



NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230

NSF 17-045

Dear Colleague Letter: Improving Graduate Student Preparedness for the Chemistry Workforce

January 5, 2017

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 **March 1, 2017**. The [NSF Proposal & Award Policies & Procedures Guide](#) (PAPPG) Chapter VI.E.4, provides specific guidance on preparing a request for supplemental funding.

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 and must include:

1. 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 her/his 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 institution, briefly outlining the student's role in the project and indicating how the student will be mentored.

There is a limit of one CHE Graduate Education Supplement per PI/co-PI (even if the PI or Co-PI has multiple CHE grants).

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 host institution), 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) 2017, depending on the availability of funds.

SUBMISSION AND REVIEW

We anticipate funding no more than 15 supplements in FY 2017. Investigators are strongly encouraged to contact their cognizant program directors for more information. For full consideration, requests should be submitted no later than March 1, 2017 for FY 2017.

Cognizant CHE Program Directors:

- Chemical Catalysis (CAT) - Tim Patten

- 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) - Scott Rychnovsky
 - Macromolecular, Supramolecular and Nanochemistry (MSN) - Suk-Wah Tam-Chang
 - Chemical Measurement and Imaging (CMI) - Kelsey Cook
 - Environmental Chemical Sciences (ECS) - Anne-Marie Schmoltnner

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