# Postdoctoral Scholar with Professor Kristen Davis

Job #JPF07359

• Civil and Environmental Engineering / Henry Samueli School of Engineering / UC Irvine

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## APPLICATION WINDOW

Open date: February 11th, 2022

**Next review date:** Friday, Sep 30, 2022 at 11:59pm (Pacific Time) Apply by this date to ensure full consideration by the committee.

Final date: Friday, Sep 30, 2022 at 11:59pm (Pacific Time)

Applications will continue to be accepted until this date, but those received after the review date will only be considered if the position has not yet been filled.

### **POSITION DESCRIPTION**

The Coastal Dynamics Laboratory within the Department of Civil and Environmental Engineering at the University of California, Irvine invites applications for a Postdoctoral Scholar position beginning Spring 2022.

The postdoctoral scholar position is in coastal physical oceanography as part of an Office of Naval Research (ONR) funded study of the dynamics of refraction and reflection of nonlinear internal waves (NLIWs). The postdoc will use numerical modeling along with existing observational data to examine the dynamics of NLIWs interactions with steep topography. The successful candidate will ideally have a working knowledge of physical oceanography (specifically internal wave dynamics) and ocean modeling, although candidates with similar skills will be considered.

#### **DUTIES AND RESPONSIBILITES**

- Conduct a series of idealized and realistic numerical simulations to examine NLIW refraction, reflection and generation using the SUNTANS (http://suntans.stanford.edu/) model;
- Use existing observations along with model output to contribute to an understanding of NLIW dynamics;
- Explore the effects of forcing mechanisms such as internal tides and rotation, as well as effects from nearshore NLIW such as residual currents, upwelling and mixing;
- Publish research in peer-reviewed journals and present results at national and international conferences.
- Mentor graduate and undergraduate students in the Coastal Dynamics Laboratory.

### MINIMUM QUALIFICATIONS

- Doctoral degree in Oceanography, Fluid Mechanics, Geophysical Fluid Dynamics, or a related field from an accredited university;
- Experience in numerical ocean model application, validation and analysis;
- Ability to collaborate effectively in a team environment;
- Excellent written and oral communication skills;
- Publications related to the minimum qualifications;
- Ability to pursue research independently.

The postdoc will work directly with Dr. Kristen Davis (http://davis.eng.uci.edu/) at the Department of Civil and Environmental Engineering, UC Irvine and will also collaborate with co-investigators at UC San Diego and Stanford University. Additionally, there will be opportunities to mentor graduate and undergraduate students and for travel to Taiwan.

Initial appointment will be for 12 months and will be renewable for up to one year, subject to performance and availability of funding. Salary will commensurate with qualifications and experience.

Applicants should submit a cover letter with a brief description of present and future research interests, curriculum vitae, publications, and contact information for three references. Apply by submitting your application to our online RECRUIT system at: https://recruit.ap.uci.edu/JPF07359

 $Screening \ of \ applicants \ will \ begin \ immediately \ and \ will \ continue \ until \ the \ position \ is \ filled.$ 

Department: http://engineering.uci.edu/dept/cee

## **QUALIFICATIONS**

Basic qualifications (required at time of application)

This position requires a Ph.D. degree in Oceanography, Fluid Mechanics, Geophysical Fluid Dynamics, or a related field from an accredited university.

## **APPLICATION REQUIREMENTS**

#### **Document requirements**

- Curriculum Vitae Your most recently updated C.V.
- Publications Publications or link to publications
- Cover Letter (Optional)

### Reference requirements

• 3 required (contact information only)

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## **CAMPUS INFORMATION**

The University of California, Irvine is an Equal Opportunity/Affirmative Action Employer advancing inclusive excellence. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age, protected veteran status, or other protected categories covered by the UC nondiscrimination policy.

## **JOB LOCATION**

Irvine, CA