Ohio Manufacturing Institute

Rich Spivey
Executive Director
• **Advanced Materials and Manufacturing**
  - World-class Materials Characterization Facilities
  - Multi-scale Computational Modeling
  - Advanced Metals & Forming
  - Corrosion & Coatings
  - Composites, Injection Molding
  - Materials Joining, Welding
  - Manufacturing, Micromachining, Integrated Systems Development

• **Energy, Environment, and Sustainability**
  - PhotoVoltaics; Batteries; Sustainability; Wind; Carbon capture; Biofuels; Smart Grid; Energy-aware Computing and Networking

• **Power and Propulsion**
  - Center for Automotive Research; Plug-in Hybrid Electric Vehicles
  - Gas Turbine research; flow control; aeroacoustics
  - Gear Dynamics

• **Sensors and Sensor Systems**
  - RF; remote sensing - ElectroScience Laboratory
  - Sensor exploitation and networking
OMI Mission:

• To make the technical resources of The Ohio State University apparent and easily available to manufacturers for economic development.
• To provide cost-effective mechanisms for applied engineering, development, testing, and manufacturing process support utilizing Ohio State’s faculty, student, and researcher expertise.

Technical Services:
• Engineering Services
• Co-located Internships
• Technical Training
• Seminars / Lecture Series
Engineering Services

• Testing, design support, material analysis, trial parts production, document search

• Simple, standard engineering service contracts deployed in <24 hours

• Projects leverage faculty expertise, labs, equipment, students, and institutional research

• Experiential learning for students

Benefits to Industry:

• Quick access to university technical resources at reasonable rates

• Problem solving and technical solutions delivered at the speed of business
## Ohio’s Technical Resource Landscape

What technical resources are available to manufacturers in Ohio?

### University College of Engineering Depts & Faculty
- Development of technological, professional, and personal skills of students. Conduct scientific studies and sponsored basic research projects.

### University College of Engineering Research Centers
- Provide basic and applied sponsored research services in specific areas of university technical strength or societal need.

### Research Institute or Foundation (Univ)
- Provide basic and applied sponsored research services in specific areas of university technical strength to government and industry. Support commercialization of technology.

### Industry / University Center (incl NSF I/UCRCs)
- Partnership between multiple universities and industry to conduct research that is of interest to all parties and advances a specific technology.

### Public / Private Laboratory
- Provide basic and applied sponsored research and development services to government and industry. Emphasize on national security, economic development, energy, life sciences, and sustainability.

### Technical Center
- Development and application of advanced manufacturing technology. Commercialization of existing and new technologies via membership and/or pay-per-service engagements.

### Technical Organization
- Convening companies within a specific technology or manufacturing process area to advance technical competencies. Provide programs & services that facilitate the growth of member companies.

### Industry Organization
- Convening companies within a specific industry to advocate for and advance business and technical competencies. Provide programs & services that facilitate the growth of member companies.

### MEP Manufacturing Extension Partnership
- Strategic advisor to small and mid-sized manufacturers. Promote business & job growth, & connect manufacturers to public and private resources.

### Community/Technical College
- Provide professional and technical associate degree programs, certificate programs, & continuing education opportunities.

### Services

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Dr. Charles Wessner Presentation on Feb. 27

- Dr. Wessner, National Academy Scholar and Director of the Program on Technology, Innovation, and Entrepreneurship

- February 27, 2014, 4-5:15 pm
- Scott Laboratory, Room E100

- Dr. Wessner is an international authority on manufacturing innovation policy best practices and successful public/private partnerships.

- Recent studies include 21st Century Manufacturing: The Role of the Manufacturing Extension Partnership Program