

Shimadzu Equipment Grants for Research: 2014-2015

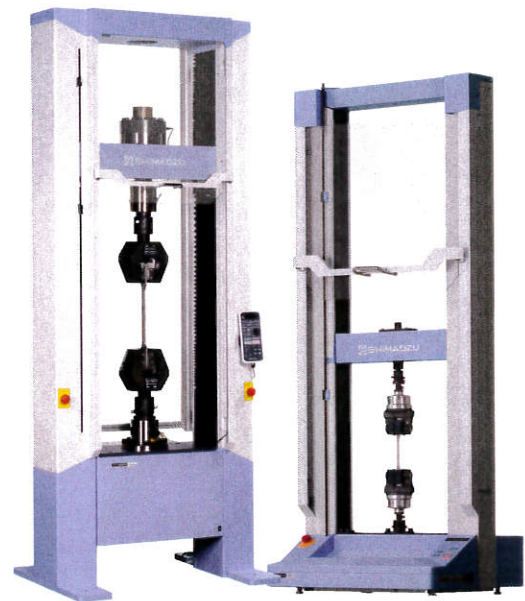
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Shimadzu has been making funds available through our EQUIPMENT GRANT PROGRAM for over 15 years. Shimadzu has provided millions of dollars in funding since the equipment grant program was established. It is our intention to encourage research into areas that may be of interest to the research community and to support the corporate mission goals of Shimadzu. Shimadzu's core operating principles, **"Contributing to Society through Science and Technology"** and **"For the Well-being of Both Mankind and the Earth"**, will be used in evaluating grant proposals.

Award Description

Grants may be awarded for the purchase of certain Shimadzu instruments or to reduce the acquisition price of related instruments. A grant award may be applied to the list price of the instruments to be purchased.

In all cases the net price of the instrument less the grant award will be lower than the best available price for the instrument for our customers and including those organizations with volume purchase contracts or government contract pricing. These grants do not cover overhead or administrative costs.



Details/Instructions

- Applicants must complete a Grant Application Form. Upon receipt, Shimadzu corporate management will review the proposal against other proposals under consideration.
- A grant may have specific requirements, and will have time limits or other qualifications.
- It is the responsibility of the Grant applicant to insure that the proposal meets all university and administrative criteria for approval.
- Award amounts can vary considerably and amounts will depend on the proposal.
- Funds will have specific requirements and expiration dates.
- Contact: Grants@shimadzu.com for an application or for more information.



Eligibility

Open to academic researchers at universities and non-profit research institutes within the United States and US territories only. Other programs are available outside the United States.

Contributing to Society through Science and Technology



INSTRUMENTS FIND A HOME ON THE RANGE

Shimadzu and the University of Texas, Arlington, build a sprawling **TECHNOLOGY PARTNERSHIP**

ANN M. THAYER, C&EN HOUSTON

EVEN INSTRUMENTATION centers are bigger in Texas. A recently launched partnership between Shimadzu Scientific Instruments (SSI) and the University of Texas, Arlington, is setting new standards for gift giving by an instrumentation company and for cooperation between industry and academia in the field of analytical technology.

The partners are creating the Shimadzu Institute for Research Technologies (SIRT), which will encompass two teaching labs and five separate centers spanning analytical chemistry, imaging, genomics, and materials analysis. The five-year goal is to create nearly self-sustaining instrumentation resources to support the independent research of a broad range of UT system faculty and students, as well as corporate partners, including Shimadzu.

Collaboration with university researchers is a common practice among instrumentation providers. For example, Waters Corp. supports about 20 single-investigator centers of excellence. And Agilent Technologies has a multiyear, multi-million-dollar commitment to the Synthetic Biology Institute at the University of California, Berkeley.

With \$25.2 million in equipment, however, the UT Arlington effort stands out for

its scope and scale. In February 2013, after SSI pledged an additional \$7.5 million to support the operation of the institute—the largest gift the university has ever received—UT Arlington gave the initiative its name. Although SSI will be a scientific collaborator and make technicians available to maintain the university-purchased equipment, the company is not involved in managing the center, says UT Arlington's vice president of research, Carolyn L. Cason.

“The sheer magnitude and breadth of in-

MULTIPLE PARTS

The Shimadzu Institute for Research Technologies features the following centers and labs:

- Shimadzu Center for Advanced Analytical Chemistry
- Center for Bio-Molecular Imaging
- Center for Environmental, Forensics & Material Analysis
- Center for Human Genomics
- Materials Genome Center
- Chemistry and biochemistry teaching lab
- Biology teaching lab

COLLABORATION Students work in the Shimadzu Center for Advanced Analytical Chemistry at UT Arlington.

struments, as well as the cohesiveness of it all being one brand and being maintained, puts us on pretty unique ground,” boasts UT Arlington chemistry professor Kevin A. Schug, who was instrumental in get-

ting the partnership off the ground.

Getting to this point was a stepwise process, says Terry Adams, SSI's vice president for marketing. Based in Maryland, SSI is the U.S. arm of the Japanese instrument maker Shimadzu. Although its parent has connections with Japanese universities, SSI had been looking to create its own U.S.-based partnership. With an office in Houston, its business was already growing in Texas.

Shimadzu also was familiar with Schug's research since his days as a graduate student. He joined the UT Arlington faculty in 2005 and set up a lab that included Shimadzu equipment. Soon after, scientists in the region began approaching him about research projects, some of which were outside his expertise. “I saw a big need for some type of core facility here but wasn't quite sure how to go about it,” Schug says.

