

Division of Materials Research

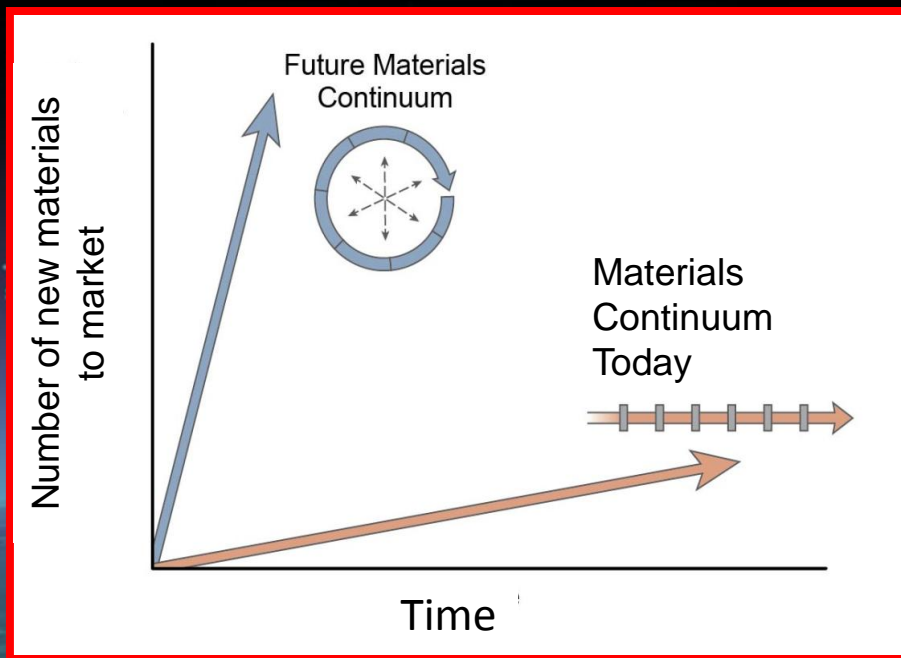
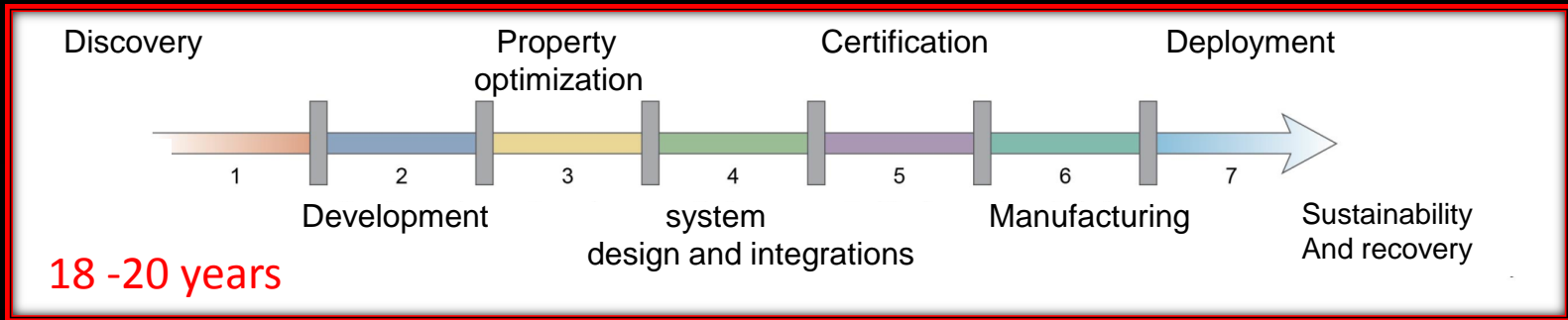
DMREF

