# MRSEC Seed Grant Program Application Instructions

Deadline: September 1, 2013

### PROGRAM DESCRIPTION

The NSF Materials Research Science and Engineering Center (MRSEC) at the University of Utah is pleased to announce the third round of competition for seed program funding that will support **new** research related to the goals of the MRSEC. This program will potentially support basic and translational studies in all areas of materials science and engineering that would otherwise be considered eligible for support through the Division of Materials Research (DMR) of the NSF. The **emphasis** of this program is on developing new directions that can either be integrated into one of the two existing Interdisciplinary Research Groups (IRGs) or developed into a third independent IRG. The two existing IRGs are (i) Plasmonic Metamaterials and (ii) Organic Spintronics. Any questions or concerns regarding areas of research eligible for funding under this program should be directed to the seed program director, Valy Vardeny (val@physics.utah.edu) prior to preparing an application.

The MRSEC is an interdisciplinary and highly collaborative organization. Successful applicants must demonstrate in a clear and convincing manner that the proposed project will not only represent a new research direction for the applicant, but also that the project is likely to generate a new research direction for the Center as a whole. Funds awarded under this program are to be used to compete for research avenues and/or extramural funds that support the project in the long term. Research that is already supported by other sources and/or gap funding to bridge support between external grants or contracts will not be considered. Proposals that have already been submitted to an extramural agency or those already reviewed and found non competitive by an extramural agency will not be reviewed.

Preference will be given to proposals that:

- 1. Have potential for long-term, high-impact research in novel materials.
- 2. Have significant scientific merit.
- 3. Represent a new research direction for the PI(s).
- 4. Build or strengthen cross-disciplinary research partnerships within the MRSEC.

### APPLICANT ELIGIBILITY

An applicant may not be a principal investigator on more than one proposal during an application period. Proposals having co-investigators are eligible if the co-investigator is not an integral component on another seed grant application. Applicants must be tenure track faculty in residence at the time of application and be at least 0.75 FTE **OR** research track faculty of at least 0.75 FTE with a minimum of a one-year residency, in rank, at the University of Utah.

If an application has been turned down by the review panel, the PI is allowed one re-submission of a revised proposal on the same subject during the next round (one year later). Revised proposals must indicate changes from the previous proposal, as well as responses to reviewer comments.

### PROPOSAL SUBMISSION

There will be one submission cycle per year with a deadline **at the close of business (5:00 pm)** on **September 1<sup>st</sup> of each year**. If the 1<sup>st</sup> falls on a weekend or holiday, applications are due on the first work day following the 1<sup>st</sup>. An applicant may submit only a single proposal each cycle, whether individually or in combination with others (see above).

One copy of the proposal should be submitted, along with the Document Summary Sheet, to the MRSEC Executive Committee at <a href="mrsec@eng.utah.edu">mrsec@eng.utah.edu</a>. Proposals will not be returned.

If human subjects or animal research is involved, provide one copy of the IRB or IACUC. Applications must be made and approved prior to funds being released.

The application must include the following:

- 1. Abstract of the proposal; 1 page
- 2. Technical Proposal: limited to 3 pages
- 3. References: limited to 1 additional page
- 4. Budget (Excel format)
- 5. Current and Pending Support list yearly direct funds for each grant
- 6. Biographical sketch (limit 3 pages)
- 7. Letter of support from Department Chairman
- 8. List of 4 potential reviewers 2 can be within your department and 2 outside your department; must be University of Utah faculty, excluding members of the MRSEC Executive Committee.

# If any information items requested above are not included at the time of submission, the proposal will not be reviewed.

Awards will be up to \$30,000 for a single PI. Additional funding (up to a total of \$50,000) may be considered for a proposal with two or more PIs.

Funding is available for salaries and fringe benefits of postdoctoral fellows, students, technicians, and other non-faculty project personnel, technical supplies, equipment and miscellaneous expenses.

Grant funds **cannot** be used for **faculty salaries** (summer or academic year); **travel** that is not directly related to project research (e.g., conferences cannot be supported by this grant); **consultants**; **or office equipment, including computers (unless specifically justified).** 

Personnel time is limited to 12 months of any combination of postdoc, technician, or graduate student. An additional 12 months of graduate student time may be budgeted when the application is from multiple departments/programs.

The PI may transfer up to 25% of the award into different categories of spending without written permission from the MRSEC Executive Committee, as long as the category is in the originally approved budget.

### PROPOSAL EVALUATION

Applications will be reviewed by the MRSEC Executive Committee based on assessment by faculty members of the University of Utah. Applicants will be informed of the committee recommendations on or about September 30, 2013.

### **Review Criteria**

Proposals will be evaluated using the following criteria:

- 1. If the proposed research is completed, does the proposal have a high chance to generate new research direction for the Center, or be integrated in one of the two IRGs of the Center?
- 2. Are the significance and merit of the research clearly documented?
- 3. Have other research projects and/or faculty members been identified to be able to create a new interdisciplinary research group in the near future (2-3 years)?
- 4. Does the PI(s) provide information necessary to determine if this is a new direction and that the research does not overlap with existing funded projects?
- 5. Have potential barriers or technical difficulties been identified?
- 6. Does the PI (and co-PI's) have the experience necessary to carry out the project?
- 7. Are the goals, objectives and expected results stated clearly and are they reasonable, given the funds and time provided?
- 8. Are the methods outlined and do they reflect the goals and objectives stated in the proposal?

### **GRANT ADMINISTRATION**

The Principal Investigator is responsible for the administration of grant funds. In particular, he/she must be certain that over-expenditures do not occur. Capital equipment purchased from the funds is the property of the University of Utah.

If the work cannot be completed in the initial twelve-month period, the Principal Investigator may request one six month no-cost extension by sending a letter to the MRSEC Executive Committee at <a href="massec@eng.utah.edu">mrsec@eng.utah.edu</a> at least one month prior to the end of the project.

## REPORTING REQUIREMENT

Successful applicants must submit an intermediate report no later than 6 months after the start of the research investigation and a final report no later than 2 months after the completion of the grant. In general, recipients are expected to use results obtained from the ensuing research to write a proposal for extramural funding. These plans should be included in the final report. Reports should be submitted to the MRSEC Executive Committee at <a href="mailto:mrsec@eng.utah.edu">mrsec@eng.utah.edu</a> for review.