

That's Good for Oklahoma!®

OKLAHOMA CENTER FOR THE ADVANCEMENT OF SCIENCE AND TECHNOLOGY PROMOTES INNOVATION

(GIT) One need only look at computer stores' advertisements to see the speed at which technology is developing and becoming a part of American's day-to-day lives. Keeping pace in one's personal and professional life can be a chore.

The same can be said for the state and its economy. Without some efforts to promote technological development, Oklahoma could fall behind other states in the number of technology-based firms doing business from within its borders.

That's where the Oklahoma Center for the Advancement of Science and Technology (OCAST) comes in.

Created in 1987, OCAST is designed to build the infrastructure of expertise and equipment needed to conduct nationally competitive research and development in Oklahoma and to stimulate state-based firms applying and producing technology.

The center has aggressively pursued that charge.

PROGRAMS AND SERVICES

Because of the breadth of technological development and research in the country, one program alone is not enough to satisfy the various needs of the involved businesses. That means the Oklahoma Center for Science and Technology must use a variety of programs and services to meet the companies' needs.

The center's Health Research Program aims to stimulate research and development support in the key area of human health by competitively awarding seed funds to for one to three-year projects investigating the causes, diagnoses, treatment and prevention of human diseases and disabilities. The program also endeavors to facilitate the development of health care products. Awards enable projects to make the progress necessary to obtain additional federal or private financial support.

In the technology field, the Applied Research Program builds research and development infrastructures in key technology areas and encourages Oklahoma firms to apply and produce technology by competitively awarding matching funds to support collaborative research and development with technical merit, commercial promise and the potential to stimulate economic growth.

The University of Oklahoma's Rock Mechanics Research Center, another part of OCAST's efforts, builds research and development infrastructures in a technology area which is key to the oil and gas industry. It also encourages the application of technology by independent Oklahoma producers. The center receives \$300,000 each year from OCAST, the National Science Foundation and a consortium of 20 companies to perform collaborative research and development on oil and gas exploration involving adverse geologic formations.

Building on OCAST's Technology Access Program, the Technology Commercialization Initiative will increase the number, suc-

cess and growth of technology-oriented firms in Oklahoma by giving them access to pre-venture services and seed financing.

The Oklahoma Industrial Extension System encourages Oklahoma manufacturers to apply technology. It is a coordinated network of public and private resources, the purpose of which is to

assist small and medium-sized manufacturers to

gain the ability to compete success-

fully at progressively higher levels of value-added

in the national and international economy. The system is coordinated by a private, non-profit organization, the Oklahoma Alliance of Manufacturing Excellence. Using state, federal and private funds, the Alliance contracts with state and local agencies to deliver modernization services to manufacturers, including assistance with applying technology. OCAST administers state and federal contracts with the Alliance which provides funding for the system.

The Small Business Research Assistance Programs promote Oklahoma firms producing technology by encouraging small Oklahoma businesses to apply for federal Small Business Innovation Research and Small Business Technology Transfer grants. The federal grants are designed to promote small business research, development and technology commercialization.

MEASURING SUCCESS BY THE NUMBERS

With such a large number of programs aimed at a variety of areas, OCAST has found success in every area. Since its creation nine years ago, OCAST has:

- ✓ Attracted \$3.53 of private and federal money with every \$1 of state appropriations received;
- ✓ Generated a total investment in Oklahoma research, development and technology application of more than \$326 billion;
- ✓ Produced 96 patents and licenses awarded and pending, with a total estimated value of \$1 billion;
- ✓ Helped more than 500 Oklahoma businesses develop and apply new or existing technology;
- ✓ Generated 3,600 publications in refereed journals;
- ✓ Created four research and development centers in areas important to key state industries — integrated design and manufacturing, molecular medicine, rock mechanics and lasers; and
- ✓ Created an Oklahoma Industrial Extension System, linking the state's 300 small and medium-sized manufacturers to modernization resources they need to compete successfully at progressively higher levels of value added in the international market.

MEASURING SUCCESS BY THE STORIES

There's more to OCAST's success than simply numbers. The stories behind the numbers are perhaps more telling of the center's successful development efforts.