

User Access Policy

The Center for Functional Nanomaterials will be operated as a national user facility, accessible to researchers at universities, industrial laboratories and national laboratories through peer-reviewed proposals. The user program will provide access to state-of-the-art Laboratory Facilities and related facilities staffed by laboratory scientists, postdocs and technical support personnel who are active in nanoscience research. The number of users will grow from modest levels in the first year, following the initial Call for Proposals in March 2003, as the new facilities are constructed and commissioned in the succeeding years. We invite proposals from external scientific and industrial communities that involve a broad spectrum of activities ranging from short-term capability access to long-term joint research programs.

General Policies and Procedures for User Access to the DOE Nanoscale Science Research Centers (DRAFT)

1. Preamble

The mission of the Department of Energy (DOE) Nanoscale Science Research Centers (NSRCs) is to support users in doing outstanding science in a safe environment. To this end, each Center must have:

- An array of state-of-the-art equipment and laboratories for synthesis, fabrication, characterization, and simulation of nanoscale materials and structures
- A skilled staff to support this equipment, users, and the associated science, but above all
- A user scientific program that provides leadership in nanoscale science and technology

This document addresses the policies and procedures for user access to the NSRCs.

2. Peer review and Advisory Bodies

The key to delivery of outstanding science is rigorous peer review that is fair, clear, expedient and sensitive to the needs of users. We envisage advisory committees of the following kind:

2.1 Scientific Advisory Committee (SAC)

Each Center will have a SAC or equivalent body that advises senior management on policies related to the optimization of the quality and quantity of the scientific productivity of the facility. The SAC will be composed of distinguished scientists from both inside and outside the nanoscale science community. Appointments to the SAC will be made by senior management based on nominations from the user community, the Center management, and its advisory bodies. The SAC will report to the Laboratory Director or Associate Laboratory Director with senior management oversight responsibility for the Center.

2.2 Users' Executive Committee (UEC)

Each Center will have a UEC or equivalent body that is elected by the user community at large. The UEC will serve as the official voice of the user community in its interactions with Center management. The UEC will elect its Chair and Vice-chair from among its own members, and the UEC Chair will automatically have an ex officio seat on the SAC.

2.3 Proposal Review Panels (PRPs)

Evaluation of General User (GU) proposals will be carried out by appropriately constituted Proposal Review Panels. The rank order of scores generated by the PRPs will be the primary input in the allocation of facility access to General Users. The PRP will also provide feedback to the investigators on the quality of their proposals and, where relevant, on perceived weaknesses. The PRP will consist of external scientists (without affiliation to the NSRC) with expertise in various research fields related to nanoscale research. Appointment to the PRPs will be made by the Center Director or designate based on nominations received from the user community and suggestions from the facility management. PRP subcommittees related to the Center's scientific thrusts may be appointed to ensure knowledgeable and efficient handling of user proposals.

3. Evaluation Criteria and Process

Proposals are rated on a scale of 1 to 5 (1 being the highest rating and 5 being the lowest). Proposals with ratings between 3 and 5 may wish to submit a new Proposal that addresses the PRP comments in order to improve the rating and thus improve chances of receiving facility time. Proposals with ratings between 4 and 5 are automatically inactivated and should not expect to receive facility time. The user will receive written notification of the rating. Proposals are rated according to the scale below:

1. The proposal involves highly innovative research of great importance. An open-ended project that will either launch a new application for nanoscience research or will clearly impact one of the outstanding problems in the field of nanoscience. A nanoscience facility is essential.
2. A well-conceived, original, research project with a strong potential for making an important contribution to the field of nanoscience research. The experimenters have a good track record and the results obtained are likely to be published in a leading refereed publication. No alternative analytical tool is available.
3. An extension of a nanoscience project that has produced publications in leading refereed publications. Although not groundbreaking, is near cutting-edge and likely to produce significant results. The need for a nanoscience facility is evident.
4. A nanoscience facility is required and the science is interesting, but routine measurements in a well-worked area of research. The results from the research, although useful, are not likely to create excitement in the field.
5. Serious doubt exists regarding the feasibility of the proposed project or there is no evident need for the use of a nanoscience facility.

4. Modes of User Access

To deliver outstanding science, there must be access modes that are sufficiently flexible so as to be responsive to user needs. There are two basic modes of user access, General User access and Partner access, each with variable scope.

4.1 General User Access

General Users are individuals or groups who need access to the facility to carry out their research, using existing equipment in the NSRCs. General Users apply for access by submission of a proposal that is evaluated by one of the PRPs. The scope of a General User proposal can vary from a single experiment proposal to a program proposal (valid for multiple visits and substantial access to a range of equipment extended over multiple years) to a "special" proposal (i.e. rapid access, feasibility studies, or other means which have been developed by each Center based on their particular needs). Individual and group proposals, including collaborative proposals with NSRC staff, are encouraged.

4.2 Partner Access

Partners are individuals or groups who not only carry out research at an NSRC but also enhance the capabilities or contribute to the operation of the Center. Typically they

develop the facility instrumentation in some way, bringing outside financial and/or intellectual capital into the evolution of the NSRC, or contribute to the operation of equipment and facilities. These contributions must be made available to the General Users and so benefit them as well as the facility. In recognition of their investment of either resources or intellectual capital and in order to facilitate and encourage their involvement, Partners may be allocated limited access to one or more facilities over a period of several years, with the possibility of renewal. Partner scientific programs are subject to the same peer review process as General Users.

5. Proprietary and Non-Proprietary Research

Users of the facilities include academic, industrial and government scientists and engineers. While the vast majority of user research should be in the public domain, and so must be disseminated by publication in the open literature, there may be access for a reasonable percentage of proprietary research which utilizes these unique facilities to benefit the national economy. Users conducting proprietary research may access the facility as either General Users or as Partners. Full cost recovery is required from the User, and it is a requirement that DOE must approve the proprietary research proposal. Efforts will be made to secure appropriate intellectual property control for proprietary users to permit them to exploit their experimental results.

6. User Access Allocation, Scheduling, and Recording

Allocation of access to equipment and facilities for General Users will be done based on the rankings provided by the PRPs. Partners will manage their own scientific programs, subject to PRP review, and will allocate access among their members. Scheduling of user access will be centralized in the facility User Office using expert input from facility staff and Partner representatives. Center management will have ultimate responsibility and accountability for effective and efficient utilization of time on all equipment at the facility.