

Call for Proposals in a Joint NSF-BSF Program in Energy for Sustainability

The U.S.-Israel Science Foundation (BSF) is pleased to announce the opening of the second round of applications in a joint funding program in Energy for Sustainability, with the Division of Chemical, Bioengineering, Environmental, and Transport Systems (CBET) of the U.S. National Science Foundation (NSF).

The Terms of this program are as follows:

General:

1. This NSF-BSF program is not a "special" program with the NSF setting aside money for potential grants. Rather, it is an integral part of the regular NSF programs in these discipline, with no "special" funds. Clear understanding of it by the U.S. partner is essential before embarking on proposal writing.

Synopsis of Program:

2. The goal of the Energy for Sustainability program is to support fundamental research that will enable innovative processes for the sustainable production of electricity and transportation fuels. Processes for sustainable energy production must be environmentally benign, reduce greenhouse gas production, and utilize renewable resources.

A full description of the current program can be found in the NSF solicitation on the NSF website. It is strongly advised for all potentials applicants (including Israelis) to read the document carefully: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501026

Program Areas:

- 3. Current topics of interest in sustainable energy technologies are
 - Biomass Conversion, Biofuels & Bioenergy
 - Photovoltaic Solar Energy



 Advanced Batteries for Transportation and Renewable Energy Storage

4. Excluded Areas of Research

The following areas of research are excluded from this program:

- a. Wind Energy
- b. The following areas related to Biomass Conversion, Biofuels & Bioenergy:
 - Proposals that focus primarily on chemical reactor analysis related to biomass conversion;
 - Proposals related to the combustion of biomass;
 - Proposals that focus on the fundamentals of catalysis or biocatalysis
- c. The following areas of research that are related to Photovoltaic Solar Energy:
 - Proposals that focus on the fundamentals of photocatalysis;
 - Proposals that focus on the generation of thermal energy by solar radiation
- d. The following areas related to Advanced Batteries for Transportation and Renewable Storage:
 - -Fuel-cell related proposals

NSF/CBET-BSF collaborative proposals on renewable energy topics outside the scope of the three topics of interest will be considered unresponsive and will be returned without review.

- 5. Prior to submission, the U.S. applicant should contact the appropriate NSF program manager to discuss the research focus of his international project.
- 6. Part of the requirements of the U.S. PI, is to attach to the PI's submitted application a standard letter of collaboration that will describe the roles, responsibilities and activities of the Israeli team. The letter should also indicate the Israeli colleague's enthusiasm for participating in this project. In addition, the letter of collaboration should include this standard language:

"Dr. [Israeli Collaborator] will apply to the U.S. Israel Binational Science Foundation (BSF) for support of the Israeli side of this collaborative activity. BSF anticipates that they will fund all proposals approved by NSF. BSF has indicated that it will support projects of this type up to \$80,000 /per year over the number of years approved in the NSF grant to the U.S. team".



- 7. Applications must be written jointly by an Israeli and a U.S. scientist from a U.S. research institution.
- 8. The NSF accepts applications only from U.S. scientist and submission to the NSF should be made by the U.S. PI alone (the Israeli does not appear as a formal co-PI on the application). However, in the collaborative applications, the role of the Israeli partner(s) must be described. Furthermore, it should be clearly explained why the contribution of the Israeli PI to the research project is important/essential.
- 9. If awarded a grant, the Israeli scientist will receive a grant from the BSF, while the U.S. scientist will receive a grant from the NSF.
- 10. The size of the BSF grant to the Israelis is expected to be up to 80,000\$/year for the duration of the grant, subject to the availability of funds. BSF will follow the decision by the U.S. funding agency regarding the length of the project.
- 11. The program is expected to be held annually.
- 12. We have put together a presentation with tips for Israeli scientists who wish to submit to the NSF-BSF. You can download the presentation here.

