

## Hydraulic Engineer

The Hydrologic Research Center (HRC), San Diego, was founded in 1993 and it is a non-profit, public-benefit research, technology transfer and training organization dedicated to the development of effective and sustainable solutions to global water issues. HRC's research-to-operations activities provide mitigation strategies that save lives, protect health, and enable economic prosperity and long-term sustainability of local agriculture, water resources, healthy ecosystems, and natural resources through a range of projects and grants from local to global scales. At present, HRC-developed operational systems support hydrometeorological forecasters in more than 65 countries, serving about 3 billion people worldwide. Please visit the HRC website for more details: <https://www.HRCwater.org>.

### Job Description

HRC is in search of a research engineer that specializes in computational hydraulics and its applications. As part of the HRC physical modeling team, you will be working with other researchers and computer engineers in the development and implementation of tailored numerical modeling solutions for a variety of channel flow applications in local and international projects. The typical work associated with the position includes numerical modeling and predictions in open channel hydraulics and sediment transport, scalable flash flood modeling, integrated hydraulics structure modeling, watershed management and flood mitigation strategy, quantitative and statistical analysis of model results, and user training of the numerical codes and background theories. The prospective candidate is expected to have a solid research background in hydraulics, hydrology or other related fields. Strong quantitative and scientific computing skills are essential for the position.

### Specific Requirements

- MS degree or higher, or equivalent experience, in hydraulic engineering or allied field with an emphasis on numerical modeling.
- Experience in scientific computing in channel routing.
- Experience in hydraulics structure modeling and integration, such as reservoirs, sluice gates, and diverging channels.
- Ability to work well with multidisciplinary teams of scientists and engineers.
- Ability to communicate analysis results with various audiences, including non-technical audiences, in the form of technical reports, training materials, and presentations.
- Ability to travel domestically and internationally.
- Desired is: experience with teaching and technology transfer.
- Desired is: proficiency with programming languages, such as C, Matlab, Fortran, Bash shell scripting.

### Additional Information and Instructions:

HRC's office is located in San Diego, California. All staff are currently working remotely but with regular in-person group meetings.

Salary commensurate with qualifications and experience. Salary range is \$65,000 to \$78,000. HRC provides a competitive benefits program including retirement, medical, dental and vision plans and paid vacations, holidays and sick leave.

Candidates should email a cover letter highlighting the reasons for their interest in the position, their current CV, and the names of two references that are familiar with the candidate's past work to: Dr. Z. Cheng, Chair, HRC Hydraulic Engineer Search Committee: [ZCheng@hrcwater.org](mailto:ZCheng@hrcwater.org). Selected candidates will be provided an application form that must be completed prior to final selection.

The position will remain open until filled.

HRC is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability, age, protected veteran status, gender identity or sexual orientation.

In compliance with federal law, all persons hired will be required to verify identity and eligibility to work in the United States and to complete the required employment eligibility verification document Form I-9 upon hire.