

Technology Transfer

Oak Ridge technology fares well in 1997.

Recently released statistics show that technology developed at ORNL and other Oak Ridge facilities is having an impact on U.S. industries. A total of \$23.2 million in commercial sales from Oak Ridge-licensed technologies was reported for 1997—an increase of 21% over the 1996 figure. Also, during the past year, the Office of Technology Transfer for Lockheed Martin Corporation in Oak Ridge executed 33 new licenses and 2 options for a total of 35 deals. In addition, it executed 32 new cooperative research and development agreements (CRADAs) worth \$54 million. Over 34% of all CRADAs executed in FY 1997 involved funds from industrial partners, an increase over all previous years. The amount of cash brought to Oak Ridge to support CRADAs was over \$2 million.

Technology transfer activities at Oak Ridge played a major role in influencing three private companies to either relocate or open operations close to DOE facilities operated by Lockheed Martin.

Licenses can be either exclusive or non-exclusive, depending on the technology involved and the agreement reached by the licensing executive and the licensee. A license allows a company to use a technology, to manufacture a product, or both.

For example, in 1997 two ORNL inventions for concentrating a commonly used medical isotope were licensed to DeRoyal Industries, Inc., of Powell, Tennessee, a worldwide manufacturer of medical supplies and prostheses. The company will use ORNL radioisotope generator technology

for concentrating technetium compounds in solution to increase the specific radioactivity of technetium-99m, the most predominantly used radionuclide in nuclear medicine. DeBusk Energy, Inc.—named after Pete DeBusk, the president of DeRoyal Industries, Inc.—was created to commercialize this licensed technology.

In another example, in 1997 ORNL technology to concentrate solutions of rhenium-188 for treatment of cancer-induced bone pain and to prevent reclogging of coronary arteries cleared by balloon angioplasty was licensed to Mallinckrodt Medical, Inc., a major international radiopharmaceutical manufacturer headquartered in St. Louis.

Other noteworthy accomplishments for 1997 include \$1.2 million in royalty income from licenses and CRADAs. Through CRADAS, government and industrial partners collaborate on ideas, share costs, and pool the results of a particular research and development program to bring technologies to the marketplace. Private partners provide resources for the research effort, while ORNL or other DOE laboratories provide personnel, facilities, equipment, or other nonmonetary resources.

Customer surveys show that industrial firms are pleased with the services provided by government partners in CRADAs. In 1997, the amount of cash brought to Oak Ridge (over \$2 million) by private companies in support of CRADAs exceeded the typical “in-kind support” of any previous year.