

Postdoc Position in the Department of Civil and Environmental Engineering at University of Southern California

Are you enthusiastic about leading the way in research to combat air pollution and address climate change? Join Dr. Jiachen Zhang's research group (<https://sites.usc.edu/jzhang/research/>), which is at the forefront of investigating the complex interactions between climate change, air quality, and society (encompassing areas such as transportation, energy, land use policies, public health, and equity).

We are seeking one postdoctoral scholar to work on a project evaluating the impact of zero-emission transportation policies on air quality, health, and equity. Applicants are also encouraged to propose research ideas aligned with their interests that resonate with the overarching research objectives of Dr. Zhang's research group.

We welcome applications from candidates who possess the following qualifications:

- Commitment and passion to addressing critical societal challenges related to climate change, air quality, and equity through research and outreach
- Proficiency in air quality and climate modeling tools such as WRF, WRF-Chem, WRF-CMAQ, AERMOD, CESM, and GEOS-Chem
- Proficiency in data mining techniques and computer programming (e.g., Python, MySQL, R, and Excel), including hands-on experience with complex datasets and statistical analysis.
- A strong background in engineering or science, such as coursework or research experience in Environmental, Mechanical, or Chemical Engineering, Atmospheric or Earth sciences, Environmental Health, or related fields

Prospective postdocs are encouraged to reach out to Dr. Jiachen Zhang at jiachen.zhang@usc.edu before **April 15**. Applications will be reviewed on a rolling basis, so please contact Dr. Zhang sooner than later. Please use the subject line "Postdoc-2024-Name", combine the following documents into one PDF, and attach it to your email:

1. Curriculum Vitae (CV).
2. A concise personal statement (less than 1-2 pages) of your research interests, experiences, skill sets, and career goals.



3. Contact information for recommenders (names, affiliations, and email addresses).

Biography of Dr. Jiachen Zhang (<https://sites.usc.edu/jzhang/>)

Dr. Jiachen Zhang is a tenure-track Assistant Professor in the Department of Civil and Environmental Engineering at the University of Southern California (USC). Her research group investigates the interactions of air quality, climate, and society, quantifying the health and equity impacts of strategies aimed at mitigating climate change and air pollution.

Dr. Zhang holds a Ph.D. in Environmental Engineering from USC and a B.S. in Atmospheric Sciences from Peking University. During her doctoral and postdoctoral studies, she utilized and enhanced various climate and air quality models to assess the environmental impacts of adopting solar reflective cool surfaces, renewable energy, and electric cars. Prior to returning to USC, Dr. Zhang was the manager of the Mobile Source Technology Assessment and Modeling Section at the California Air Resources Board, where she led a team of scientists and engineers to conduct original research projects, develop emissions inventory, and inform first-of-their-kind policies aimed at promoting electric vehicles and reducing air pollutant emissions. Additionally, she chairs the Entrepreneurship and Innovation Committee of the Chinese-American Engineers and Scientists Association of Southern California and serves as the secretary of the Air & Waste Management Association West Coast Section.

The University of Southern California (USC)

USC stands as a globally renowned private research (R1) university. Situated in the heart of Los Angeles, USC is in close proximity to leading technology firms, cutting-edge research institutions, and government agencies pioneering environmental regulations, offering a wealth of opportunities for collaborations and career prospects. The Viterbi School of Engineering at USC is ranked #9 in the United States by *U.S. News & World Report* and consistently attains top rankings with research expenditures typically exceeding \$183 million annually, solidifying its reputation as a world-class institution for engineering education and research.