Eligibility:

- 1. All inquiries regarding the eligibility of the research topic must be made by the U.S. PIs to the program directors at NSF. BSF will not respond to any query regarding topic eligibility.
- 2. All regulations regarding eligibility of the BSF (for the Israeli PI) or the NSF (for the U.S. PI) will apply to this program.
- 3. Each Israeli scientist is allowed to submit only a single proposal. Moreover, a scientist who has any pending NSF-BSF application, or has any active NSF-BSF grant that is not in its last year, is not allowed to submit an application to this program
- 4. Israeli scientists will be allowed to submit both to an NSF-BSF program and the regular BSF program, including similar applications. In the event that they are awarded a grant in both programs, they will be funded in both, unless the research application is mostly similar, in which case only their NSF-BSF program will be funded.



5. In case of similar NSF-BSF and regular BSF applications, in which the NSF evaluation was not completed by the time the regular BSF awards are made, the BSF will defer its decision regarding a possible grant to this application, until the NSF-BSF awards are announced.

Evaluation:

- 1. Proposals will be evaluated by the NSF, <u>using its criteria</u>. The BSF will create a small screening panel to quickly examine the role of the Israelis in the applications, and ascertain that it is meaningful, and that they have the knowhow and facilities to perform their part in the research. This panel will also advise the BSF regarding the budget requests, but will not evaluate the scientific merit of the applications. However, Israelis may possibly take part in the NSF evaluation process as panel members and/or external reviewers.
- 2. BSF is likely to fund any Israeli whose partner in this program is funded by the NSF, subject to the eligibility constraints, availability of funds, and advice of the screening panel.
- 3. NSF uses a conventional peer review system with expert panels and ad-hoc (external) reviews for full proposals. However, unlike the practice in Israel, panel members serve in an advisory capacity, and final decisions lie with the program managers and their management. These post-panel officials may introduce additional considerations such as whether the research topic already has support from the U.S. government, whether support from other NSF programs may be sought, etc.
- 4. Israeli applicants are advised that they should pay particular attention to the NSF evaluation criteria, http://nsf.gov/bfa/dias/policy/merit_review/, which may include issues such as broad impact, data management, etc. That are either missing in BSF/ISF applications, or have a greatly different meaning (particularly the term 'broad impact'). Failure to appropriately refer to such topics by the U.S. partner may be detrimental to the proposal, including early rejection without review.

Submission:

The full proposals will be submitted to the program twice.

The U.S. scientist (only) will submit to the NSF using its regulations

(http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg) and



submission system (https://www.fastlane.nsf.gov/). The US PI submission to

the NSF MUST include the BIOGRAPHY (in the NSF format) and BUDGET (in the BSF format) of the Israeli partner as part of the auxiliary material.

The Israeli scientist (only) will submit to the BSF, also providing the U.S. scientist information, according to its regulations and submission system: http://www.bsf.org.il/ElectronicSubmission/GatewayFormsAndGuidelines.asp x?PageId=7&innerTextID=0%20

Timetable:

Full proposals should be submitted to the BSF no later than 5 pm (Israel time) on October 30, 2016. NSF deadline is October 20, 2016. Please note that during Sukkot (Oct. 16 - 24) the BSF office will be closed.

Applicants are requested to acquaint themselves with the BSF regulation for this NSF-BSF program before they submit applications. The forms and regulations can be downloaded from the BSF website (<u>www.bsf.org.il</u>) under 'Guidelines and Forms'.

Questions regarding the applicability of the proposed research for this program should be directed by the U.S. partner to the program officer at the NSF.

Other questions regarding this special NSF-BSF program can be discussed with the BSF management by mail or phone (972-2-5828239): Dr. Rachel (Heni) Haring (heni@bsf.org.il ext. 110) or Ms. Yael Dressler (yael@bsf.org.il ext. 103). Questions regarding the online application system should be directed to Ms. Orli Rozencwajg (orli@bsf.org.il ext. 109).