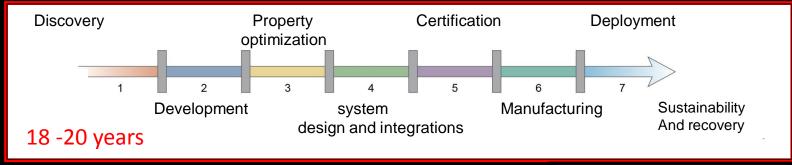
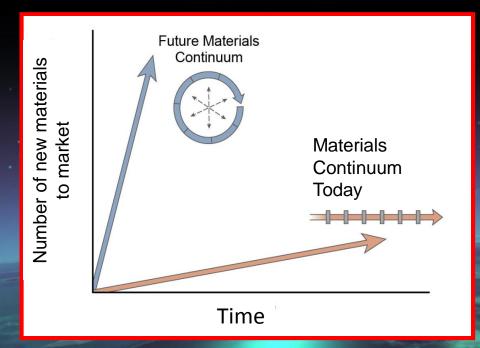
Materials Genome Initiative: New paradigm: "twice as fast, at a fraction of the cost"









NSF Responds http://www.nsf.gov/pubs/2011/nsf11089/nsf11089.txt
Dear Colleague Letter: Designing Materials to Revolutionize and Engineer our Future (DMREF)

Materials Innovation Infrastructure

Auman Welfare Clean Energy Computational Tools Experimental Digital Data Tools Next Generation works National Security **Materials Innovation** Infrastructure

Looking for Next generations algorithms

Tools to access the appropriate time and spatial scale to determine the fundamental physical and chemical processes that govern the property, response.

New tools for synthesizing and processing materials

Data- how to gather, store, analyze, visualize and search large data sets.



NSF DMREF WINDOW: Jan 15 - Feb 15 2012

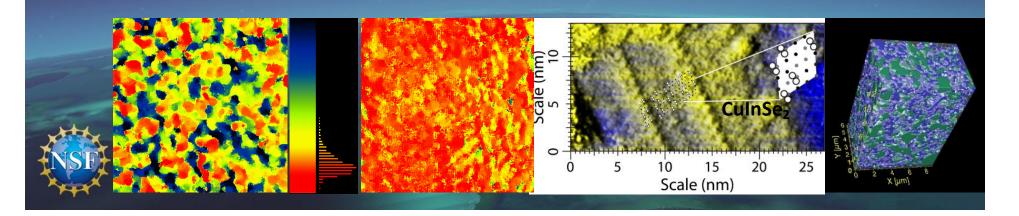
Science, Engineering, and Education for Sustainability (SEES):

Foundation for future clean energy technologies and sustainable, environmentally benign chemical manufacturing, including educational initiatives.

SEES Post-doc Fellows http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=50467

Sustainable Energy Pathways SEP Deadline 1 Feb. 2012 http://www.nsf.gov/pubs/2011/nsf11590/nsf11590.htm

Sustainable Research Networks pre-proposals due 1 December, 2011 Final proposals due 1 April, 2012 http://www.nsf.gov/pubs/2011/nsf11574/nsf11574.htm



NSF Innovation Corps

PI, student and mentor learn aspects of developing, organizing and managing a business.

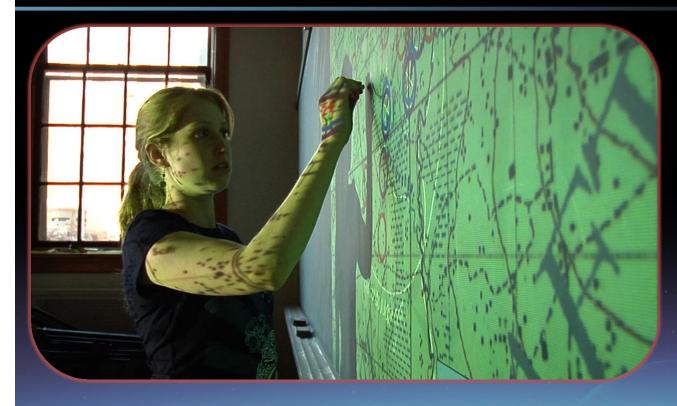




http://www.nsf.gov/pubs/2011/nsf11560/nsf11560.htm

SAVI: Science Across Virtual Institutes

http://www.nsf.gov/pubs/2011/nsf11087/nsf11087.jsp



"...an effort to motivate collaboration among scientists and educators around the globe to spur scientific discovery. By connecting researchers with common interests and goals, SAVI can better leverage taxpayer resources while helping to address some of society's most vexing problems..."

