Commerce Department's Advanced Technology Program Issues Second Solicitation

The Commerce Department's Advanced Technology Program (ATP) has issued its second solicitation for proposals, with one official there telling the MRS Bulletin that he would like to see "more proposals from the advanced materials area."

One reason a company may be more interested in getting involved now could be that there is a greater chance of winning. Commerce has upped the ante to \$20 million in this solicitation, more than doubling the funds provided in the first round to 11 award winners. (See related article in the June 1991 MRS Bulletin, p. 13.)

A rough estimate for the first round furnished by a spokesman at the National Institute of Standards and Technology (NIST), the Commerce sub-agency running ATP, was that 63 of the 249 proposals received were related to advanced materials, with an additional nine dealing with high temperature superconductivity. Of the 11 award winners, two related directly to advanced materials and a third involved superconductivity.

Potentially helping companies in advanced materials is the fact that the White House has launched a major initiative to develop a budgetary crosscut to be presented with next year's budget proposal. Also, Lyle Schwartz, director of the Materials Science and Engineering Laboratory at NIST, is involved with national materials planning, including drafting an agenda for advanced materials and processing, as part of his role as chairman of the White House Committee on Materials.

A bellwether study the Commerce Department produced in ATP's nascent days identified advanced materials as an emerging technology with a market larger than all other technologies so identified. ATP was created by the Technology Competitiveness Act of 1988.

With regard to the ATP solicitation, only companies may propose projects, and they must be ruled to be precompetitive, generic technologies with significant commercial promise. Universities and government agencies may be part of an industry-led consortium bidding a job, but cannot themselves initiate proposals.

A-new wrinkle in the second solicitation is that non-U.S. companies may now win, where they were excluded from participating in the first round. However, the Secretary of Commerce must rule on two additional criteria prior to their winning. A non-U.S. company's participation must be

in the economic interests of the United States, and the country in which the company is based must offer similar opportunities to U.S. companies, as well as adequate protection for intellectual property rights.

A feature reinstated from the first solicitation is that grant recipients may patent inventions and retain title to them, according to ATP. Recipients may also copyright software developed under the ATP grant.

The ATP emphasis is on building groups, and the award limit to one company is \$2 million over three years. Awards to joint ventures carry no such restrictions, may be for up to five years, and are limited only by available funds. NIST funding to joint ventures must represent less than 50% of the overall R&D cost, however.

The deadline for proposals is September 25, 1991. Interested companies should contact: Advanced Technology Program, A 430 Administration Bldg., National Institute of Standards and Technology, Gaithersburg, MD 20899; phone (301) 975-2636. The ATP phone hotline, with recorded information, is (301) 975-2273.

Panel Urges New Approach to **Export Controls**

Current restrictions on the sale of hightechnology products to Eastern European countries and the Soviet Union should be limited to a few "highly critical" items, says a blue-ribbon panel* of the National Academies of Sciences and Engineering and the Institute of Medicine.

Export controls, it adds, should be highly selective and fully multilateral in order to be an effective instrument of national security policy. And, it continues, proliferation of weapons of mass destruction should be explicitly treated as a element of national security rather than foreign policy.

The panel calls on the U.S. government to move progressively toward removing export controls on dual-use items (those with both civilian and military applications) where the civilian end use can be verified.

The panel urges the United States to avoid the "serious economic disadvantages" of unilateral export controls, to strengthen export control policymaking through a presidential directive and an interagency coordinating committee, and to consolidate the routine administration of



Quality Control

◆ 100% GC / MS analysis

Packaging Options

- Any quantity, same spec.
- Steel, polished steel or aluminum cylinders
- Pneumatic valves for fail-safe gas supply
- Optional flow restrictor for added safety
- "Keved" VCR outlet for UHV connection to system

Also of Interest

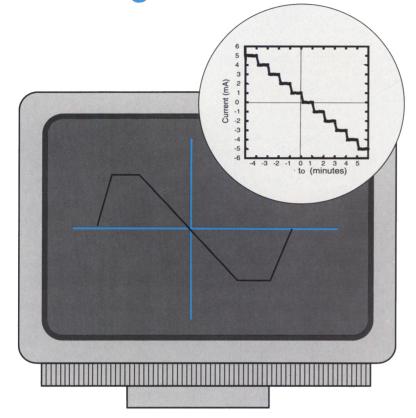
- Diborane
- Trimethylboron
- Germane
- Digermane
- All mixtures

Voltaix, Inc.

P.O. Box 5357, 197 Meister Ave. N. Branch, New Jersey 08876 Telephone: (908) 231-9060 Facsimile: (908) 231-9063

Circle No. 11 on Reader Service Card.

The Ultimate Solution to Magnet Control!



The first magnet power supply with true, Four-Quadrant performance

- · either positive or negative current and voltage values can be set.
- the need for external switching or operator intervention to reverse current polarity is eliminated.
- the transition through zero current is smooth and continuous, permitting the analysis of samples at very small current increments about zero.
- programmed demagnetization loops can be used to achieve zero field.
- · Four-Quadrant allows rapid generation of hysteresis loops.

An integrated solution.

The supply produces highly stable, low noise current regulation. Display and programming resolution to 1mA and 1mV. Digital setting/monitoring electronics and computer interfacing are integrated with the power management and precision analog control circuitry.



Circle No. 12 on Reader Service Card.

export controls under the U.S. Commerce Department's Bureau of Export Administration

Other findings and recommendations:

- The Soviet Union continues to be at least five to ten years behind the West in most key technology areas, but it continues to field highly capable military systems.
- There is a possible need to differentiate the level of exports to Eastern Europe from those to the Soviet Union itself.
- CoCom should shift the focus of trade with the Soviet Union and Eastern Europe from denial to approval, adopt a shorter "core list" of proscribed commodities, and agree on verifiable end-use conditions. (CoCom, the Coordinating Committee for Multilateral Export Controls is an international nontreaty organization of 17 member nations.)
- The tendency of the United States to use trade controls as a unilateral foreign policy tool has become increasingly counterproductive.
- The president should issue a national security directive that clearly states the objectives of all national security export controls. The directive would also establish criteria and mechanisms for control lists.
- Control lists should be drawn up only after defense, intelligence, trade, and foreign policy communities have explicitly ranked the technologies they consider most critical.
- An Export Control Policy Coordinating Committee, composed of department and agency representatives and chaired by the national security adviser or deputy adviser, should be created to formulate and review export control policies.
- To improve industry's ability to comply, the administration of export control should be consolidated under the Commerce Department's Bureau of Export Administration. Policymaking would be retained by the Departments of State, Defense, and Commerce.
- The Panel also concluded that it would be better to modify the current system by separating administration from policymaking rather than by creating a new agency.
- *The Panel's report, Finding Common Ground: U.S. Export Controls in a Changed Global Environment is available from the National Academy Press. See address on p. 6 and related article on p. 5-6 in this issue. □

