

Watershed-scale Water Quality Modeling Postdoctoral Fellow Position

We are looking for a postdoctoral researcher interested in pursuing research in hydrologic modeling within agricultural watersheds. The successful candidate will work with Dr. Minghua Zhang at the Department of Land, Air and Water Resources, UC Davis in Davis, California. The position is for one year, with a possible extension to a second and third year. The project is to model pesticide fate and transport and nitrogen in surface waters and quantify exposure risks in the California's Central Valley using the Soil and Water Assessment Tool (SWAT) model and possibly to include AnnAGNPS model. Pesticide use data will be extracted from the Pesticide Use Report (PUR) database maintained by the California Department of Pesticide Regulation (CDPR) and nitrogen data will be estimated using landuse and land covers.

Desired expertise includes knowledge and skills across the following five areas of expertise: (1) hydrologic modeling using SWAT, (2) model calibration/optimization, sensitivity analysis, and uncertainty analysis, (3) pesticide exposure and risk assessment, (4) GIS (ArcGIS) and spatial database (PostGIS), and (5) scripting languages (e.g., Python, R).

Interested applicants are required to submit 1) a cover letter, 2) resume or curriculum vitae, and 3) a list of three references with contact information including mailing address, phone number, and email address. Salary is based on the University of California Academic Salary Scale, in accordance with current Postdoctoral Scholar Salary scale. A full-benefits package consisting of medical/dental and vision plans will also be offered.

Application materials should be sent to: Dr. Minghua Zhang, Department of Land, Air and Water Resources; University of California, Davis, CA 95616, e-mail: mhzhang@ucdavis.edu (subject line: Postdoc Application).