

## A. PROJECT INFORMATION

**New Project:** *If the purpose of the project is substantially different from a prior project, please start a new project.*

OR

**Follow-on to Project Number:** *If it is a direct continuation of work begun under a prior project, enter the prior NanoFab Project Number.*

**New or Updated Project Title:** *Enter a short, descriptive title, sufficient for someone to understand the main purpose of the project. If this is a follow-on project application, update the title if the purpose has changed; if it has changed substantially, start a new project.*

**Estimated Budget:** *This estimate will generally be arrived at in coordination with the NanoFab Manager and the User Office. You can leave this blank if the estimate is not yet available.*

**This project will be proprietary:** *To be proprietary, no federal employees, including NanoFab staff members, may assist in the work. By Department of Commerce policy, full rates will be charged.*

OR

**This project will be non-proprietary:** *Non-proprietary projects are expected to freely share any processes developed and the outcome of the work, and may be conducted with the assistance of NanoFab staff members.*

**I request that this non-proprietary project be considered for reduced rates:** *All NanoFab rates are based on the operating cost to the CNST. The CNST Director may authorize a non-proprietary NanoFab project to be charged reduced rates, with the balance of the project's costs to be paid by the CNST. The decision to award reduced rates will be based on the extent to which the proposed project will develop innovative nanoscale measurement and fabrication capabilities to support nanoscale technology from discovery to production, including the likelihood of publications, patents, new processes, commercial products, and other outputs that benefit the public.*

**I learned about the NanoFab from:** *Please help us understand the most effective outreach mechanisms by identifying how you learned about the NanoFab.*

## B. PARTICIPANT INFORMATION

**Applicant Name:**

**Primary Work Phone:**

**Primary Work Email Address:**

**Employer:** *List the Institution where you are employed (i.e., who pays you). If you are a NIST federal employee, simply list "NIST". If you are a NIST Associate, and not a NIST federal employee, do NOT list NIST, list your primary affiliation.*

**I am a NIST Associate in Division:** *If you are already on-site as a NIST Associate (i.e. you have a NIST badge and are in the NIST Name Lookup), list the Division number that is hosting you.*

**If your primary office is not located at NIST, provide your complete mailing address:** *If your institution is only in one location, you may simply provide the department and institution (we will look-up the address). If your institution has multiple locations—for example, your company has office locations around the country—please provide your complete address.*

**Address Line 1:**

**Address Line 2:**

**City**

**State**

**Zip**

**Country**

**B. PARTICIPANT INFORMATION (CONT'D)**

**I am the Principal Investigator (PI):** *Check this box only if you are both the applicant and the leader of the overall research project. Note that NIST-funded projects must have a PI that is a NIST employee (although an Associate may be the Applicant and NanoFab user).*

*If you have checked the box above, you do not need to provide your information again; otherwise, please provide the PI's name and contact information below.*

**Principal Investigator Name:**

**Primary Work Phone:**

**Primary Work Email:**

**Employer:**

**If primary office is not at NIST, provide complete mailing address:**

**Address Line 1:**

**Address Line 2:**

**City**

**State**

**Zip**

**Country**

**List all collaborators on this research project from the same Department and Institution as the PI:** *List the names of all the people from the PI's department who are collaborating on this research, even those not expected to work in the NanoFab themselves; i.e., anyone expected to be a co-author of a presentation or publication associated with this NanoFab project. Please include middle initials if possible. If there are more than ten names, please email the other names when you submit your application.*

**List all other collaborators from different Departments or Institutions:** *Following the same guidance as above, list here all collaborators from other departments or institutions. If there are more than seven names, please email the other names when you submit your application.*

### C. TECHNICAL DESCRIPTION

**Describe the overall goal of your research and how this NanoFab project will contribute to that goal:** *Provide a concise description (2 to 4 sentences) of the goal of the overall research program to which this NanoFab project will contribute and how this project will contribute to that goal. This description should be written for the scientific generalist and enable one to quickly ascertain the purpose of your research and how using the NanoFab will help achieve it.*

**If applicable, describe any materials and chemicals that you plan to bring into the NanoFab, along with their purpose:**

*After consulting with the NanoFab Manager, please list any materials and chemicals you require that are not currently available in the NanoFab. Describe the composition of any non-commercial items and any associated safety or contamination concerns. Please provide MSDS information for any unusual items.*

**C. TECHNICAL DESCRIPTION (CONT'D)**

**Describe in detail as appropriate to the scope of the NanoFab project the work you propose to perform in the NanoFab, including the tools and processes required and how you plan to use them. For complex projects, you may summarize some steps and reference publications that describe the detailed methods:** *Sufficient information must be supplied for the CNST to determine specifically how the NanoFab will be used; whether the tools and processes required to carry out the project are available in the NanoFab or can be reasonably made available; whether the tool and process requirements are within our current capacity; the technical/innovative quality of the project; and the feasibility that the proposed work will succeed in achieving the project's goals. If appropriate, provide a step-by-step process flow. Indicate if any of the steps will be performed (at cost) by NanoFab staff members (non-proprietary projects only). Attach additional pages or supplemental material as necessary.*

**D. NANOFAB JUSTIFICATION**

**Briefly explain how you expect this project will support NIST's mission to advance measurement science, standards, or technology:** *Although direct support of the NIST mission is not a prerequisite for using the NanoFab, potential contributions to this mission are one factor used in evaluating the relative merit of each project application. If your project is not expected to contribute in this way, enter "N/A".*

**Briefly explain how you expect this project will support the CNST's mission to advance fundamental nanoscale science and technology, and/or accelerate commercial production of nanotechnology that will benefit the public:** *Although direct support of the CNST mission is not a prerequisite for using the NanoFab, potential contributions to this mission are one factor used in evaluating the relative merit of each project application, and a major factor used to decide whether the CNST will provide financial support through reduced rates, if requested. If you have requested to be considered for reduced rates, this section must be filled in. If your project is not expected to contribute in this way, enter "N/A".*

## E. REPORTING AND ACKNOWLEDGEMENT REQUIREMENTS

*These requirements must be read and understood by all participants in this project. The reporting requirements for all prior projects led by the PI must be completed before any additional projects may be approved. This page must be signed by the PI (not the applicant if he or she is not the PI).*

**In submitting this application, the Principal Investigator agrees to the following:**

- To provide a comprehensive list of collaborators associated with this project, including those collaborators who may not personally work in the NanoFab.
- To provide annually a list of all outputs and accomplishments associated with this project, including all publications, presentations, patent applications, media citations, honors, and awards.
- To include the acknowledgement “*Research performed in part at the NIST Center for Nanoscale Science and Technology*” in all research publications and published documents reporting results associated with or made possible by this project.
- To acknowledge the *NIST Center for Nanoscale Science and Technology* in presentations reporting results associated with or made possible by this project.

**For Principal Investigators who have led prior NanoFab projects:**

- I have been provided with a report of other NanoFab projects that I have led during the past three years:

The list of outputs (publications, patent, presentations) and collaborators was complete.

**OR**

I have provided a complete list of outputs and collaborators to the User Office.

- The CNST has been acknowledged in all publications associated with prior NanoFab projects that I have led:

Yes

No

Explain:

Principal Investigator's Signature \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