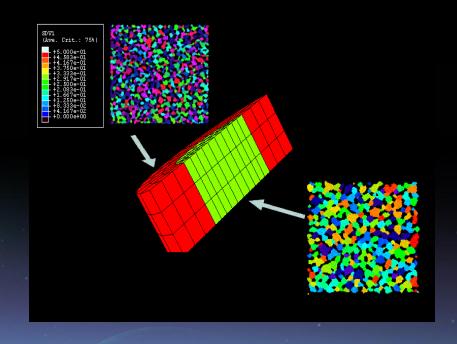
We have international activities associated with our International Materials Institutes, Material World Network program, in the MRSEC program, Research Experience for Undergraduates and individual investigator programs. How can we position DMR to take advantage of these new efforts and how do our programs map onto Foundation-wide activities.?

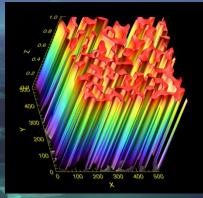


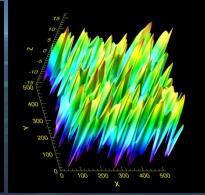
The COV indicated it would be appropriate for us to assess our international portfolio giving activities elsewhere in NSF. Your input is needed and you can help.

Cyber-Infrastructure Framework for the 21st Century (CIF21):

Necessary to ensure that simulations are able to capture the complexity of nature, and are physically correct, reproducible, and predictive, investing in MPS computational sciences, algorithm development, and software infrastructure needed for sustained long-term research efforts. Equal attention will be given to data-enabled science, including fundamental mathematical algorithms, software, data services, and network infrastructure needed to serve scientists wherever they are located.



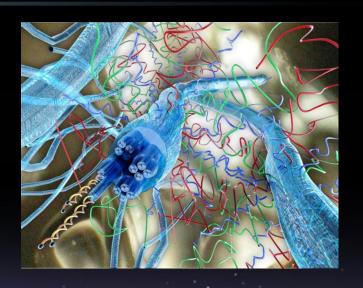


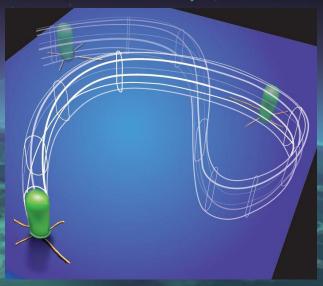




Research at the Interface of Biological, Mathematical, and Physical Sciences (BioMaPS): Working

Together BIO, MPS, and ENG will coordinate research over the entire spectrum from the discovery of biological, physical, and mathematical principles underlying the biological processes, to their application to the energy sector and advanced manufacturing.







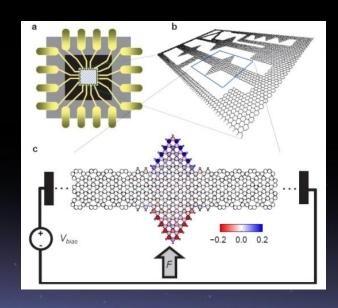
National Nanotechnology Initiative (NNI):

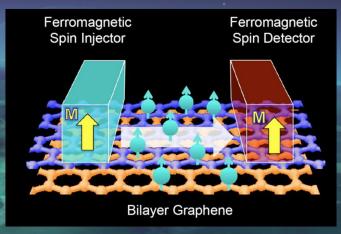
NNI Signature Initiatives:

Nanoelectronics for 2020 and Beyond,

Nanomanufacturing for Sustainable Development,

Nanotechnology for Solar Energy Collection and Conversion.







Upcoming "DMR" Deadlines



Anytime: Science Across Virtual Institutes (SAVI)

- Anytime: Career-Life-Balance
- Anytime: other supplemental requests
- Nov. 10: Materials World Network (MWN)
- Nov. 14-18: Grad. Res. Fellows



Dec. 5: SEES Fellows: post-docs.

- Dec. 15 closes: (every 4 mos.): Innovation Corps (I-Corps): training and seed \$
- Jan. 15 opens: (1 mo. window)
 DMREF (Materials Genome Initiative): DCL re. FRG
- Jan. 26: Major Res. Instrumentation (MRI)

- Feb. 1: Sustainable Energy Pathways (SEP): teams
- Soon: Cyberinfrastructure
 Framework for 21st Century
 Science and Engineering (CIF21)
- Soon: The Interface of the Biological, Mathematical, and Physical Sciences (BioMaPS)
- Soon: Cultural Heritage Science (previously SCIART)
- May 1: IGERT
- May 14: PIRE



- Aug. 22: REU Sites
- Sept 1 opens: (2 mos. window)
 DMR Unsolicited Proposals (incl. GOALI, RUI, FRG)