

Guidelines for MRSEC Annual Progress Reports and Continuation Request

NSF is transitioning to a new reporting system through research.gov, which requires NSF to comply with guidance about report content and specifies what information can be collected by the agency. This information is specified in the Research Performance Progress Report (RPPR) resulted from an initiative of the Research Business Models (RBM) Subcommittee of the Committee on Science (CoS), a committee of the National Science and Technology Council (NSTC).

Based on that guidance, MRSEC reports will remain identical in **format** in the PDF files submitted to NSF. **Two major changes are: (1) all diversity information collected must be based entirely on voluntary self-reporting. (2) all budgetary information in the report must be attested to by the university ARO.**

To implement item 1, we will establish a web-based interface on MRSEC.ORG for individuals to voluntarily self-report Demographic data. Do not collect Demographic information from any other source or by any others means.

The **Annual Progress Report** contains specific information including, but not limited to, the following:

- a. *A summary description of the Center; description of scientific and engineering accomplishments and plans; progress and plans in the area of education and human resources; progress and plans in outreach and knowledge transfer to industry and other sectors and groups; shared experimental facilities; Center administration and management; and a data base of indicators of activity and progress, as required by the Government Performance and Results Act (GPRA).*
- b. *Personnel and financial reports containing the following information: a statement of funds estimated to remain unobligated as of the anniversary date; a current year budget based on actual funds spent and a continuation request budget for the ensuing year in accordance with NSF Form 1030; estimated budgets for the current and ensuing year by area of activity according to the Summary Table of Requested NSF Support; names of senior personnel by interdisciplinary research group; current information about other support of senior personnel and a statement of institutional and other support for the Center.*
- c. *An updated long-range plan, including projected activities, long-range budget expectations, and priorities through the expiration of this Agreement.*

These guidelines spell out the format for Annual Progress Report for the Materials Research Science and Engineering Centers (MRSECs). **Annual progress reports are due approximately six weeks before the continuation date of the MRSEC award. Annual progress reports are due May 1 for continuation dates between July 1 and October 1.**

Please prepare the report using the headings, instructions, and the table templates provided, in the order indicated in the following guide. *The narrative sections are to be written in third person.* The report must be submitted through the annual report option of Research.gov (Note, that annual report due dates in the Research.gov system are based on the initial award date and

may not coincide with the continuation date of the award). Please submit the entire report as a single pdf file including the budget pages and tables. If the pdf file exceeds the research.gov pdf file size limit, the file may be broken into several pdfs. In addition, report only those publications/patents that acknowledge MRSEC support in the acknowledgement section should be (a) listed in section 14 of the annual report, and (b) counted in Appendix E. It is encouraged that the NSF MRSEC Program and the local Center name be acknowledged as well.

A separate Certification of Cost Sharing (for old MRSEC awards that required cost sharing) documented on an annual and cumulative basis needs to be submitted via Research.gov by a university administrator in the Sponsored Project Office, if applicable.

Research.gov questions should be referred to the Help Desk (1-800-381-1532).

Checklist for MRSEC Annual Progress Reports

- ❑ Ensure that you are working from the current Guidelines.
- ❑ Annual progress reports are due at NSF approximately six weeks before the continuation date of the MRSEC award. Annual progress reports are due May 1 for continuation dates between July 1 and October 1.
- ❑ Prepare the PDF file as normal per the Annual Progress Report Guidelines.
- ❑ For Research.gov: insert the following text into all Annual Project Report module sections: “See attached PDF of Annual Report”. Do not upload or enter any publications in the Products Module.
- ❑ Submit the entire PDF report, including the narrative sections; budget pages and tables, as a single PDF file via the file upload function in the Accomplishments module on Research.gov.
- ❑ Submit the Breakout Budget Excel spreadsheets via e-mail to mrsec@nsf.gov; also include a PDF these spreadsheets in the budget section of the annual report (see section 17. below).
- ❑ The Sponsored Project Office needs to submit Certification of Cost Sharing documented on an annual and cumulative basis via Research.gov, if applicable.
- ❑ Send **all** Highlights in PowerPoint format to mrsec@nsf.gov. One Highlight per file, using the following filename: ‘University’ MRSEC ‘cooperative agreement number’ ‘author name’ ‘Highlight title.’ For example, a Highlight on patterned proteins by Mary Smith from the CalTech MRSEC would read: CalTech MRSEC 0520565 IRG-1 Smith Patterned proteins. Please ensure that Highlights created on a Macintosh computer open properly on a Windows machine before transmitting them to NSF.
- ❑ Post two of the above Highlights (the best two) on the mrsec.org website before or coincident with the submission of this annual report. This can be done directly or by sending the Highlights to webmaster@mrsec.org.
- ❑ Update your MRSEC website at least annually
- ❑ All narrative sections are to be written in the third person.
- ❑ Describe both accomplishments/progress and plans in narrative sections 4-9.