Eventually, Schug worked with SSI to propose a new chemistry instrumentation center at the university. In the spring of 2012, UT Arlington signed off on the Shimadzu Center for Advanced Analytical Chemistry (SCAAC). The \$6.7 million center combines \$3.7 million in purchases by the university and a \$3 million in-kind contribution from Shimadzu. The center is now the first operational unit under the broad SIRT umbrella.

“It wouldn't have happened had we not had a very good relationship with Shimadzu and a forward-looking administration,” Schug says. The initiative established the Shimadzu Distinguished Professor of Analytical Chemistry chair, which Schug now holds. Since July, he has also served as Shimadzu science adviser to UT Arlington's vice president for research.

When SCAAC opened in April 2012, it was the largest installation of analytical instrumentation from Shimadzu in the Western Hemisphere. By October 2012, UT Arlington had agreed to buy another \$18.5 million in Shimadzu instrumentation to start two more centers. One for biomolecular imaging is getting under way, while an environmental, forensic, and materials analysis center is set to open by spring 2014.

Along with these three facilities, SIRT

will include an existing materials lab and a human genomics center. Although the centers reside in separate departments and buildings, access is open to researchers in all disciplines, says Joe A. Barrera, who became SIRT director in February. Meanwhile, the chemistry and biology departments will expose even nonmajor undergraduate students to advanced instrumentation in the teaching labs through their own curriculum.

EACH OF THE CENTERS will have a manager and a senior scientist, Barrera explains. “We want to see how we can apply these instruments and push the boundaries of research,” he says. As the centers grow and establish services, SIRT will hire more staff to operate instruments and analyze samples.

“We will have several routes to access the centers, including sample submission and analysis, and open access where researchers can come and use the instrumentation,” Barrera says. To recoup most of the operating costs and reduce the need for university subsidies, SIRT has a three-tier fee struc-

ture: The lowest rate is for Texas universities, another is for outside academic institutions, and one is for commercial interests.

“A lot of industries will want to use this kind of instrumentation, especially smaller companies that just don’t have the resources,” Barrera says. “Industry customers will help recoup some of the cost, but at the same time we also look to harness collaborative relationships between industry and our own faculty.” Projects already under way include developing methods for analyzing water and assaying estrogen in biomedical studies.

The university’s vision for SIRT is “a great mix of academics, graduate research, and external services,” SSI’s Adams says. The institute also fits with Shimadzu’s desire to see its instruments used widely and may serve as a testing ground for the company. “As we bring out new technology, UT Arlington will be one of the first sites we will take it to prior to launching it in the U.S. marketplace,” he says.

Both the university and SSI see the relationship as more than client and provider,

and they are excited about an exchange of scientists and research that is beginning to take place. “It’s not a sales situation. We have a center where we can be open and frank with each other,” Adams says. “They can tell us what is wrong with our instruments, and we try to fix it and vice versa.”

He’s also keen about working with young scientists at UT Arlington. “I see them sort of as a farm team for us,” he admits. “I need strong students coming out of school to come to work for Shimadzu.”

Even though not all the centers are operating, UT Arlington’s departments are already using them to attract faculty and students, Cason says. With about 33,500 students, UT Arlington is the second-largest school within the UT system.

“Our annual research expenditures are running about \$72 million,” Cason says, which makes the scale of the investment significant. “The institute will have significant impact in research and help us accomplish a doubling of our research expenditures within four years.” Those are some big numbers, even for Texas. ■



Excellence in Science

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Shimadzu is Actively Seeking Partnerships with University Engineering Programs for Physical Testing and Analytical Instrumentation

Dear Dean Tikalsky:

We at Shimadzu Scientific Instruments recognize that much of today's cutting-edge research is being performed at our Universities. The next generation of scientists and researchers are being trained and molded at these same institutions.

Throughout its history, Shimadzu has partnered with universities around the globe and throughout the U.S. in continuing efforts to promote science education, develop future leaders, and conduct collaborative research that contributes to society. Some examples include Johns Hopkins University, Stanford University, Cornell University, Mississippi State University, and Purdue University.

Recently, we developed a partnership with the University of Texas, Arlington (UTA), providing a \$10 million "gift in aid" to support UTA's Institute for Research Technologies (*Chemical & Engineering News*, September 2, 2013, page 32, enclosed). This partnership began with a \$200K grant for new instrumentation. We wish to develop more academic partnerships and I encourage you to contact us about our **University Equipment Grant Program** at grants@shimadzu.com to learn how we can work together.

Shimadzu offers a diverse portfolio of products to address a wide array of engineering research and classroom needs. These include:

- Universal Testing Machines (Electromechanical and Hydraulic)
- Hardness Testers
- Fatigue Testers
- Impact Testers
- Concrete Testers
- XRF & XRD
- Capillary Flow Testers
- Thermal Analysis
- Particle Size Analyzers
- Balances

Learn more about the products listed, and the many more we have to offer by going here: www.ssi.shimadzu.com/

Founded in 1875, Shimadzu is one of the largest analytical instrument companies in the world. It's Analytical and Measuring Instruments Division offers state-of-the-art solutions in a wide variety of fields, including engineering.



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With decades of experience, technological expertise, and customer service/support, we understand each situation is unique – and an opportunity to develop long-term partnerships. Shimadzu looks forward to partnering with Oklahoma State University for all of your engineering solutions.

Please feel free to contact me at the phone number or e-mail address listed below should you wish to pursue this further.

Sincerely,

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