# **Introduction**

The **2021 Environmental Science Education: Hydrology and GIS Workshop** at UCR will focus on educating credentialed high school and pre-service STEM teachers with the *pedagogy and techniques to integrate scientific contents related to water resources and GIS in their classrooms*.

The workshop, funded by the National Science Foundation and co-sponsored by the UCR CalTEACH- Science Mathematics Institute (SMI), is led by Professor Hoori Ajami with the aim of *integrating knowledge from chemistry, physics, and mathematical sciences in problem solving and interpretation of issues in water resources*. Participants who complete the workshop *will be provided with teaching materials* necessary for transferring their knowledge into their classrooms.

 These resources cover important materials related to hydrologic cycle, groundwater recharge processes and water management.



Anticipated Outcomes

Participants can expect to

* Learn about physical principles governing water balance;
* Learn on the use of GIS data and maps in teaching science;
* Gain skills in applying knowledge from physics and mathematics for problem solving in water resources.

Environmental Science Education:

HYDROLOGY and GIS Workshop

**Dates:**

July 29-30, 2021

**Time:**

10:00 am-4:00 pm (Instruction and

Group Work)

**Location:**

Online via Zoom

**Eligible Applicants:**

Credentialed High School Science Teachers

**\*\*Participation Stipend\*\***

$500 upon completion



**APPLICATION- Please answer the following questions to assist the selection process**:

1. Is your baccalaureate/post-baccalaureate degree in science, math, or engineering?

\_\_\_\_\_Yes \_\_\_\_\_No

**Application Deadline:**

*June 15, 2021*

To apply for this workshop, fill out and email the application form to Prof. Ajami (hooria@ucr.edu ) by June 15, 2021.

**Questions:** Contact Prof. Ajami

(hooria@ucr.edu)

Please indicate your subject area/ major \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. School site information:

School name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 School district \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What courses do you currently teach? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Indicate which type of teaching credential you hold:

\_\_\_\_\_\_\_Preliminary Teaching Credential

\_\_\_\_\_\_\_Professional Clear Teaching Credential

5.Briefly describe your primary motivation to participate in this workshop:

Contact Information:

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

e-mail\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_