- Address diversity at **all** academic levels in the Diversity Strategic Plan.
- Double check the numbers in budget pages:
 - For each budget page, Line L should reflect the numbers entered in lines A-K.
 - The total MRSEC budget should be the sum of the five breakout budgets.
- Use a consistent list of Center participants at the faculty level in Narrative Section 2(i) and in Appendix A.
- The total cost sharing in Appendix D1 should be the same as line M in the budget page.
- The numbers entered in Appendix G should be consistent with those in the budget pages.
- The numbers entered in Appendix H should be consistent with those in appendices D1, D2 and G.

MRSEC PROGRAM ANNUAL PROGRESS REPORT GUIDELINES

CONTENTS

Narrative Sections:

1. **Executive Summary** (maximum 5 pages in length)

This is a high level report to NSF of major accomplishments, activities, and plans of the MRSEC

- State the vision of the Center and how the Center is organized into IRGs and Seeds.
- Provide a Director's overview of the Center, including education activities, the Center diversity effort, industrial outreach, international collaborations, shared facilities, and Center management.
- Then provide a narrative of the past year's **Key Accomplishments**, addressing the NSF criteria on Intellectual Merit and Broader Impacts in distinct sections.
- Discuss the Center's response to any site visits and external advisory committee recommendations.
- Briefly describe progress made with supplemental funding, if applicable.
- Finally, comment on any long-range plans, change in priorities, or other unusual circumstances that are pertinent for the continuations of this award.

2. **List of Center Participants** (*faculty level and equivalent*) by academic departments in the three categories, below; names in categories (i) and (ii) should sum to the number of participants reported in Appendix B. For Center participants from industry or National Laboratories list the equivalent academic department.

- (i) Receiving Center support (not necessarily *salary* support). Please state full names.
- (ii) Affiliated, not receiving Center support.
- (iii) User of shared Center facilities.

3. **List of Center Collaborators.**

Alphabetized list of names of collaborators (not including those listed as Center Participants), their institutional affiliation, e-mail address, area of expertise, and reference to the appropriate IRG and Seed and/or the use of shared facilities. This provides more detailed information than the numbers entered in Appendix F.

We suggest a table format with the following entries:

Collaborator	Institution	e-mail	Area of expertise	IRG # or seed association	User of Shared Facilities
John Doe	Biomet	jdoe@biomet.com	polymers	2	Yes
Jane Smith	State University	jsmith@state.edu	structural mechanics	1	No

4. **Strategic Plan** (maximum 2 pages).

Restate the vision of the integrated Center. In separate paragraphs, identify the research, education, and diversity goals of the MRSEC. Describe activities used to develop a Center's vision and mission, which is shared by center participants. In addition, describe how the MRSEC plans to achieve the goals, what process is used to monitor progress, and what mechanisms of assessment or metrics are used.

5. Research Accomplishments and Plans (Limit 5 pages per IRG, 1 page per Seed project, 2 for a Super Seed or Initiative)

A synthesis of scientific accomplishments, challenges, and plans. List faculty and senior participants by full name, and include the numbers of students and postdocs involved in the work before the narrative for each IRG and Seed.

6. Education and Human Resources

About 5-7 pages total. (a) Describe current and planned activities. Include a detailed narrative of REU and RET activities, including the student selection process, names of students and teachers with titles of their projects. (b) Describe efforts to measure the impact of the education and outreach activities.

7. Post-doc Mentoring Plan

For MRSECs that support Postdoctoral Researchers, describe the current Center-wide Postdoctoral mentoring activities and planned activities for future years, see NSF Proposal & Award Policies & Procedures Guide (PAPPG), NSF 09-1.

