

IfM Directors 1991-Present



Dr. Robert O. Warrington
1991-1997



Dr. Barry A. Benedict
1997-1998



Dr. James L. Maxwell
1998-2000

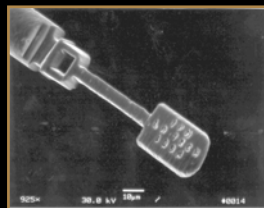


IfM Groundbreaking
December 16, 1994

Senator J. Bennett Johnston
President Daniel D. Reneau



Dr. Kody Varahramyan
2000-Present



Groundbreaking Micro Shovel

Created with
Focused Ion Beam Technology
By *Dr. Michael J. Vasile*

INSTITUTE FOR MICROMANUFACTURING



Crystal Anniversary 1991-2006

A Decade and A Half of Research and Educational Innovations



Louisiana Tech University
Institute for Micromanufacturing
P.O. Box 10137 / 911 Hergot Avenue
Ruston, LA 71272

<http://www.latech.edu/ifm/>



Institute Vision

To be a world-class resource for the realization of commercially-viable micro- and nanosystems, contributing to the economic infrastructure of Louisiana and the nation and benefiting humanity as a whole.

Institute Mission

- To enable research and development of novel micro- and nanoscale technologies and systems for biomedical, biological, chemical, environmental, and information technology
- To generate and harness commercially viable intellectual property
- To partner with industry, government, and academia in economic development
- To transfer new technology and provide technical training to industry and government
- To develop curricula and educate students in micro- and nanoscale technologies and systems

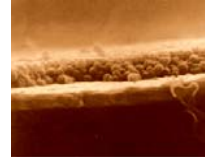
Crystal Milestones

Since its inception over a decade and a half ago, the Institute for Micromanufacturing has been at the forefront of research and educational innovation. Starting from its original emphasis on micromanufacturing, the Institute has been among the first in the nation in developing strong capabilities in nanotechnology in support of the National Nanotechnology Initiative launched in 2000. Since then, the Institute has grown to its current five centers of excellence. The Institute milestones include:

- 1990 \$750,000 planning grant from the US Department of Energy
- 1991 Launching of the Institute for Micromanufacturing as the first institute of its kind in the nation
- 1991 \$10 million infrastructure grant from the US Department of Energy
- 1992 \$2 million infrastructure funds from the State of Louisiana
- 1994 Groundbreaking of the Institute's new research and development building
- 1996 Dedication and occupancy of the Institute's new research and development building, marking the development of a world-class facility for micro- and nanosystems research and education
- 1998 Dedication and occupancy of the Technology Transfer Center in Shreveport
- 1999 Led in the \$12 million National Science Foundation EPSCoR grant to establish Louisiana Advanced Materials and Emerging Technologies Consortium
- 2000 Expanded the mission and vision of the Institute, laying the foundation for the realization of its five centers of excellence

- 2003 Realization of the centers of excellence in Nanotechnology, Biotechnology, Biomedical Nanotechnology, Environmental Technology, and Information Technology
- 2004 Attainment of the 200 mark for the number of faculty, staff, and students associated with the Institute
- 2006 Crystal Anniversary
 - Facilities valued at over \$50 million in R & D resources
 - Exceeded \$30 million in total grants and contracts
 - Surpassed 50 faculty, staff, and associates
 - Ranked 3rd in the nation by the Small Times magazine for micro- and nanotechnology education
 - Resulted in the existence of 5 start-up companies, numerous patents, licenses, SBIR awards, and industry partnerships based upon the Institute's groundbreaking technologies

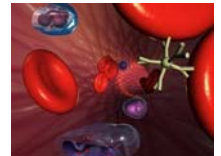
Nanotechnology



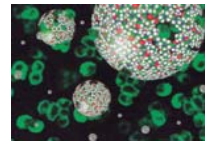
Pioneering layer-by-layer nanoassembly and other novel nanofabrication methods for broad range of applications, ranging from artificial blood to smart paper

Biotechnology

Advancing micro/nanotechnology integrated systems for biotechnology applications, including tools for regenerative medicine



Biomedical Nanotechnology



Developing innovative nanotechnology-based systems for biomedical applications, including glucose sensors and drug delivery systems

Environmental Technology

Advancing micro/nanotechnology integrated systems for environmental, chemical, and energy applications, ranging from chemical detection systems to fuel cells



Information Technology



Developing innovative micro/nanotechnology-based systems for information technology applications, including intelligent wireless sensor and RFID systems