Research Postdoctoral Scholar Position in Inorganic Chemistry Education & Chemical Education Research

Position Description

The Interactive Online Network of Inorganic Chemistry (IONiC; www.ionicviper.org) and the Center for the Improvement of Teaching & Research in Undergraduate STEM Education (CITRUS; at the University of South Florida) seek a Research Postdoctoral Scholar for a full-time, 12-month position, with benefits, that can begin as early as August 1, 2018. The initial appointment will be for one year, with the possibility of renewal for a *maximum* of one additional year, contingent on satisfactory performance and resources.

The person who is hired for this position will assist in a collaborative research effort of three universities (USF, Hope College, and James Madison University). The Research Postdoctoral Scholar will work under the direct supervision of Dr. Jeffrey R. Raker at the University of South Florida; *the appointee is expected to establish residency in Tampa, Florida, for the duration of the appointment*. Dr. Raker is a Principal Investigator (PI) of this collaborative National Science Foundation-funded project (Improving inorganic chemistry education through a community-developed student-centered curriculum; DUE-1726133, USF; DUE-1726162, Hope College; DUE-1725822, James Madison University). The Research Postdoctoral Scholar will be expected to interact regularly with the PIs at collaborative sites and with project participants.

Qualifications

The successful candidate will have the skills and experience to contribute to all phases of data collection and analysis for the project; and contribute to the planning, implementation, and evaluation of professional development/cohort workshops. Specifically, the candidate will be expected to contribute to the project by assisting with these activities:

- Develop collaborative relationships with VIPEr Fellows, content-development workshop participants, and IONiC members.
- Obtain Institutional Review Board (IRB) approval in collaboration with VIPEr Fellows at their respective institutions.
- Develop procedures for collection, management, and sharing of data from the VIPEr Fellows' institutions.
- Screen and evaluate project data including assessments of affect, assessments of content and skills, classroom observations, VIPEr Fellow interviews, course syllabi and assessments, and other project related fields notes, etc.
- Analyze project data including statistical analysis, psychometric analysis, and applying coding rubrics to constructed-response assessment items and observational data.
- Prepare summaries of analyses for use as discussion starters and reflection during professional development workshops.
- Prepare manuscripts for peer-review that describe project activities and results of research initiatives.

- Collaborate with the leadership and facilitation of professional development sessions including workshop presentations, small and whole group discussions, and instructional material development.

The successful candidate must have interest in teaching undergraduate inorganic chemistry following the Research Postdoctoral Scholar experience.

The successful candidate will be expected to prepare a *professional development plan* in the first month of their appointment. This plan will address (A) a timeline for preparing appropriate application materials for post-appointment employment, (B) an articulated set of achievement milestones for project-related goals, (C) an articulated set of achievement milestones for a small independent research project that contributes to the goals of the broader project, and (D) participation in professional development opportunities such as attending programs offered by the USF Academy for Teaching and Learning Excellence, auditing graduate-level courses offered by the Measurement and Evaluation faculty of the USF College of Education, or participating in career development workshops offered by the American Chemical Society. The successful candidate with interests in careers in academia will have opportunities to participate in the preparation of grant proposals; as appropriate, the successful candidate will have time to prepare an independent grant proposal for use after the Research Postdoctoral Scholar appointment has concluded.

Experience conducting chemical education research is not required; however, candidates with experience in chemistry education research, scholarship of teaching and learning, or with a demonstrable knowledge of the themes, issues, and methods central to chemical education research are preferred. A Ph.D. in a STEM field such as inorganic chemistry, synthetic chemistry, materials, or chemistry education research is required at time of appointment.

Application Process

Please submit full applications electronically via Careers@USF (Position #16530) no later than **May 15, 2018**. Applications received by this date will be given first consideration; applications will be accepted and considered until the position is filled. *The application must include **a single PDF file** that contains (A) a cover letter in which the applicant describes their experience or interests in inorganic chemistry education and chemical education research, (B) a current CV, (C) one sample published paper (co-authored papers are acceptable; however, the applicant should be the primary or first author), and (D) a list of three references with contact information.* Letters of recommendation, a summary of research interests, a proposal for an independent project related to the project, or other supporting documentation *may* be requested from finalists for this position. Top candidates will be interviewed using Zoom (or equivalent) with the possibility of a campus visit.