



NATIONAL SCIENCE FOUNDATION
2415 EISENHOWER AVENUE
ALEXANDRIA, VIRGINIA 22314

NSF 20-088

Dear Colleague Letter: NSF and DFG Opportunity for Collaborations in Advanced Manufacturing

May 29, 2020

Dear Colleagues:

Recognizing the importance of international collaborations in promoting scientific discoveries, the U.S. National Science Foundation (NSF) and the German Research Foundation, Deutsche Forschungsgemeinschaft (DFG) have signed a Memorandum of Understanding (MoU) on research cooperation. The MoU provides an overarching framework to enhance opportunities for collaborative activities between U.S. and German research communities and sets out the principles by which jointly supported activities might be developed. To facilitate the support of collaborative work between U.S. researchers and their German counterparts under this MoU, the Division of Civil, Mechanical and Manufacturing Innovation (CMMI) at the NSF and the Division of Engineering (ING) at the DFG are pleased to announce a Lead Agency Activity in the area of Advanced Manufacturing.

International collaborations between eligible U.S. and German institutions are invited to submit joint proposals in the areas described on the web pages for NSF's Advanced Manufacturing Program and DFG's review board 401 Production Technology. This Lead Agency Activity will allow U.S. and German researchers to submit a single collaborative proposal that will undergo a single review process while allowing funding organizations to maintain budgetary control over their awards. Proposals eligible to apply for this Lead Agency Activity in FY 2020 should have a research focus relevant to the topic areas identified in the links above. These proposals will be reviewed in the NSF Advanced Manufacturing Program by a panel of experts according to the NSF review guidelines in competition with other proposals received in the same NSF program.

This document outlines general principles and expectations of the participating funding organizations: 1) Information for proposers to help them prepare and submit proposals, 2) How the merit review process will be conducted, 3) How funding recommendations will be made, and 4) Information for Principal Investigators (PIs) regarding post-award conditions and reporting requirements.

PROPOSAL PREPARATION AND SUBMISSION

- The eligibility to submit a proposal follows the policies or regulations for the NSF and DFG programs for individual funding respectively. If in doubt, researchers are strongly encouraged to contact the corresponding program officers. Please note that for DFG financing, only projects which fall within DFG's funding responsibility and fit into the funding scheme "Sachbeihilfe/Research Grants" is eligible.
- The proposal must first be submitted to NSF's [Advanced Manufacturing program](#), and PIs must comply with the proposal preparation requirements outlined in the NSF Proposal & Award Policies & Procedures Guide (PAPPG). The proposal must be submitted via FastLane (<https://www.fastlane.nsf.gov>), Research.gov (<https://research.gov>) or Grants.gov (<https://grants.gov>).
- The proposal should have a title prefaced with "NSF-DFG:".
- The German investigators should be included as Senior Personnel (non-funded). A Biographical Sketch for each of these individuals should be provided in the Biographical Sketch section of the proposal with a format that conforms to the NSF PAPPG guidelines. Additional information about NSF-approved formats for the biographical sketch is available at <https://www.nsf.gov/bfa/dias/policy/biosketch.jsp>. "Current and Pending Support" information for German investigators does not have to be provided. Since this is a required section of an NSF proposal, however, please use the NSF fillable PDF form to indicate for each investigator designated as Senior Personnel (non-funded) that Current and Pending Support information is not required. Additional information about NSF-approved formats for current and pending support is available at: <https://www.nsf.gov/bfa/dias/policy/cps.jsp>. A "Results of Prior Support" Section also is NOT required for the German personnel. Please note that the "Collaborators and Other Affiliations" Single Copy Documents section MUST be filled out for the German collaborators.
- The proposal should only include the funds requested from NSF in the Budget section and include a budget justification.
- A letter of collaboration from the collaborating German institution should be included in the proposal and uploaded as a supplementary document.
- A supplementary document (limit 10 pages) must be prepared for DFG. This supplement must contain the information required in sections 5 to 7 of the DFG research grant project description - cf. DFG guidelines 54.01 and 53.01. This includes, among other information, the funds requested from DFG.
- After receiving a proposal number issued by the NSF, the proposal must be submitted to the DFG via ELAN. The submission to DFG must also contain the original proposal submitted to the NSF, the aforementioned supplementary document, and a cover letter stating the NSF proposal number (this is needed for matching the submissions). The submission to DFG must select its primary subject area from DFG's manufacturing

subject areas (i.e., 401-01 to 401-06).