Designing **M**aterials to **R**evolutionize
and **E**ngineer the **F**uture

In Response to Materials Genome Initiative



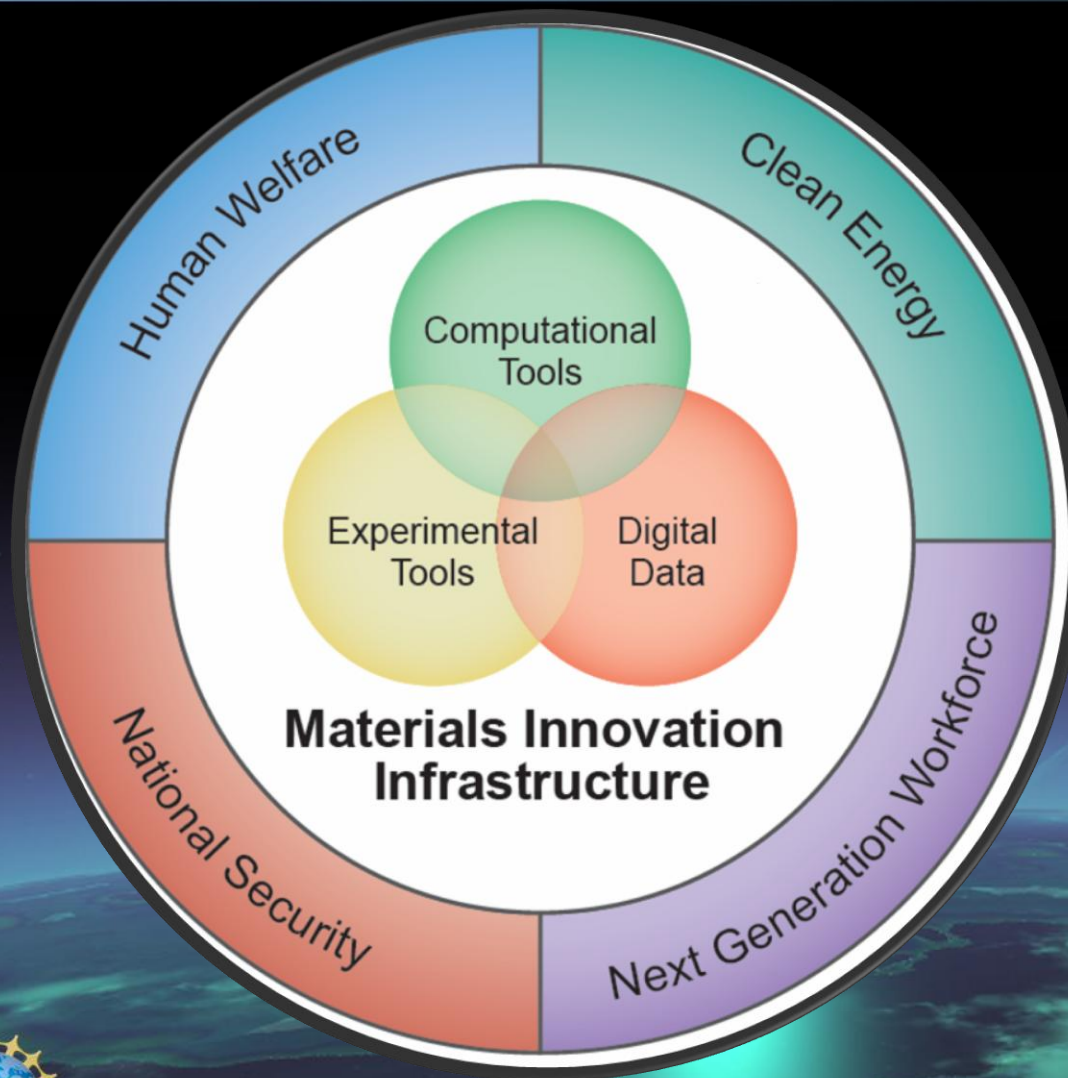
Materials Genome Initiative: New paradigm: "twice as fast, at a fraction of the cost"



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



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

DMREF Proposals

- Focused Research Group
 - <http://www.nsf.gov/mps/dmr/awards/frgs.jsp>
 - Three or more faculty
 - Typical award range \$250K to \$500K per year
- Topics from all areas typically funded by DMR
- Most competitive proposals will closely couple synthesis and processing, theory and simulations, and characterization, in an iterative process that accelerates material discovery.
- Most competitive proposals will address data management including sharing of algorithms and data



DMREF Proposal Submission

- **Encourage the submission of a 1 page white paper to one of the following PDs**
 - **Mary Galvin - mgalvind@nsf.gov**
 - **Diana Farkas – dfarkas@nsf.gov**
 - **Daniele Finotello – dfinotel@nsf.gov**
 - **Linda Sapochak – lsapocha@nsf.gov**
- **Submit proposals thru Fastlane to appropriate DMR program**
- **Submission window Jan 15th to Feb 15th 2012**
- **DMREF must be in the proposal title**

