



**Materials Research Science and
Engineering Centers (MRSEC)
and
Individual Investigator Award (IIA)
Programs**

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NSF Division of Materials Research



Materials Research Science and Engineering Centers

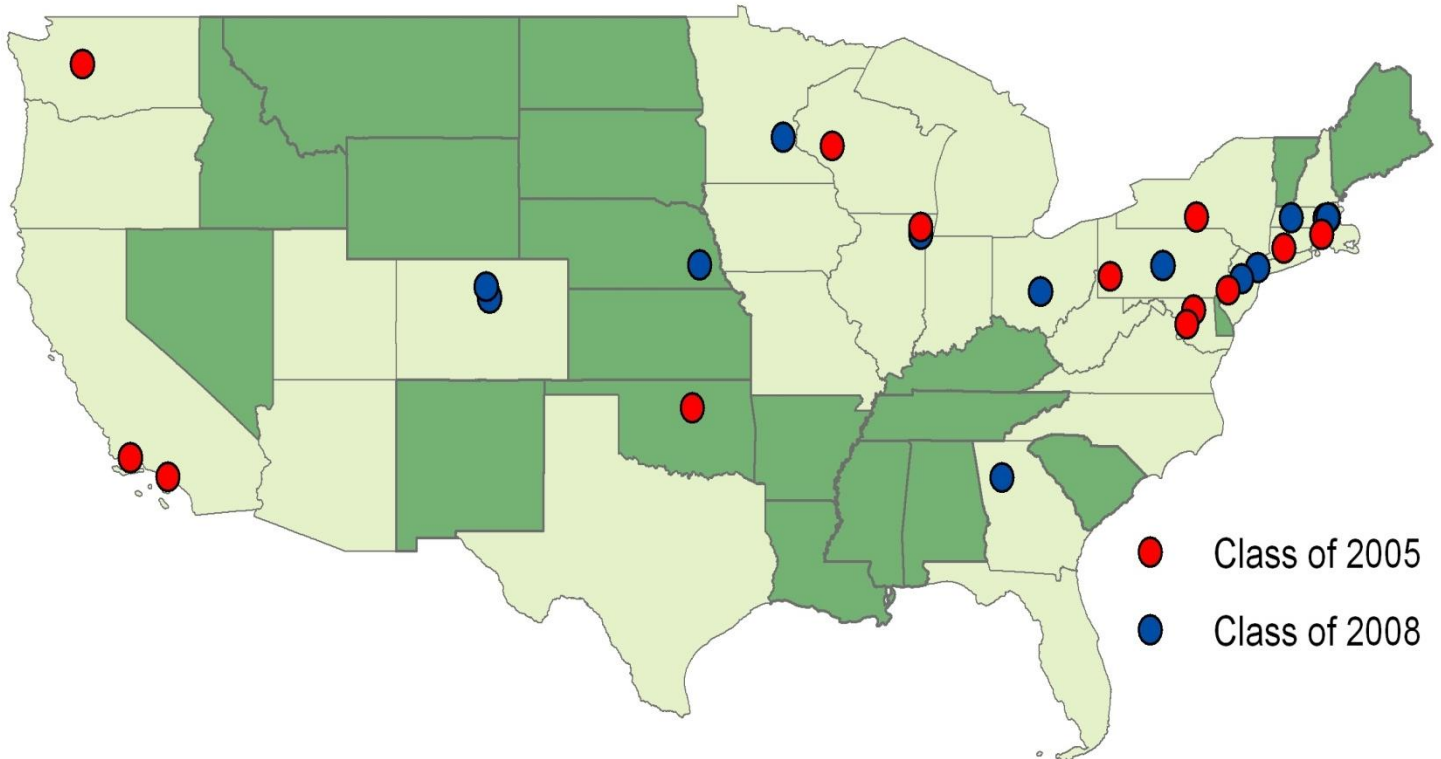
Support **multidisciplinary** and **interdisciplinary** materials research and education of the highest quality while addressing fundamental problems in science and engineering that are intellectually challenging and important to society

Research is carried out in interdisciplinary research groups: 1 to 5 IRGs for each MRSEC



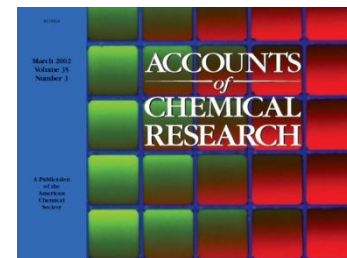
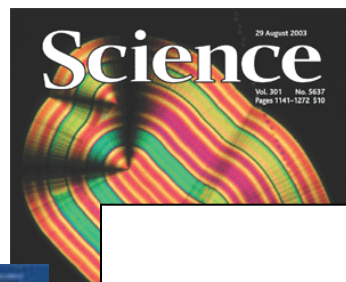
The MRSEC Program in 2010

