

ARIZONA STATE UNIVERSITY
An Equal Opportunity/Affirmative Action Employer

POSITION DESCRIPTION:

Postdoctoral Research Associate – Climate and the Built Environment
Job # 11841

Overview:

The School of Geographical Sciences and Urban Planning (SGSUP) at Arizona State University (ASU) seeks applications for one non-tenure-track position at the rank of Postdoctoral Research Associate, supervised by Professor David Sailor, the Director of a new Urban Climate Research Center (UCRC) at ASU. The position, available July 1, 2017 (or soon thereafter), is a year-to-year appointment, renewable, contingent on performance and availability of funds.

The UCRC is a highly interdisciplinary center engaging researchers from across a wide spectrum of disciplines, including physical geography, atmospheric science, engineering, design, and health and social sciences. The ASU Tempe campus has approximately 60,000 students and is located in the rapidly growing metropolitan Phoenix area, which provides a wide variety of recreational and cultural opportunities and is especially desirable for outdoor enthusiasts who enjoy biking, hiking, skiing, and other activities in the exquisite Arizona canyon lands and rugged terrain.

Job Description:

This position presents a unique opportunity to contribute to and expand upon the research thrusts of several ongoing funded projects while also helping to develop new collaborative research efforts across the UCRC. Ongoing projects focus on several key thrusts: quantifying the potential benefits of targeted urban heat mitigation efforts at the building to neighborhood scale—with an emphasis on pedestrian thermal comfort and indoor environmental conditions in unconditioned buildings; and understanding the role that human behavior, building construction, and management practices play in mediating the exchange of heat and air pollution between outdoor and indoor environments—with an emphasis on episodes of extreme heat and poor air quality in the absence of air conditioning and/or coincident with power failures. We are particularly interested in applying concepts of resilience and adaptive capacity to these projects and expanding them across additional cities and regions (they currently focus on Los Angeles and Houston). The successful candidate will be expected to articulate a specific plan of research to build on these efforts and take them in new directions. The candidate will also assume a leadership role in helping to develop integrative proposals to build on a range of activities ongoing in the UCRC. They will also be expected to actively contribute to publication of research results in peer-reviewed journals and presentation of results at national and international meetings.

Essential Duties:

- Contribute to existing projects through a subset of the following activities: mesoscale or microscale atmospheric modeling, design and implementation of building to neighborhood scale measurement campaigns, or spatial/statistical modeling and interpretation of field data.
- Assist in mentoring current graduate students in their research
- Collaborate with faculty affiliates of the UCRC to develop research proposals
- Provide guest lectures as appropriate and consistent with your expertise for graduate and undergraduate courses.

Minimum Qualifications:

- A Ph.D. in Atmospheric Science, Geography, Engineering or a related field by time of appointment.
- Strong data analysis skills with software such as R, SPSS, Matlab, ArcGIS, etc.
- Demonstrated verbal and written communication skills (in English)
- Demonstrated research and publication record in the peer-reviewed literature within some aspect of the field of urban climate.

Desired Qualifications:

- Strong programming skills (e.g., C, Fortran, Python, scripting languages, etc.) and experience working within a unix/linux environment
- Experience developing, running, and analyzing output from simulation software for building energy modeling (e.g., EnergyPlus), microscale meteorological models (e.g., EnviMet), or mesoscale atmospheric models (e.g., WRF).
- Remote sensing proficiency (e.g., use of appropriate software and data sets for analyzing and characterizing land use/land cover, and surface characteristics);
- Experience working with sensors and programming and deploying data loggers for micrometeorological, indoor environment, and/or air pollution measurements.

To Apply:

To apply, please submit the following as a single PDF document: to sgsup.jobs@asu.edu with "Sailor PostDoc 11841" as the subject line text. The file name for your PDF should be of the form <surname>_<firstname>.pdf

- A Statement of Research Interests (not to exceed 2 double-spaced pages);
- A complete Curriculum Vitae including a list of publications and the names/email address/phone numbers of three references;

Further inquiries should be made to Prof. David Sailor (David.Sailor@asu.edu) The initial review of applications will begin December 31, 2016; if not filled, applications will be reviewed every two weeks thereafter until the search is closed. A background check is required for employment.

Arizona State University is a VEVRAA Federal Contractor and an Equal Opportunity Affirmative Action Employer. All qualified applicants will be considered without regard to race, color, sex, religion, national origin, disability, protected veteran status, or any other basis protected by law.

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