model to remote sensing data
- Mentor undergraduate students on computational work
- Lead manuscript preparation efforts
- Present research findings at national meetings
- Develop skills towards an independent career

Other opportunities:

- Prepare new research proposals
- Teach environmental engineering courses
- Leverage resources from the OSU Office of Postdoctoral Affairs (<u>https://u.osu.edu/osupac/home/</u>) and join the OSU Postdoctoral Association (<u>https://u.osu.edu/postdocs/</u>)

Required qualifications:

- PhD in Environmental Engineering, Atmospheric Science, Computer Science, or related field
- Experience with large data sets
- Experience with regression and machine learning techniques

Desired qualifications:

- Experience with aerosol measurement data
- Experience with aerosol optical properties
- Experience with high-performance computing

Interested applicants may email a cover letter; a personal statement describing research interests, career goals, and relevant experience; a current CV; and contact information for at least three references to Dr. May (<u>may.561@osu.edu</u>) by 15 July 2024 for preliminary screening. Formal applications will be submitted through an official WorkDay job posting that is forthcoming. For more information about Dr. May's research, please visit his website: <u>https://u.osu.edu/may.561</u>.

The Ohio State University is an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to age, ancestry, color, disability, ethnicity, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, race, religion, sex, gender, sexual orientation, pregnancy, protected veteran status, or any other basis under the law. Dr. May has completed three levels of the OSU College of Engineering's Inclusive Excellence Certificate Program, and he has received a teaching endorsement from the OSU Michael V. Drake Institute for Teaching and Learning for his participation in research mentoring training.

Department of Civil, Environmental and Geodetic Engineering

> 470 Hitchcock Hall 2070 Neil Avenue Columbus, OH 43210-1275

> > Phone: (614) 688-1206 Fax: (614) 292-3780

> > > may.561@osu.edu

^{*} See <u>https://doi.org/10.3390/atmos11111185</u>, <u>https://doi.org/10.1080/02786826.2022.2114311</u>, and <u>https://doi.org/10.1080/02786826.2022.2114312</u>.