MRSEC





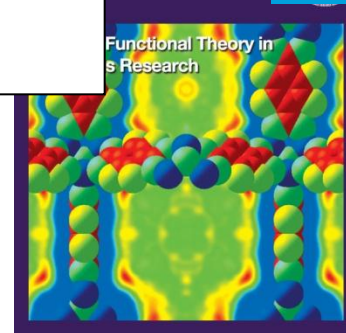
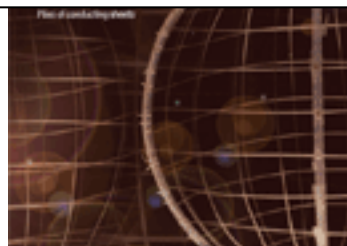
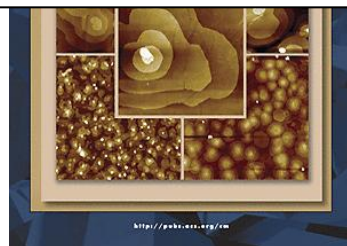
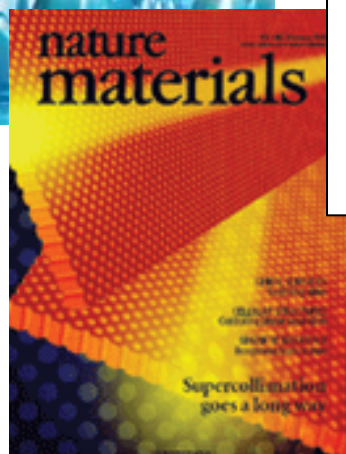
MRSEC: High Impact - High Visibility



Science Output

- 1080 publications
- 42 patents issued
- 182 Ph.D.s awarded
- 126 Post-docs completed

'08-'09 data





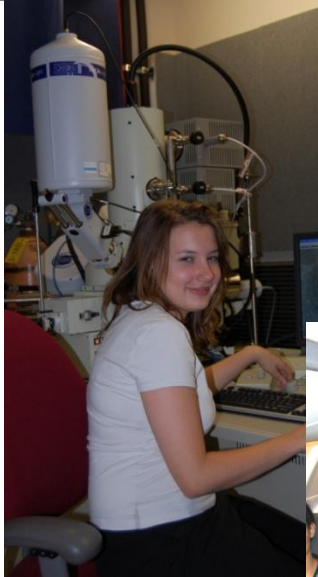
Education Outreach, Developing a Diverse Workforce



Annual Education Investment

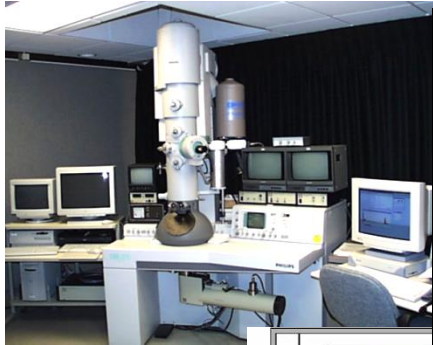
- 850 Graduate Students
- 274 Post-docs
- 169 UG year 'round
- 386 REU students
- 103 RET
- 13 PREM partnerships

'08-'09 data





Infrastructure



Users of MRSEC Facilities

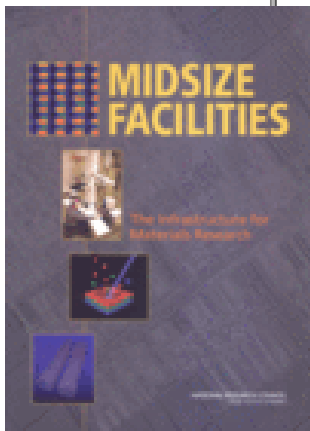
- 755 Academic
- 420 Industry
- 84 National Labs

Resulting in **530 Publications**

Support for:

- Technicians
- Administrative staff

'08-'09 data



Materials Research Facilities Network



NSF Centers

- 4 Centers for Analysis & Synthesis (\$23M)
- 8 Centers for Chemical Innovation (24M)
- 15 Engineering Research Centers (\$55M)
- 31 Materials Research Science & Eng. Centers (\$57M)
- 19 Nanoscale Science & Engineering Centers (46M)
- 17 Science & Technology Centers (\$58M)
- 6 Science of Learning Centers (\$26M)

The total center support, \$288M, represents ~5% of the NSF budget.



NSF Budgets

- 5% centers
- 24% research infrastructures (high magnetic lab, accelerators, synchrotrons, research vessels, telescopes, ...)
- 6% agency operations
- 65% others: mostly through more than hundreds individual investigator award (IIA) programs, which support single investigators and small groups



Individual Investigator Award Programs in DMR

- Biomaterials (BMAT)
- Ceramics (CER)
- Condensed Matter and Materials Theory (CMMT)
- Condensed Matter Physics (CMP)
- Electronic and Photonic Materials (EPM)
- Metals and Metallic Nanostructures (MMN)
- Polymers (POL)
- Solid State and Materials Chemistry (SSMC)

- For more information, visit www.nsf.gov/materials and contact DMR Program Directors



Useful Websites

- www.nsf.gov
- www.nsf.gov/materials
- www.nsf.gov/funding
- www.nsf.gov/awardsearch

Contact NSF Program Directors if you have question.