8. Center Diversity – Progress and Plans

Background:

MRSECs must seek to embrace the cultural, gender, racial, and ethnic diversity of the U.S. in the composition of their participants **at all levels**. NSF expects faculty, staff and the administrations of all institutions receiving NSF funding to share this commitment and to devote the time and effort required to ensure that the diversity of the Centers' participants at all levels serves as a model for diversity within each institution and for the nation as a whole. This expectation is made with the understanding by NSF that MRSECs do not generally have the authority to hire faculty, accept students, or grant degrees. Each MRSEC is expected to demonstrate a significant commitment to the involvement of groups underrepresented in Science Technology Engineering and Mathematics (STEM) research as Center participants (MRSEC leaders, faculty participants, undergraduate and graduate students, and postdoctoral associates), see NSF Framework document on Broadening Participation - http://www.nsf.gov/od/broadeningparticipation/nsf_frameworkforaction_0808.pdf. Since no set of formal requirements can ensure that a desired level of dedication to achieving diversity is engendered, the following are essential elements of a diversity strategy, the success of which depends in large part on the spirit in which they are implemented by the Center and its collaborating departments and university-level schools.

MRSEC Diversity Strategic Plan:

- (a) **Current status and progress** since the last reporting period. How effective was the MRSEC's plan to increase the diversity of the Center's leadership, faculty, undergraduate, graduate students, and postdoctoral associates, as well as the REU and RET programs associated with the Center?

(b) **Plans for the next reporting period.** Describe goals and intended actions to increase the diversity of the Center's leadership, faculty, undergraduate, graduate students, and postdoctoral associates, as well as the REU and RET programs associated with the Center. The updated Diversity Strategic Plan should highlight key deficiencies identified in the previous year's plan and new strategies to rectify them. The focus of these diversity efforts will be on achieving a demonstrated impact by benchmarking vs. national science and engineering averages* for the involvement of underrepresented groups in STEM.

* In compliance with the requirements of federal law, no university receiving federal funds will employ quotas or set-asides based on gender, race, or ethnicity.

9. Knowledge Transfer to Industry and Other Sectors

Describe current and planned collaboration and interaction with industry and national labs; workshops; and, others as appropriate.

10. International Activities

Describe current and planned international activities such as collaborations, faculty / student exchanges, workshops, use of user facilities, etc.

11. Shared Experimental/Computational Facilities

Describe what they are, their use and accessibility, supervision, cost recovery, and planned acquisitions. If the Center is a member of the Materials Research Facilities Network, describe the progress and plan.

12. Administration and Management

Organization chart, list membership of Center internal and external committees.

13. **List Ph.D. students** graduated with MRSEC support over the past year, with placement, if known. Also, list postdocs who left during the past year, with placement if known. Please state full names. Indicate underrepresented minorities and women.

14. **List of MRSEC-supported publications and patents** covering the current award period. List published papers by IRG and Seeds, alphabetically by first faculty participant author. List papers only once, even if they report research results of more than one IRG. Use **bold face** to designate each author that is a Center faculty participant (or faculty equivalent if from industry or a national laboratory). Only include papers actually published since the last annual report. **Do not include submitted, in-press, or accepted entries.** Use the categories below:

IRG-1

- a. Primary MRSEC support that acknowledge the MRSEC award – *approximately 50% or more support from MRSEC*
- b. Partial MRSEC support that acknowledge the MRSEC award – *less than 50% of support from MRSEC*
- c. Publications resulting from IRG research, but do not acknowledge the MRSEC award.

IRG-2 (etc.)

- a. Primary MRSEC support that acknowledge the MRSEC award
- b. Partial MRSEC support that acknowledge the MRSEC award

- c. Publications resulting from IRG research, but do not acknowledge the MRSEC award.

Seeds / Initiatives

- a. Primary MRSEC support that acknowledge the MRSEC award
- b. Partial MRSEC support that acknowledge the MRSEC award
- c. Publications resulting from Seed research, but do not acknowledge the MRSEC award.

Shared facilities

– *no direct MRSEC support but research and subsequent publication directly impacted by use of shared facilities.*

Patents - List patents using the following categories:

- a. Patents granted during the current period
- b. Patent applications (excluding provisional applications) during the current period.
- c. Patents Licensed during the current period..

15. Brief biographical information for each new investigator (faculty member or equivalent) maximum 1 page.

16. Honors and Awards - List and briefly describe significant honors and awards given to Center participants during the funding period.

