



CSULA - NSF REU SITE

HYDROLOGICAL SYSTEMS IN URBAN AREAS

REU Site Objectives:

- Our REU site at California State University, Los Angeles aims to attract motivated, diverse students to investigate urban hydrological problems in Southern California through a nested series of events during a 10-week summer REU experience. Component activities include research activities, training activities, mentoring activities, social activities, and post-REU activities. A four-day field activity at various hydrological sites is included in the summer program.

Web Site for more details and application procedure:
http://www.calstatela.edu/centers/URBAN_HYDROLOGY_REU

Summer 2023

Application Deadline:

February 15, 2022

REU SITE THEME AREAS

1) SURFACE HYDROLOGY OF URBAN AREAS

(2) CLIMATE DRIVEN CHANGES IN URBAN GROUNDWATER

(3) METEOROLOGY AND PRECIPITATION ALONG URBAN CORRIDORS

(4) HYDROCHEMICAL CHANGE IN URBAN WATERSHEDS

(5) MICROPLASTICS IN THE ENVIRONMENT

STUDENTS WILL BE PROVIDED WITH:

- \$600 PER WEEK FOR 10 WEEKS
- TRAVEL FUNDS TO LOS ANGELES
- HOUSING IN UNIVERSITY DORMS
- SUPPLIES & MATERIALS FOR RESEARCH
- PARTIAL MEAL AND POST-REU CONFERENCE SUPPORT

Supplemental Information

REU SITE: CALIFORNIA STATE UNIVERSITY, LOS ANGELES
**CHANGING DYNAMICS OF HYDROLOGICAL SYSTEMS IN URBAN AREAS -
 RESPONSE TO HUMAN DISTURBANCE AND CLIMATE CHANGE**

THEME AREAS	SUBPROJECT TITLE	INVESTIGATORS
1. Surface Hydrology of Urban Areas	Increasing Risks of Drought and Flooding over Southern California Associated with Urbanization and Climate Change (Computer Lab)	Li/LaDochy/ Farahmand
	Ascertaining the Long-term Effects of Best Management Practices in Urban Basins (Computer Lab)	Lopez/Li
	Ecohydrology of Burn Areas in Southern California Watersheds (Field Work, Computer Lab)	Farahmand/ Beland
2. Climate Driven Changes in Urban Groundwater	Groundwater Investigations in Salton Sea Area: Small Communities, Farms, and Wetlands (Field Work, Chem Lab, Computer Lab)	Hibbs
	Changes in Groundwater Flow Systems due to Urbanization and Climate Change (Computer Lab)	Lopez
3. Meteorology and Precipitation Along Urban Corridors	Climate Change Impacts on Water Resources and Demand in Southern California (Computer Lab)	LaDochy/ Li
4. Hydrologic and Hydrochemical Change in Urban Watershed/Wetlands	Natural and Contaminant Hydrochemistry of Urban Rivers (Field Work, Chem Lab)	Hibbs/Vozka
	Hydrologic Change in Urban Stream/Aquifer Systems and Coastal Wetlands (Field Work, Chem Lab, Computer Lab)	Beland/Hibbs
5. Microplastics in the Environment	Laboratory Experimentation of Microplastic Movement in Post-fire Soils (Chem Lab)	Vozka
	Modeling Microplastic Movement in the Environment (Computer Lab)	Lopez

ACTIVITY	EVENT	SCHEDULE	FACULTY LEAD
Orientation and Meet Advisor (off campus)		Week 1	All REU Faculty
Arrive on campus June 10 to 11			
Lab Research		Week 2 to 10	All REU Faculty
Half Day Workshops	-Unmanned Aerial Systems and Photogrammetry Techniques	Week 3	Beland
	-Basic Hydrochemical Laboratory Analysis/Post Field Trip Samples	Week 5	Hibbs
	-Poster/Oral Presentations	Week 7	Lopez
Friday Mentoring Meetings and Sports		Week 2 to 9	All REU Faculty
Four Day Joint Field Exercise, Trip		Week 4	Hibbs
Leave campus by August 6		End Week 9	
Annual Watershed Symposium (off campus via ZOOM)		Week 10	All REU Faculty
Weekend Social Events	Kickoff Social Dinner	End Week 2	REU Faculty
	Griffith Observatory Hike	End Week 5	REU Faculty
	Sunday Group Brunch	End Week 8	Hibbs (all invited)
REU Student Attendance of Professional Conferences		Post REU	All REU Faculty
Development of REU Student Publications		Post REU	All REU Faculty

Summer 2023

June 5 to June 11 (off campus)

June 12 to August 5 (weeks 2 to 9 on campus)

August 6 to August 12 (off campus)

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