

NSF 13-082

Dear Colleague Letter: United States and United Kingdom Clean Water Collaboration

Date: April 3, 2013

The Global Grand Challenges Summit initiative between the national academies of engineering in the UK, US, and China brings together leading international engineers, future engineers, innovators, and policy makers to share their ideas on solutions to the world's most pressing challenges. This event is based on the firmly held belief that future solutions to these global challenges will rely on cooperation, both interdisciplinary and international. In the context of the Grand Challenges Summit, the UK Engineering and Physical Sciences Research Council (EPSRC) and NSF announce a joint, parallel activity to encourage collaborative research between leading researchers and students from the UK and US. The basis of the activity will be to add value to the existing engineering portfolios in both nations through the supplementation of existing grants to enable collaboration, for example through travel and people exchanges.

The provision of clean water is a global issue with societal, health, and economic implications. It has been identified by the international research community, including the US National Academy of Engineering, as a grand challenge for engineering in the area of sustainability. In the global context, particularly when addressing clean water issues, researchers and educators must be able to operate effectively in teams with partners from different nations and cultural backgrounds.

The NSF Directorate for Engineering (ENG) announces a special opportunity for collaborative research with UK-based research groups in the area of clean water. This NSF/ENG activity complements the recently begun NSF Graduate Research Opportunities Worldwide effort, and it parallels a call from the EPSRC. This cooperative effort promotes excellence in engineering research through international collaboration and facilitates development of a diverse, globally-engaged, US engineering workforce.

ENG will consider supplement funding requests for collaborative research with UK-based research groups in the area of clean water. Within clean water research, areas of particular interest include water treatment and purification, water reuse, storm water use, the water-energy nexus, urban water sustainability, and the resilience of water infrastructures. The supplement funding requests must be for existing active NSF awards that are managed by any ENG program officer. Supplement funding requests must be within the scope of the existing NSF active parent award.

The supplement budget request must not to exceed \$50,000, and the duration of the proposed activities must not exceed one year. The funds are to be used either to support the students of US-based researchers (and the researchers, if appropriate) as guest collaborative researchers in appropriate UK research settings, or for supporting students of UK-based researchers (and researchers) in appropriate US-based research settings. (However, funds may not be requested to cover transportation costs for

UK-based researchers and/or their students to and from the US; such costs will have to be covered by non-NSF sources.)

Prior to submitting a supplement funding request as described in this Dear Colleague Letter, an email request for authorization to submit such a supplement request must be sent simultaneously to the following NSF/ENG program officers:

- Bruce Hamilton at bhamilto@nsf.gov
- Geoffrey Prentice at gprentic@nsf.gov
- Debra Reinhart at dreinhar@nsf.gov

The email request for authorization to submit the supplement funding request must provide:

- the NSF award number of the existing NSF active award that would be supplemented,
- the name of its Principle Investigator,
- the current expiration date for the active award,
- the name of the NSF program manager for the active award,
- the tentative UK collaborator(s) and his or her (their) UK institution(s),
- a concise one paragraph description of the activity proposed for supplement support, with the role of students in the activity clearly articulated.

Email requests for authorization to submit a supplement request must be received by May 1, 2013, and authorized supplement requests must be received by May 30, 2013. ENG intends to award up to 20 supplements by September 30, 2013, for UK collaborative research on clean water, subject to availability of funds.

Authorized supplement requests must be submitted through FastLane and must address NSF merit review criteria of Intellectual Merit and Broader Impacts, and include a concise, substantive summary of the proposed plan for research and general interaction between the student(s)/researcher and the proposed UK research partners (including justification for the length of time proposed for the international research benefits to be derived from the project). The email authorization received from the Program Director must also be included as a supplemental document. Finally, the request must describe how the student(s)/researcher will:

- Benefit from specialized expertise, equipment, facilities, field sites, data, and/or other resources located outside the US.
- Build international collaborations that will enhance and contribute to the professional network of the student(s)/researcher.
- Integrate the proposed international research activities into the student(s)'s degree program and future career goals.

Sincerely, Pramod P. Khargonekar Assistant Director Directorate for Engineering