17. HIGHLIGHTS: Research and Education Highlights are a crisp one page summary of a recent *significant* result with an interesting and informative image highlighting your NSF funded work. Include a title, list of authors with affiliation(s), an appropriate color image (avoid graphs), and an acknowledgement of support with award number(s) for each highlight. We plan to use these highlights to illustrate the work that MRSEC supports. They might be used in NSF documents and presentations or posted on NSF and MRSEC.org web pages, for example. The text and graphics should capture the essence of the activity you wish to highlight. The graphics are particularly important and can include images or photographs. The text and graphics should be at the level of a press release, explaining briefly and *in non-technical language what has been accomplished and why it is significant*. Please include a technical description of the work in the notes section of the PowerPoint slide.

MRSEC Highlights will be made available to the public on the Division of Materials Research website and in CD format. By sending us a Highlight you grant NSF the right to reproduce and disseminate your images for various possible uses. If you are planning to patent your work it is your responsibility to consult with the appropriate person at your institution to ensure that sending us the requested material does not jeopardize your intellectual property rights.

Observe the following guidelines:

- Provide one or two science Highlights *per IRG*.
- Provide one or two Seed related Highlights.
- Provide one or two education related Highlights.

- Provide one to two other Highlights on shared facilities and/or partnerships (industry, national lab, international, etc.).

Send **all** Highlights in PowerPoint format to mrsec@nsf.gov. One Highlight per file, using the following file name: ‘University’ MRSEC ‘cooperative agreement number’ ‘IRG#’ ‘contact last name’ ‘Highlight title.’ For example, a Highlight on patterned proteins from IRG-1 by Mary Smith from CalTech would read: CalTech MRSEC 0520565 IRG-1 Smith Patterned proteins.

Please post at least **two** of the above Highlights on the mrsec.org website before or coincident with the submission of this annual report. This can be done directly or by sending the Highlights to webmaster@mrsec.org.

Note: The annual report will not be approved until Highlights are received at NSF and are posted on the mrsec.org website.

Fiscal Sections and Appendices:

18. Statement of Unobligated Funds for this award. Provide a \$ figure, not a percentage of the total.

19. Budget

Closing Year Budgets:

A. Closing year budget on NSF Form 1030 reporting **actual \$s spent from the last reporting period to present.**

B. Budget Explanation Page based on A.

Include the following information:

Section A – continuation of faculty receiving salary support

Section D – Equipment purchased (itemized per GPG)

Section F – **Foreign travel including destination country(s) and purpose** (International Conference, Workshops, Research outside US, education outside US, etc)

Section G – explanation for subawards and other additional information as necessary

C. No subaward or supplement budgets are necessary.

D. One page PDF of completed MRSEC Breakout Budget Excel spreadsheet for the closing year using **actual** amounts reported on Form 1030. The columns in the spreadsheet show how MRSEC funds are distributed by:

1. Research (IRGs and Seeds), Section 5 of the narrative.
2. Education Activities and Human Resources, Sections 6 and 7 of the Narrative.
3. Outreach and Knowledge Transfer, Section 8 of the narrative.
4. Shared Equipment and Computational Facilities, Section 9 of the narrative
5. Administration, Section 10 of the narrative.
6. Automatic sum of Columns 1-5. The totals will equal those reported on Form 1030.

This data will be used in Appendix G.

Continuation Request:

- A. Total requested MRSEC budget on NSF Form 1030.
- B. Budget Explanation Page for requested MRSEC budget.
 - Section A – continuation of faculty receiving salary support.
 - Section D – Equipment to be purchased (itemized)
 - Section F – **Foreign travel including destination country(s) and purpose** (International Conference, Workshops, Research outside US, education outside US, etc).
 - Section G – explanation for subawards and other additional information as necessary.
- C. Subaward budgets on NSF Form 1030, as needed.
- D. One page PDF of completed MRSEC Breakout Budget Excel spreadsheet for the requested year **increment**. The columns in the spreadsheet show how MRSEC funds are distributed by:
 - 1. Research (IRGs and Seeds)
 - 2. Education Activities and Human Resources
 - 3. Outreach and Knowledge Transfer
 - 4. Shared Equipment and Computational Facilities
 - 5. Administration
 - 6. Automatic sum of Columns 1-5. The totals will equal those reported on Form 1030.

This data will be used in Appendix G.

Please send completed MRSEC Breakout Budget Excel spreadsheets to mrsec@nsf.gov.

