# Scientific Environment at The University of Akron

The University of Akron (UA) offers more than 300 undergraduate and graduate programs, including the nation’s only B.S. degree in Corrosion Engineering and the largest polymer science/polymer engineering program in the world. Many of UA’s academic programs are recognized internationally for their excellence. In Fall 2016, UA’s enrollment exceeded 23,000 students. During the 2015-16 academic year, UA conferred 3,111 bachelor degrees, 1,113 master’s degrees, 140 doctoral degrees, 125 juris doctor degrees and 6 masters of law degrees.

The University of Akron is the public research university for Northern Ohio with an annual research budget of more than $50 million and a portfolio of more than 300 issued, pending and provisional patents. The University of Akron has more than 800 full-time faculty and affiliated research groups with expertise ranging from polymer science to direct marketing and from chemistry to electrical engineering.

Housed at The University of Akron, the **National Center for Education and Research on Corrosion and Materials Performance** provides a multi-disciplinary approach to help government and industry develop solutions for corrosion and materials performance challenges, whether they are unique or day-to-day problems. The Center has a comprehensive set of programs and services in education and workforce training, research and technology development, and outreach and public policy activities.

UA is also home to best-in-class programs including:

* One of the five fastest growing engineering colleges in the country;
* Collaborations with Timken Engineered Surfaces Laboratory;
* A Conquer Chiari Research Lab;
* More than 115 active industry-sponsored research projects;
* One of the first six winners of the U.S. Economic Development Administration’s i6 Challenge for biomedical technology commercialization with ABIA;
* One of the first three National Science Foundation’s I-Corps Sites programs to train technical faculty and graduate student in Lean Launchpad business principles. In three years, 93 teams with 321 faculty, students, mentors and entrepreneurs have learned about the commercial potential of their ideas through UA’s NSF I-Corps Sites program.

The University has been named by the National Science Foundation as one of 10 exemplars for technology transfer and commercialization and industrial partnerships, with an average of 70 new technologies disclosed each year. UA’s commitment to attract and graduate more students in the Science, Technology, Engineering, Mathematics and Medicine (STEMM) disciplines is demonstrated through its partnership in Akron’s STEMM focused high school. The University of Akron is recognized by the Carnegie Foundation as a RU/H Research (high research activity) University.

UA is designated by the State of Ohio as a *Center of Excellence in Biomedicine and Health Care* and a *Center of Excellence in Enabling Technologies: Advanced Materials and Sensors*. Programs in these Centers attract millions of federal, state and foundation dollars. For example, US Department of Energy funds support The National Polymer Innovation Center, a resource available to academic researchers and industrial partners focused on providing solutions to emerging research challenges in the areas of energy, sustainability, and health through new materials and device development. Similarly, the Akron Functional Materials Center (AFMC) has attracted over two million dollars to carry out its mission of developing novel solutions to industry challenges in complex fluids, nanoparticles, adhesion, membranes, biomaterials, and automation. Also located in the NPIC, is the Center for Biomaterials in Medicine (CBMM), which serves as a hub of wound healing and orthopaedic research, taking advantage of the University's resources, facilities and polymer expertise, providing needed research support to the *Center of Excellence in Biomedicine and Health Care.*

Research activity has more than doubled since 2001 and provides a picture of UA’s overall growth in external research funding. In FY 2016, UA researchers submitted 581 grant proposals, totaling over $122 million and received 484 awards totaling over $37.2 million.

***Following these paragraphs describing the overall institutional environment, investigators should discuss the specific resources, programs, and activities within their respective units (e.g., college, department, center) or at UA that will support the proposed work’s likelihood of success. Examples of such resources include: specialized research instrumentation or relevant core facilities; complementary expertise; formal and informal mentoring activities; and unique computing assets. In addition, early career investigators should provide specific detail regarding institutional investment in and support for their longer-term professional success.***