

The Institute of Textile Technology
in partnership with
North Carolina State University



LEADERSHIP

THE INSTITUTE OF TEXTILE TECHNOLOGY



RESEARCH

INNOVATION

The Institute of Textile Technology (Institute) was founded in 1944 by textile industry leaders who saw a need for individual companies to join forces in collective support of education and applied research. Today, even more so than in the past, successful companies need highly trained and talented business and technical leaders, a skilled workforce, information, and state-of-the-art knowledge derived from on-going research. The Institute strives to support the textile industry by providing trained leaders, by pooling resources for collaborative as well as proprietary research, and by targeting cost drivers that affect profitability.



ROLE OF THE INSTITUTE

The role of the Institute is to identify applied research, education, and service needs and to utilize both Institute and NCSU staff and resources to deliver results that can be implemented to enhance the competitiveness of its members. This is performed through continuous industry interactions and Institute-sponsored activities.

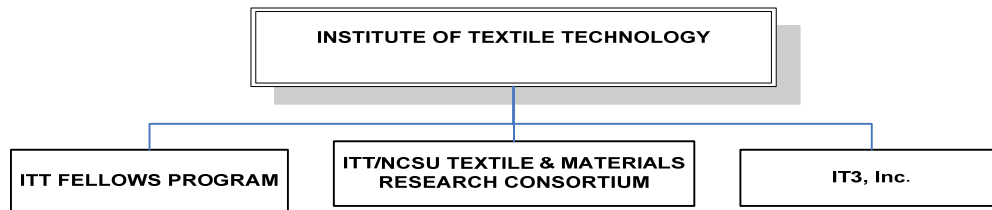
The purpose of the Institute is to extend the capabilities of textile and related companies to perform state of the art applied research, innovative product development, optimized manufacturing, and education utilizing the vast resources of North Carolina State University's College of Textiles to maintain and improve competitiveness in a global economy. To fulfill this purpose, the Institute provides and facilitates:

- Member driven, applied research
- Collaboration and information exchange
- Professional and graduate level education
- Professional consulting services

The Institute's unique alliance with the NC State College of Textiles permits members to pool and leverage resources via:

- Utilization of staff and faculty possessing in-depth technical and management skill sets,
- State-of-the-art laboratories and testing facilities, and
- Access to competitively critical intellectual property and other knowledge-based resources.

INSTITUTE OF TEXTILE TECHNOLOGY ORGANIZATION STRUCTURE



ITT FELLOWS PROGRAM

The ITT Fellows Program utilizes courses, research, independent study, seminars, workshops, intersessions, and internships to provide students with technical, management, communication, and problem-solving skills required for leadership positions within the textile industry. Special courses, course segments, and seminars are provided by the College of Textiles and Institute faculty to present textile manufacturing technology and to integrate course material through problem-solving exercises. Communication skills are developed through training by Institute Faculty as part of the traditional TAC research program requiring presentations of thesis proposals, technical papers, and thesis results at the Spring meetings. The ITT Textile Education Fund provides scholarships for ITT Fellows enrolled in the NCSU College of Textiles Master of Science program. Fellows are selected based on their academic achievements, their interest in performing industry derived research, and their desire to provide management leadership to the textile industry.



ITT/NCSU TEXTILE & MATERIAL RESEARCH CONSORTIUM

The Institute of Textile Technology and North Carolina State University (ITT/NCSU) Textile and Material Research Consortium provides one of the most advanced textile research capabilities in the world to address the applied research and development needs of the global textile industry. Consortium activities are designed to identify critical research and development needs, implement applied research, and disseminate research results to promote innovation and technological advancement of its membership. The Consortium is supported through combined membership dues allowing individual company contributions to be leveraged to provide applied research critical to the economic competitiveness of the industry.

Industry interactions are facilitated through the Technical Advisory Committee (TAC). The TAC is comprised of industry representatives who actively work with Institute Staff to identify industry relevant research, set research priorities, and review research findings. Much of this work is performed through the following subcommittees targeting specific areas:

Institute of Textile Technology

- CESTAB*
- Economic Competitiveness
- Functional and Technical Fabrics
- Yarn and Fabric Formation



*Committee for Economically Sustainable Textile and Apparel Businesses

Implicit in the proposed research efforts between the Institute, NCSU, and other institutions is the ability to commercialize research findings through the TAC. Due to the integrated manner in which the Institute research is developed, funded, and communicated with industry members, results can be immediately implemented. For projects involving intellectual properties, the Institute membership represents an ideal base for demonstrating value and identifying beneficiaries.

RECENT RESEARCH AREAS (A complete list of research topics and presentations is available):

- Nanotechnology and Plasma Techniques for Advanced Fabrics
- Supply Chain Management
- Repellent and Flame Retardant Finishes
- Sustainability in Manufacturing
- Yarn Sourcing and Lean Manufacturing
- Energy Reduction in Textile Processes

IT3, INC.

IT3, Inc. is a for-profit, wholly owned subsidiary of the Institute. Funding is obtained through fees for services provided. This provides the opportunity for companies to sponsor proprietary research and projects without the overhead associated with their maintaining individual research staffs and facilities. Revenues generated through IT3, Inc. are used to support educational and research activities of the Institute. While technical in nature, IT3 provides services that a client may need to maintain its competitive position in today's global economic environment.

IT3 services are provided in the following areas:

- Textile Manufacturing Performance
- Textile Material Analysis
- Education and Training
- Profitability Engineering
- Energy Audits and Management
- Environmental Engineering and Management
- Quality (ISO-9000) and Environmental (ISO-14000) International Standards Organization Registration



Knowledge is the fundamental key to success and only those companies that recognize and invest in education, training, research, and continual improvement will have long-term success.

BENEFITS OF MEMBERSHIP

The Institute of Textile Technology membership allows companies to engage in applied research and technical programs designed to enhance their competitiveness. Our programs foster product innovation and development, technological advancement, cost improvements, and strategic business insight. Specific benefits extended to members include:

- Membership in ITT/NCSU Textile and Material Research Consortium
- Exclusive rights for licensing of Consortium Intellectual Properties
- Representation on the ITT Board of Trustees
- Representation on the Technical Advisory Committee (TAC)
- Unlimited Participation on TAC Research Subcommittees
- Participation in TAC Sponsored Meetings
- Presentation of Research Results
- Participation in Technical Forums
- Technical and Business Management Presentations
- Leveraging of pooled resources for applied research
- Research funding for ITT Fellows and ITT/NCSU facilities, faculty, and staff
- Access to Historical Institute Research Publications and Theses
- Proprietary Research using ITT/NCSU Resources
- Consultation with Institute and NCSU Researchers and Staff
- Discounted Services through IT3, Inc.
- Discounted training programs through IT3, Inc.

SUMMARY

The Institute of Textile Technology continues to provide its “tradition of excellence” to the textile industry through programs for applied research, education, and services. Its capabilities have been strengthened through its alliance with the NCSU College of Textiles. Together, these institutions offer industry support that is unrivaled anywhere in the world.

Institute membership and program participation can play an essential role in meeting the knowledge resource needs for those companies that strive to succeed in an increasingly, globally competitive market.

CONTACT INFORMATION

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