18. Appendices -
Please complete the Templates that follow.

APPENDIX A

Summary Table of faculty support (annual basis) showing person-months (MRSEC, other NSF, other federal, other non-university) for each MRSEC faculty member, *by academic department* (current year).

NOTE: (1) The total dollar support columns (\$k) should include salary of faculty member and share of faculty member's support for students, postdocs, materials/supplies, etc., including overhead.

(2) The names listed in this table should be consistent with the List of Center Participants at the beginning of the annual report.

TEMPLATE

Support of NSF-MRSEC Faculty (or equivalent for nonacademic participants) for the Current Award Period. Please list faculty names by academic department (or equivalent)

	NSF MRSEC Funds (\$K)	Person-Months of Support (Academic Year and Summer)			
		NSF MRSEC	Other NSF	Other Fed. Gov.	Other Non-University
Dept.					
Chemistry					
Electrical Engineering					
Materials Science					
Physics					

APPENDIX B

Number of faculty (or equivalent for nonacademic participants), the participants' departmental affiliation, postdocs, graduate students, undergraduates, and support staff in the MRSEC, showing number of women and members of underrepresented minority groups. For information on which ethnic and minority groups constitute URMs, see for example:

http://www.nsf.gov/od/broadeningparticipation/nsf_frameworkforaction_0808.pdf

NOTE: (1) The salaried faculty participants are those who receive faculty salary support.
 (2) The sum of faculty participants by department will be the same as the sum faculty participants in the top of the table and listed at the beginning of the annual report. Pick one department affiliation for faculty with multiple affiliations.

TEMPLATE

CENTER PARTICIPANTS

Center: _____ **Current Year Period** _____

<i>Designation</i>	<i>Total</i>	<i>Female</i>	<i>Disability</i>	<i>Underrepresented minority</i>
<i>Faculty participants(tenure track)</i>				
- Receiving salary support from MRSEC funds				
<i>Faculty participants(non-tenure track)</i>				
- Receiving salary support from MRSEC funds				
<i>Faculty participants by Department (tenure and non-tenure track)</i>				
Physics				
materials science				
Chemistry				
biological sciences				
geological sciences				
Mathematics				
electrical engineering				
chemical engineering				
mechanical engineering				
other engineering				
other science				
<i>Postdocs</i>				
<i>Graduate Students (do not include PREM)</i>				
<i>Undergraduate Students (not REU or PREM)</i>				
<i>Technical Support Staff – Shared Facilities</i>				

<i>Technical Support Staff – non Shared Facilities</i>				
<i>IRG Leaders</i>				
<i>Education Staff not reported elsewhere</i>				
<i>Administrative Support Staff</i>				

APPENDIX C

Education Outreach – Use the Template provided below to list the total number of REU students and RET teachers supported by the MRSEC. Also, list the total number of K-12 students, and pre-college teachers and faculty from predominantly undergraduate institutions. Provide information for two groups of K-12 students: (1) *Active* participants that generally receive financial support (stipends, not materials and supplies) from MRSEC, and (2) the wider group of *impacted* participants (museum attendees, classroom students, etc). Breakout MRSEC financial support (\$K) for: K-12, MRSEC REU, other undergraduate programs, RET, Informal Science, The total of these five categories must equal what is reported on the Education Breakout Budget. List additional NSF REU and RET *Site* support (separate NSF award) which is affiliated with the MRSEC, and REU and RET Supplements. List total MRSEC support of underrepresented minority programs.

**TEMPLATE
EDUCATION OUTREACH**

Center: _____ Current Year Period: _____

<i>Designation</i>	<i>Number of Active Participants</i>	<i>Number funded by NSF MRSEC</i>
<i>REU Students total</i>		
Female		
underrepresented minority		
disability		
<i>RET Teachers total</i>		
Female		
underrepresented minority		
disability		
<i>Other Pre-College Teachers total</i>		
Female		
underrepresented minority		
disability		
<i>Undergraduate Faculty total</i>		
Female		
underrepresented minority		
disability		
	<i>Number of K-12 students receiving MRSEC funds for stipend (not supplies)</i>	<i>Number of K-12 students Impacted Participants</i>
<i>K-12 Students total</i>		
Female		
underrepresented minority		
disability		
		\$K
Breakout of MRSEC Educational Funds (do not include supplements)		
K-12		
MRSEC REU support		
Other Undergraduate support		
RET support, not supplement		
Informal Science		
Total Education Outreach (same as Total as MRSEC Education Budget column)		
REU and RET Site support (separate NSF award)		
REU and RET supplements		

