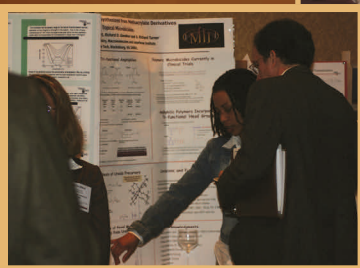


Macromolecules and Interfaces Institute at Virginia Tech (MII) is an interdisciplinary group committed to continuing the growth and advancing the stature of the existing, highly-ranked macromolecular science and engineering graduate degree granting program at Virginia Tech. We are committed to fostering a dynamic environment that enthusiastically promotes the recruitment and education of high-quality students; actively initiates and conducts timely research at both the basic and applied levels; and vigorously pursues continuing education and economic growth through outreach activities with industry and government agencies.

Over the years the macromolecular and interfacial science and technology focus has grown to include faculty from 14 departments within five colleges at Virginia Tech. During the past 3 year period, MII faculty have been responsible for nearly \$17 million of actual research expenditures. Many of these projects are in cooperation with industry.



Graduate and undergraduate students present their research at national meetings and at MII's Technical Conference and Review.

The faculty and students of the Macromolecules and Interfaces Institute are especially appreciative of our Industrial Partnership members and industrial research sponsors. The financial assistance provided by the companies that are associated with MII is essential to the health of interdisciplinary macromolecular science and engineering education and research on campus. These contributions are a strong signal to the Virginia Tech community that our mission is relevant to today's polymeric materials dependent enterprises.

If your company is not a member of the MII Industrial Partnership Program or you are not familiar with our current activities and efforts we invite you to explore our web page at <http://www.mii.vt.edu> and better yet come to Blacksburg to our beautiful campus and experience the enthusiasm of our students and explore with our world renown faculty ways to build productive relationships.

For more information, contact:

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**Macromolecules and Interfaces Institute
at Virginia Tech**

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Virginia Tech does not discriminate against employees, students, or applicants on the basis of race, sex, disability, age, veteran status, national origin, religion, political affiliation, or sexual orientation. Anyone having questions concerning discrimination should contact the Equal Opportunity/Affirmative Action Office.

Industrial Partnership Program



***Linking Industry to
Academia to
Educate the Next
Generation!!***

**Macromolecules and Interfaces Institute
at Virginia Tech**



Blacksburg, Virginia 24061 USA

Selected Current Research Topics

• Specific Applications

Adhesives & Sealants
Bio-Adhesion & Bio-Polymers
Civil Infrastructure
Coatings
Construction and Wood Products
Elastomers
Fuel Cell Technology
Microelectronics
Nanotechnology
Transportation: Automobile, Aircraft, Ship
Photochemical Processes
Electrospinning
Medical Diagnostics Materials
Therapeutic Delivery Materials
Tissue Engineering
Solar Cell Technology

• Macromolecular Synthesis

High Performance & Cost Effective Adhesives & Resins
Fire Retardant Polymers
Novel Polymer Chemistries
Tailored Architectures
Step-Growth & Chain Polymerization
Olefin Catalysis
Supramolecular Chemistry
Multiphase Copolymers
Novel Branched Topologies
Magnetic Nanoparticles
Ion Containing Polymers
Sustainable Chemistries

• Interfacial Science

Surface & Failure Analysis
Environmentally-Friendly Surface Pretreatments
Functional Self-Assembled Monolayers
Characterization of the Interphase
Environmental Effects

• Macromolecular Characterization

Monitoring Cure/Drying
Mechanical, Electrical, Thermal Properties
Molecular Migration and Phase Segregation
Effects of Fillers, Additives, Reinforcement
Fracture, Fatigue, & Durability
Environmental Degradation
Test Method Development
Molecular Weight Measurements

• Polymer Processing

Extrusion
Injection Molding
Fiber Spinning



Levels of Participation

Contribution Levels		Contributing* (\$10,000/year)	Supporting** (\$25,000/year)	Sustaining (\$40,000/year)
Education and Employee Training***				
2	Web-based training modules			
2	Complimentary tuitions	2	4	6
2	Discount on additional enrollees	✓	✓	✓
2	Annual Adhesion Science Short Course			
2	Complimentary tuitions	1	2	3
2	Reduced tuitions (50%)	2	4	6
2	Annual Efficient Testing Short Course			
2	Complimentary tuitions	✗	1	2
2	Reduced tuitions (50%)	✗	2	3
Communications and Updates				
2	Networking opportunities across MII and the entire University	✓	✓	✓
2	Access to "Partners Only" web site with research reports and advanced publications	✓	✓	✓
2	Invitations to seminars and other MII events	✓	✓	✓
Student Interactions and Support				
2	Special assistance with student recruitment	✓	✓	✓
2	Option to have industrial representative on graduate student committees	✗	✓	✓
2	Named student fellow-ship/scholarship	✗	✓	✓

* To facilitate enhanced interactions, companies funding significant research through the Institute will automatically become a "Contributing Partner" and a one-level upgrade, with the exception of the named student award

** The "Supporting Partnership" level will be assigned to any company that provides a graduate fellowship.

*** The well-know polymer science short courses are administered by the American Chemical Society, NOT MII.

Macromolecules and Interfaces at Virginia Tech: Industrial Partnership Program

The Industrial Partnership program is designed to foster closer working relationships between industry and the Macromolecules and Interfaces Institute at Virginia Tech. Industrial Partners are given direct access to the following opportunities, including:

- Employee training programs
- Timely, targeted communications
- Enhanced interactions with students
- Input to and from research programs

Industrial Partnerships are available at several levels, each of which carries a specific number of complimentary or reduced fee benefits as shown in the table to the left.

Funds from Industrial Partnership play an important role in supporting our research and educational efforts. These funds help to:

- Support student fellowships
- Enhance student development
- Communicate with member companies
- Enhance on-campus interactions

Support from our Industrial Partnership Program has helped build the stature of macromolecular and interfacial research at Virginia Tech, and will allow us to continue to educate future generations of scientists and engineers in this interdisciplinary field.

