

DRAFT

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

1. Preamble

The mission of the U.S. 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

Each Center will have a Scientific Advisory Committee (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

Each Center will have a Users' Executive Committee (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 Committees

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

The evaluation criteria used in the peer review procedures will take as their starting point the criteria proposed by the International Union of Pure and Applied Physics (IUPAP) in its recommendations on the operation of major user facilities (<http://www.iupap.org/statements.html#facil>). These are:

- Scientific merit
- Technical feasibility
- Capability of the experimental group
- Availability of the resources required

These criteria may be supplemented with additional requests, for example to justify the need for special equipment or to satisfy safety and environmental concerns. Special consideration will be given to encourage and support first time users so they can compete effectively in the peer review system. Preference will be given to proposals that utilize the unique capabilities of a Center and contribute to its established scientific thrust areas. The paramount criterion will be scientific merit.

User proposals will be directed first to the Center for a feasibility and safety review. A proposal considered not feasible or safe will be returned to the proposer with appropriate comments included suggested changes.

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 PRCs. 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 will be obtained for proprietary research, and 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 PRCs. Partners will manage their own scientific programs, subject to PRC 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.