APPENDIX D₁

Summary Table of annual dollar levels of support (or dollar equivalent):

Cost sharing support of the MRSEC for the current closing and proposed year from each of the following sources (*the total must equal line M in the respective Total MRSEC Budgets*):

TEMPLATE
COST SHARING

Center: _____

	<i>Current Year</i>	<i>Proposed Year</i>
<i>Reporting Period</i>		
Designation	\$K	\$K
Cost Sharing		
State		
Local		
Foundation		
Industry		
University		
International		
Other		
Total Cost Sharing (same as line M in budget)		

Cost sharing explanation page: Please attach a brief list of cost sharing allocations (i.e., how cost sharing funds were spent: faculty salary, student support, equipment, etc).

APPENDIX D₂

Summary Table of annual dollar levels of support (or dollar equivalent):

Cost contributions; i.e. complementary support for MRSEC activities not listed on line M in the budget. The MRSEC effort can be augmented by other sources, which may include cash contributions, sponsored projects to the Center, equipment donations, laboratory renovations, etc. Note: *Do not include* sponsored projects to the individual faculty members, even if they are related to the core mission.

TEMPLATE

COST CONTRIBUTIONS

Center: _____

	<i>Current Year</i>	<i>Proposed Year</i>
<i>Reporting Period</i>		
Designation	\$K	\$K
Cost Contributions (support not on line M)		
Other NSF (include supplements to the MRSEC)		
Other Federal		
State		
Local		
Foundation		
Industry		
University		
International		
Other		
Total Cost Contributions		

Cost contribution explanation page: Please attach a brief list of cost contributions (i.e., how cost sharing funds were spent: faculty salary, student support, equipment, etc). Do not include buildings.

APPENDIX E

Output - Provide numerical data on Publications, Patents and Center graduates. Only count those publications that reference MRSEC support.

TEMPLATE

OUTPUT

Center: _____ Current Year Period: _____

<i>Designation</i>	<i>Number Current Year</i>	<i>Cumulative Totals for this Award</i>
Publications from IRGs and Seeds		
Primary Publications that acknowledge MRSEC Support		
Partial Publications that acknowledge MRSEC Support		
Number of Primary and Partial Publications that acknowledge MRSEC Support co-authored by 2 or more Center faculty level participants		
Shared Facilities		
Patents		
Awarded		
Pending		
Licensed		

<i>Next position</i>	Terminal Masters Students Graduated		Ph.D. Students Graduated		Post-doctors Completed Study	
	<i>Number Current Year</i>	<i>Cumulative Totals for this Award</i>	<i>Number Current Year</i>	<i>Cumulative Totals for this Award</i>	<i>Number Current Year</i>	<i>Cumulative Totals for this Award</i>
Academic Inst.						
National Labs						
Industry						
Non-science						
No data/no job						
Total						
Women						
URM (All) *						
URM (US) *						

* URM = Under-Represented Minorities in Science Technology Engineering and Mathematics (STEM). Please report two numbers for graduate students and post-docs: all URM and those that are US citizens or Permanent Resident Aliens.

For information on which ethnic and minority groups constitute URMs, see for example:

http://www.nsf.gov/od/broadeningparticipation/nsf_frameworkforaction_0808.pdf

APPENDIX F

Collaborations - see Item 3. in the Guidelines.

TEMPLATE
COLLABORATIONS

Center: _____ **Current Year Period :** _____

<i>Designation</i>	<i>Numbers</i>
<i>Collaborators (in addition to Center participants)</i>	
Academic Institutions	
Academic collaborators	
National Labs	
National Lab collaborators	
Industry (# of companies)	
Industry collaborators (# of individuals)	
<i>Users of Shared Facilities (in addition to Center participants, including those supported by the Materials Research Facilities Network or MRFN)</i>	
Academic Institutions	
Academic collaborators	
National Labs	
National Lab collaborators	
Industry (# of companies)	
Industry collaborators (# of individuals)	
<i>Users of Shared Facilities supported by MRFN</i>	
Academic Institutions	
Academic collaborators	
National Labs	
National Lab collaborators	
Industry (# of companies)	
Industry collaborators (# of individuals)	

APPENDIX G

NSF MRSEC support by IRG and other activities for both the current and the requested award period. **Note:** For each entry in the Table, include indirect costs. Subtotals for Research, Education Activities and Human Resources, Outreach and Knowledge Transfer, Shared Equipment and Computational Facilities, and Administration should be the same as those reported in the breakout budget Excel Spreadsheet. Include major capital equipment under shared experimental facilities. Support for graduate students should normally be included under research, not under education and human resources.

