

The mission of the Center for Wireless Integrated MicroSensing and Systems (WIMS²) at the University of Michigan is to advance the design, fabrication, and breadth of the applications for sensor-driven microsystems through research, education, and interactions with industry. Core technologies include new sensing concepts and sensor designs, micro and nanoscale fabrication and packaging methods, micromachined RF filters and resonators, energy scavengers, low-power circuitry, and wireless interfaces. Application areas include wearable, implantable, and microanalytical devices, chemical and environmental sensors, and infrastructure monitoring systems. The applications' focus and interdisciplinary nature distinguishes WIMS² from other university research efforts. The relevance of this research is shown by the 13 start-up companies and more than 80 patents.

The WIMS² Center has world-class faculty and facilities, which generate world-class results. Benefits to industry include:

- **Technology Transfer:** Members can use Center research and technologies to add value to products and services.
- **Intellectual Property:** Center members are given preferential treatment on intellectual property.
- **Recruiting:** Center members get repeated access to and referrals about our students - the leaders and best researchers of tomorrow.
- **World Renowned Researchers:** Our research liaisons will introduce you and insure access to our internationally known faculty.
- **Targeted Research:** You can sponsor targeted research projects specifically for your companies needs. These projects can take advantage of existing Center research and provide a significant value to members.

The advantages of WIMS² are that it provides a convenient and cost-effective mechanism for industry to collaborate and interact with the researchers, as well as making it easier to transfer technology.

MEMS and Integrated Microsystems: Pervasive Applications

- Weather Forecasting and Environmental Monitoring
- Biomedical Systems: Diagnostic and Therapeutic
- Homeland Security and Defense Applications
- Communication Systems (RF and Optical)
- Consumer Electronics, Appliances, Entertainment
- Transportation Systems (vehicles, smart highways, infrastructure)
- Adaptive Automated Manufacturing Tools (including VLSI)
- Smart Homes
- Space Probes and Satellite Instrumentation