Proposers to be funded by the DFG are requested to fulfil the eligibility requirements of DFG Research Grants, as noted in the guidelines of the Research Grants Program (DFG form 50.01). This includes the duty to cooperate ("Kooperationspflicht") within Germany for members of non-university institutions with permanent positions.

REVIEW PROCESS

Proposals submitted under the U.S. National Science Foundation (NSF) and the German Research Foundation, Deutsche Forschungsgemeinschaft (DFG) collaboration are reviewed along with other proposals submitted to the same program or funding opportunity in accordance with the standard NSF merit review criteria of Intellectual Merit and Broader Impacts of the proposed effort and additional review criteria where specified in the relevant program or funding opportunity. In addition, reviewers will be asked to assess the international collaboration in terms of:

- mutual benefit(s);
- true intellectual collaboration among all participating partners;
- benefits to be realized from the expertise/specialized skills, facilities, sites and/or resources of the international counterparts; and
- active research engagement of students and early-career researchers, where such individuals are engaged in the project.

The review will also adhere to the NSF merit review process for conflict of interests and confidentiality policies. NSF plans to share reviews and any panel summaries (without reviewer identities) with DFG for the purpose of coordinating funding of research.

FUNDING DECISIONS

NSF and DFG will use their standard internal procedures to make their funding decision. DFG's funding decision will be informed by the NSF's panel recommendation and funding decision.

NSF and DFG will confirm a final recommendation for funding with each other. Each agency reserves the right to fund their own country's researchers, regardless of the other lead agency's decision to fund or not. NSF and DFG reserve the right to negotiate final budgets with the respective PIs prior to award.

All U.S. PIs will be advised whether their proposal has been recommended for funding or declined by NSF. PIs will receive copies of the unattributed reviewers' comments and, where applicable, a panel summary.

Because the participating organizations have different funding cycles, it is possible that some projects will need to have delayed start dates in order to wait until funds become available.

Should a proposal be declined for funding, PIs should refer to each agency's individual resubmission policies.

POST AWARD CONSIDERATIONS

Awardees must comply with the award conditions and reporting requirements of the agencies from which they receive funding.

Awardees will be required to acknowledge both NSF and DFG support in any reports or publications arising from the grant.

Requests for changes to awards will be discussed with other involved funding agencies before a mutual decision is reached.

All NSF and DFG requirements for data management are applicable to investigators funded by their respective agencies.

In accordance with NSF and DFG standard procedures, awards are announced publicly.

For projects involving human subjects/participants or vertebrate animals, proposers should consult both DFG and NSF policies.

FURTHER INFORMATION

The elan system can be accessed at:

<https://elan.dfg.de/en/>

DFG forms 50.01, 53.01 and 54.01 can be downloaded at:

https://www.dfg.de/formulare/50_01/

https://www.dfg.de/formulare/53_01/

https://www.dfg.de/formulare/54_01/

POINTS OF CONTACT

NSF:

Khershed Cooper - khcooper@nsf.gov - +1 (703) 292-7017

Bruce Kramer - bkramer@nsf.gov - +1 (703) 292-5348

Andrew Wells - awells@nsf.gov - +1 (703) 292-7225

Thomas Kuech - tkuech@nsf.gov - +1 (703) 292-2218

DFG (Office North America):

Bettina Schuffert - bettina.schuffert@dfg.de - +1 (202) 729-6350

DFG (Head Office - Engineering Sciences I):

Ferdinand Hollmann - ferdinand.hollmann@dfg.de - +49 (228) 885-2277

Wieland Biedermann - wieland.biedermann@dfg.de - +49 (228) 885-2023

Sincerely,

Dawn Tilbury

Assistant Director

Directorate of Engineering