

Dear Colleague Letter: Improving graduate student preparedness for the chemistry workforce

April 21, 2016

Dear Colleague,

NSF has identified as one of its Agency Priority Goals an effort to improve graduate student preparedness for entering the workforce (<http://www.performance.gov/node/40262?view=public#apg>). As part of this effort, the Division of Chemistry (CHE) supports masters and doctoral students so that they can acquire the knowledge, experience, and skills needed for highly productive careers, inside and outside of academe. This Dear Colleague Letter describes opportunities for supplemental funding to enhance the training experience of graduate students currently supported by active CHE research grants.

Summary of Opportunity

Examples of experiences targeted by this opportunity include, but are not limited to, limited duration (one to three month) internships or similar experiences in industry (including start-up companies), state or federal government laboratories, policy organizations, and non-profit foundations. Consideration would also be given to professional development courses on, for example, innovation and technology commercialization, business and entrepreneurship training, and communicating science to the public. Such courses should not be undertaken in order to directly benefit the student's research project. *Activities that include an international component are also encouraged.* It is expected that student participation in these experiences will enhance their skills for attaining a competitive position in the job market. Note: Funding requests for conference attendance will not be considered for this supplemental funding opportunity.

Eligibility

This opportunity is open to M.S. and Ph.D. graduate students currently supported on NSF CHE individual investigator or small group research grants. Graduate students must have completed at least one academic year as a full time student and be in good academic standing within their Department. These eligibility requirements must be certified by the Chair of the graduate program for the institution at which the application originates.

Supplemental funding requests should be submitted no later than May 20, 2016.

Preparation Instructions and Allowable Costs

It is expected that the student, graduate research advisor, and internship host/course coordinator will work together to identify innovative experiences that add value to the student's graduate school training. Supplemental requests must satisfy all of the following requirements:

1. The proposal must include a one-page (maximum) statement from the student describing how the activity will better prepare him/her to enter the workforce. The statement should identify the skills and experiences that are sought and highlight how the activity will enhance the student's graduate school training in relation to their career goals.
2. A one-page (maximum) statement from the graduate research advisor indicating concurrence with the student's plans and including a summary statement that this activity is not expected to adversely affect the student's progress in dissertation research.
3. A two-page (maximum) resume from the graduate student, including year in the graduate school program.
4. A letter from the chair of the graduate program certifying that the student meets eligibility requirements.
5. If an industrial or other laboratory partner is involved, the academic and industry partners must agree in advance as to how intellectual property rights will be handled. A statement to this effect should be included in both the graduate research advisor's and the sponsor's letters.
6. In the case of a laboratory internship, a letter of commitment from the host company or organization or other relevant sponsor, briefly outlining the student's role in the project and indicating how the student will be mentored.
7. There is a limit of one Graduate Education Supplement per PI/co-PI, per award period.

Principal Investigators (PIs) are encouraged to discuss, with their cognizant CHE program director, the proposed activities that would be part of a supplement request. The supplement request limit is \$12,000 for a maximum for three months. Eligible costs can include student stipends (if not paid by an industry partner), travel, temporary relocation, and course fees. Spouse and dependent travel are not allowed. The Chemistry Division expects to fund 10-15 supplements in Fiscal Year (FY) 2016, depending on the availability of funds.

Submission and Review

We anticipate funding no more than 15 supplement awards in FY 2016. Investigators are strongly encouraged to contact their cognizant program directors for more information. For full consideration, requests should be submitted no later than May 20, 2016 for FY 2016.

Cognizant CHE Program Directors:
Chemical Catalysis (CAT) - George Janini
Chemistry of Life Processes (CLP) – David Rockcliffe

Chemical Structure, Dynamics and Mechanisms (CSDM-A) – Colby Foss
Chemical Structure, Dynamics and Mechanisms (CSDM-B) – Tingyu Li
Chemical Theory, Models and Computational Methods (CTMC) – Evi Goldfield
Chemical Synthesis (SYN) – Richard Johnson
Macromolecular, Supramolecular and Nanochemistry (MSN) – Suk-Wah Tam-Chang
Chemical Measurement and Imaging (CMI) – Kelsey Cook
Environmental Chemical Sciences (ECS) – Jim Lisy