

Scalable Nanomanufacturing Signature Initiative

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Scalable NanoManufacturing Initiative

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Scalable NanoManufacturing

Solicitation NSF 10-618

Proposals Due on January 10, 2011

Anticipated funding:

Total FY 2011 Funding: \$10 million*

Expected Awards: 5 –10

Expected Funding/Project: \$1-2 million

Expected Project Duration: 4 Years

* Pending passage of the FY 2011 NSF Budget and the availability of funds.

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Proposals should address one or more of the signature themes and/or societal/educational implications:

- Novel processes and techniques for continuous and scalable nanomanufacturing;
- Directed (physical/chemical/biological) self-assembly processes leading to heterogeneous nanostructures with the potential for high-rate production;
- Principles and design methods to produce machines and processes to manufacture nanoscale structures, devices and systems; and/or
- Long-term societal and educational implications of the large-scale production and use of nanomaterials, devices and systems, including the life-cycle analysis of such nanomaterials, devices and systems.

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“Proposals to this topic area should target nanomanufacturing processes with a clear path to eventual commercial viability. This element should be carefully explained and justified in proposals, since both the scientific novelty and the feasibility of the methods being researched will be important selection factors. Collaborative activities with industrial companies are strongly encouraged and collaborations in which industrial partners develop industrially-relevant test beds where university and company researchers can experiment are particularly encouraged. Therefore, it is highly desirable that such firms be consulted early in the proposal preparation process and that their intellectual contributions are clearly explained in the proposal.”

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We are encouraging the active participation of industry, realize that there will be associated costs and want to help defray those costs to the extent that the participation of industry supports the research thrust of the initiative and the expertise, resources and capabilities of industry are critical to the realization of the research objectives of the proposal. We'll pick the most compelling proposals and fund industrial efforts to the extent that they are justified in the proposal. It is highly desirable to tightly integrate the contributions of industrial partners into the discussion of the research plan, thereby demonstrating the critical nature of contributions of the industrial performer(s) to the success of the overall plan.