TEMPLATE

MRSEC SUPPORT

Center: _____

<i>Designation</i>	<i>\$K Current award period</i>	<i>% of total budget</i>	<i>\$K Requested award period</i>	<i>% of total budget</i>
IRG 1				
IRG 2				
IRG 3				
Additional IRGs as appropriate				
Total all IRGs				
Seeds and Emerging Areas				
Total Research (IRG's + Seed's)				
Education Activities and Human Resources				
Knowledge Transfer (industry and others)				
Shared Experimental and Computational Facilities				
MRSEC Administration				
Total		100		100
Shared facilities equipment				
Other equipment				
Total equipment				
SEF Technical staff supported by Center				

APPENDIX H

Additional support that leverages NSF MRSEC support and how this additional support is spent in the Center on an annual basis (Total MRSEC award / 6). This additional support consists of cost sharing and cost contributions as defined in Appendices D1 and D2. The numbers provided in this table should be consistent with those in appendices D1, D2, and G.

TEMPLATE

MRSEC Leveraged SUPPORT (current award period)

Center: _____ Current Year Period _____

<i>Designation</i>	<i>NSF MRSEC</i> (Same as in Appendix G)	<i>Cost sharing</i> (same total amount as in Appendix D1)	<i>Cost contributions</i> (same total amount as in Appendix D2)	<i>Total all sources of Support</i> (sum of 3 columns)
	\$K	\$K	\$K	\$K
IRG 1				
IRG 2				
IRG 3				
Additional IRGs as appropriate				
Total all IRGs				
Seeds and Emerging Areas				
Total Research (IRGs + Seeds)				
Education Activities and Human Resources Shared				
Knowledge Transfer (industry and others)				
Shared Experimental and Computational Facilities				
MRSEC Administration				
Total				
Shared facilities equipment				
Other equipment				
Total equipment				
SEF Technical staff supported by Center				

APPENDIX I

Partnering Institutions- Many MRSECs have associations with a number of universities in the US and abroad, as well as with other types of research, education, and industrial organizations. These partnerships may or may not involve financial arrangements between the Center and the partner. Partnerships generally imply **significant** participation in the planning and execution of activities of the Center. They can include minority-serving institutions that have substantial research and / or educational interactions with the Center. Do not include one-on-one collaborations.

Partnering institutions may be associated with NSF awardees under the programs designed to enhance minority participation such as the Louis Stokes Alliances for Minority Participation (LSAMP), Alliances for Graduate Education Program (AGEP), Centers for Research Excellence in Science and Technology (CREST), and the Tribal Colleges and Universities Program (TCUP). List for each of these programs the lead institution of each awardee with which the Center has formal relationships.

The table distinguishes between partnerships with academic institutions and non-academic institutions. Academic partners generally include domestic and foreign universities/colleges. Generally, K-12 institutions are not included in this list unless they have significant input into the education outreach activities of the Center. Non-academic partners include those from industry, National Laboratories or other federal government agencies, State supported institutions, Museums, etc.

Appendix J

The NSF seeks to support transformative research, <http://www.nsf.gov/pubs/2007/in130/in130.jsp>. The MRSEC Seed program should in particular pursue high impact, high risk projects.

Please list the titles of all Seed projects since the start of the current award. Indicate the expectations for the seed at the time of award, the result of this investment, and whether or not the work can be categorized as transformative. If transformative, add a footnote describing why.

TEMPLATE

SEEDS

Title of Seed Projects	Date started (mm/yy)	Date ended (mm/yy)	Expectation(s)					Outcomes				
			Integrate into IRG	Nucleate new IRG	Bring new faculty into the	Other (Specify)	Transformative Science?	Integrated into IRG	Nucleated new IRG	Attracted external funds	Discontinued	Other (Specify)
			x				x					
				x			x		x			
						x						
Totals			1	1	0	1	2	0	1	0		0

Appendix K

Please list the name of all start-up companies based on MRSEC research from this and previous MRSEC, MRL, and MRG award periods.

Company Name	Year of establishment	Brief Name of IRG or SEED where research originated	Estimated Number of Employees	City, State, Zip	Website