MRSEC Final Report Guidelines

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. <u>Do not collect Demographic information from any other source or by any others means.</u>

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 Final Reports

- **List all Center Participants** (faculty level and equivalent) for the entire duration of the award by academic department.
 - o i. Receiving Center support (salary, student, or post-doc). Indicate years active (format: 20xx 20yy).
 - o ii. Affiliated, not receiving Center support.

- **Recent Activities** Extended executive summary (5-10 pages) covering the period since the last annual report. Include two sections: Intellectual Merit and Broader Impacts. Include a paragraph describing center based post-doc mentoring activities.
- Impact of the MRSEC Award Summative narrative with Intellectual Merit and Broader Impacts sections describing a handful of <u>significant</u> achievements of the MRSEC award (3-5 pages). Take a high level view of, for example, the scientific accomplishments, infrastructure development, cultural changes, broadening participation, etc., that would not have been possible without the center mode of funding. Do not include incremental advances. There is no need to cover every IRG or Center aspect.
- **Lists of graduate students and post-docs** List all graduate students supported by this award that have graduated grouped by Terminal Masters and Ph.D. List all post-docs supported by this award that have finished their study. Please state full names and placement if know.
- **Lists of all publications and patents** resulting from MRSEC support. Usual format: NSF style references, actually published, with MRSEC faculty level participants in bold face, sorted by IRGs and Seeds, and primary (>50%), partial support, and attributable to Shared Equipment Facilities.
- Highlights Optional Highlights of recent activities or of significant achievements of the MRSEC, as appropriate. Please post Highlights at MRSEC.org and send PowerPoint files to mrsec@nsf.gov.
- **Data Tables** complete the following data tables.

APPENDIX A

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 <u>salary</u> 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. (3) Indicate in a footnote center participants, by academic level not name, that are disabled. Example, 2 post docs and one graduate student are disabled.

TEMPLATE CENTER PARTICIPANTS

Center: _____ Award Period xx/20xx - xx/yyyy

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

Technical Support Staff – non Shared Facilities		
IRG Leaders		
Education Staff not reported elsewhere		
Administrative Support Staff		

APPENDIX B

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. Indicate in a footnote persons that are disabled by center program. Example, 2 REU students and one RET are disabled.

TEMPLATE EDUCATION OUTREACH

Center: Award Period xx/20xx – xx/yyyy

Designation	Number of Active Participants	Number funded by NSF MRSEC
REU Students total		
Female		
underrepresented minority		
RET Teachers total		
Female		
underrepresented minority		
Other Pre-College Teachers total		
Female		
underrepresented minority		
Undergraduate Faculty total		
Female		
underrepresented minority		
	Number of K-12 students receiving MRSEC funds for stipend (not supplies)	students Impacted Participants
K-12 Students total		
Female		

underrepresented minority	
	\$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 C

Output - Provide cumulative numerical data on Publications, Patents and Center graduates.

TEMPLATE OUTPUT

Center:	Award Period	xx/20xx - xx/yyyy
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Designation	Cumulative Total
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	

	Terminal Masters Students Graduated	Ph.D. Students Graduated	Post-doctors Completed Study
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 D

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:	_ Award Period	xx/20xx - xx/yyyy
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Designation	\$K Cumulative over award period	% of total budget
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
Shared facilities equipment		
Other equipment		
Total equipment		
CEE Technical staff arrangement of but Courts in		
SEF Technical staff supported by Center		

APPENDIX E

Partnering Institutions- Many MRSECs have associations with a number of universities in the US and abroad, as well as with other types of research, educational, 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.

TEMPLATE

Partnering Institutions (with examples shown)

Center:	_ Award Period	xx/20xx - xx/yyyy
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Indicate nature of financial support and type of partnering institution (more than one box may be checked)

	Name of Institution	Receives Financial Support from MRSEC	Contributes financial support to the MRSEC	Minority Serving institution Partner	Female Serving Institution Partner	National Lab/other govt Partner	Industry Partner	Museum Partner	International Partner
I. Academic Partnering Institutions	University A								
	University B	X		Х					
	University C								X
Total Number Academic Partners	3	1		1					1
II. Non-academic Partnering Institutions	Company D		Х				Х		
	National Lab E					X			
	Museum F	Х						Х	
	Company G						Х		X
Total Number Non-academic Partners	4	1	1	1		1	2	1	1
Total Number of academic and non- academic partners	7								

Appendix F

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 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			Expectation(s)				Outcomes				
	Date started (mm/yy)	Date ended (mm/yy)	Integrate into IRG	Nucleate new IRG	Bring new faculty into the	Other (Specify)	Transformative	Integrated into IRG	Nucleated new IRG	Attracted external funds	Other (Specify)
			X				X				
				X			X		X		
						X		·			
Totals			1	1	0	1	2	0	1	0	0

Appendix G

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