### Policies of Federal Materials Facilities to be Examined

Responding to changes surrounding the use of the United States' materials research facilities, the National Research Council's governing board has approved a year-long study to review the guidelines and policies governing those facilities, with the objective of updating and coordinating the federal management structure.

The review, entitled "Developing a Federal Materials Facilities Strategy," will be conducted by a special committee made up of a dozen appointed members from academia and private industry. The study was both requested and will be funded by the agencies most closely involved in the facilities' operations: the National Science Foundation (NSF), Department of Energy (DOE), and National Institute of Standards and Technology (NIST). In addition, as an acknowledgment of the growing influence of the medical research community in materials research, the National Institutes of Health (NIH) will be involved.

The group will meet for the first time in Washington, DC on September 14 and 15 at the National Academy of Sciences (NAS). Its first day's proceedings are open to the public, to be held at the NAS Building, Room 150, 2101 Constitution Avenue, NW, Washington, DC 20418. More public meetings will be held during the year at various locations. According to NRC, the best way for the materials research community to participate in the study is through the various professional organizations. Also, the study's website is set up for direct communications.

NÅS has chosen John J. Wise, a chemist retired from Mobil R&D Corporation where he served as Vice President for 44 years, as the committee chair. Wise is a member of the National Academy of Engineering and of NRC.

Staffers at the agencies involved in the review cite the need to establish the most cooperative atmosphere possible at the effort's outset. They acknowledge that the review is a preemptive measure, intended to head off possible future conflicts and turf battles as the facilities operate in an atmosphere of ever-tightening budgets for scientific research.

"This isn't an attempt to make specific recommendations," according to one official. The review will not result in a document similar to last year's report by DOE's Basic Energy Sciences advisory committee, which evaluated U.S. synchrotron facilities and questioned the need to continue funding in a few cases. "That report was more in-depth," the official said. "It was an attempt to give some hard advice in advance of hard choices."

The new review will be much more general. It is supposed to provide "recommendations for interagency cooperation and coordination" of future planning, funding, and operations of neutron beam and high-magnetic-field facilities as well as synchrotrons. The report will focus on the growing diversity of the user community, as well as recognition that "federal agencies that support scientific R&D are under substantial budget pressures that are expected to increase," according to the initial proposal for agency funding that was prepared by NRC staffers last year. The proposal states that those pressures have "made new facility starts difficult and put great pressures on agencies to justify continued operation of existing facilities, especially those that may have overlap in mission or in the communities served.'

As a result, NRC concluded that an overall strategy must be put into place to manage the materials facilities. Elements of the strategy would include:

 management and structure of individual facilities ("How might they be altered to address a changing user community and its infrastructure needs?")

interagency planning and operations for old and new facilities ("What type of collaboration and coordination can be introduced to maximize the return on the available federal investment?")

decision-making and management ("What changes can be made in the decision-making structure and administrative organization of laboratories and their funding agencies to maximize the benefit to the research community, both academic and industrial, while still meeting agency missions?") and

• international aspects ("How can the growing pressure to take advantage of



Circle No. 13 on Reader Service Card.

international facilities and to deal with the concomitant negotiating, management, and funding issues be accommodated?")

In this context, NRC has directed the committee to consider changing patterns of use at the materials facilities, as well as the implications for the agencies that support research in the relevant areas of science. The group also must consider ways to achieve the following, broadly stated objectives:  providing a systematic governmentwide approach for exploiting the facilities in a coordinated and efficient manner,

 accounting for the particular roles and responsibilities of the various agencies involved, and

 confronting evolving scientific and technological needs, international changes, and budgetary forces.

In addition, according to the NRC proposal, the committee is supposed to con-

– Michael Faraday

# "But still try—for who knows what is possible?"

**10-MICRON THICK SILICON WAFER** 



4000-MICRON THICK SILICON WAFER



MICROMACHINED SILICON WAFER



MICROMACHINED SILICON TUBES

The ubiquitous nature of single crystal silicon provides for application possibilities which go far beyond those defined by the "traditional" microelectronics industry. Virginia Semiconductor, Inc. considers silicon to be an **ENGINEERED MATERIAL** ideal for a host of applications that call for

• fatigue and chemical resistance

- machinability
- mechanical robustness
- thermal stability

• and electrical conductivity. When it comes to preparing

engineered silicon products, we have frequently stated (with tongue in cheek), "if we can't make it, you don't need it!"

In the final analysis, we are most eager to **IMAGINE**, to be **CHALLENGED**, and to **TRY**. At Virginia Semiconductor, Inc., we think of the possibilities—not the limitations. Those who know us now expect nothing less; why shouldn't it be that way in our service to you?



Virginia Semiconductor Inc. 1501 Powhatan Street Fredericksburg, VA 22401 Phone: (540) 373-2900 Fax: (540) 371-0371

Circle No. 16 on Reader Service Card.

sider ways to "provide effective support for the non-expert user community and effective support by federal agencies of the research teams and individuals that use the facilities." Part of this would be accomplished by identifying ways to educate emerging user communities.

For further information and regular updates of the committee's progress, access website http://www2.nas.edu/ bcst/Mf\_index.htm.

PHIL BERARDELLI

## NASA's Inspection 98 Offers Tech Information to Boost Private Sector Capabilities

The National Aeronautics and Space Administration's (NASA) Johnson Space Center in Houston has scheduled its annual exposition of space technology for October 14–16. Representatives of business, industry, education, and community leaders are invited to participate in the Center's Inspection 98. This will be the third event of its kind. More than 200 exhibits and demonstrations of spacebased technology will be offered in 22 facilities during those three days.

George Abbey, the Center's director, said, "At Inspection 98 we will introduce visitors to NASA-developed technologies that can be utilized to solve problems on Earth, and put our guests in touch with the engineers and scientists who are designing [future] missions."

Inspection 98 guests may find applications for the featured technologies in a wide range of industrial, business, and other areas, including information technology, biotechnology, energy, environmental protection and remediation, aerospace, transportation, manufacturing, and education.

The space technologies to be showcased cover a broad range of activities from training to materials testing. Concepts for new generations of space suits are developed and translated into reality at the Center laboratories. Test chambers subject materials and equipment to spacelike vacuum and to heat and cold, vibration, and meteorite-like impacts.

Inspection 98 has no registration fee. Professionals in the fields of business, industry, education, and community affairs may register at the Inspection website, http://inspection.jsc.nasa.gov; or e-mail inspection@jsc.nasa.gov, phone 281-244-1316, or fax 281-483-9193 for more information. Guests may organize their own agenda and attend the event for a half day, full day, or several days.

# SEE

FEEL

# Notice the difference

Immediately - all on one screen. TEM imaging and analysis together with microscope controls and settings. Fully embedded in one operating system and one user interface.

### Personally

Go straight to what you want. Why let repetitive routines slow you down? Adjust, then save your controls and settings precisely to your personal needs.Turn your TEM work into one seamless process.

# It couldn't be easier

One monitor, one mouse and one keyboard give you total digital control of today's most advanced TEM capabilities. With the shortest learning curve that even novice microscopists have yet experienced. And the gain in results that experienced

TOUCH

scientists, researchers and engineers have been waiting for.

Tecnai See it your way!

FEI Company Building AAE P.O. Box 218, 5600 MD Eindhoven The Netherlands Telephone +31 40 276 67 68 Fax +31 40 276 67 86 E-mail: marcom@eo.ie.philips.nl http://www.feic.com

https://doi.org/10.1557/S0883769400029274 Published online by Can

AND A

PHILIPS
Let's make things better.