ADVANCED MATERIALS
Resources in Greenwood County, S.C. and the Upstate Region

ADVANCING INNOVATION IN THE UPSTATE

Advanced manufacturing requires advanced materials, and Upstate South Carolina is increasingly supplying them to the world in the form of plastics, optics, photonics, advanced textiles and metals. As a worldwide leader in the research and manufacturing of advanced materials, the Upstate is home to highly trained graduates, world-renowned professors and a dynamic workforce developing and using cutting-edge technologies in state-of-the-art facilities.

SUPPORTING MATERIALS RESEARCH

Clemson University – A Leader in Advanced Materials

Advanced Materials research is all about making products that are better, smarter and faster and Clemson University is internationally recognized for its work in advanced fibers, films, ceramics, plastics, optics, composites and nanomaterials.

SUPPORTING MATERIALS RESEARCH

The Clemson University Advanced Materials Center is an innovation campus and technology park located in Upstate South Carolina. Anchored by a world class research facility, the Center continues to be a major catalyst for collaboration in the private and public sector.

AVAILABLE RESOURCES

- Electron Microscopy Laboratories – Best in nation
- Optical fiber drawing capabilities – Most advanced for US universities
- Laser & chemical laboratories
- Class 100 clean rooms & instrumentation facilities

South Carolina Research Authority

The South Carolina Research Authority is an applied research corporation with three main ways to support the growth of innovative companies and new technologies:

- **Technology Ventures** – Provides equity and support for the growth and commercialization of technology companies
- **Applied R&D** – Creates and leads teams that deliver applied research for federal and corporate clients
- **R&D Facilities** – Built and manages a state-of-the-art facility for wet/dry labs or office space at the Advanced Materials Center
From health care to high-performance computing, advanced materials are the key to next-generation products and processes that will improve the quality of life for everyone. In the Upstate of South Carolina, companies have discovered a wealth of raw materials and natural resources combined with a strong workforce and even stronger collaborative environment between the private industry and universities. Ease of access to markets, both domestically and internationally, only add to the positive business climate for materials-based companies.

PLASTICS
With easy access to both materials and markets, the Upstate has long since been an ideal location for the plastics industry. Our more than 150 companies employ over 20,000 people and make up the largest concentration of plastic-related companies in the State of South Carolina.
Select Upstate Companies: D&W Fine Pack, Faurecia, Mitsubishi Polyester Film, Sealed Air Corporation-Cryovac, Sterilite

ADVANCED TEXTILES
Much of the Upstate's success was once built around the textile industry. Over the years as the industry declined, the Upstate retained its presence by transitioning to the development of higher-end engineered fibers. Upstate-based Milliken & Company was and is a leader in private sector research in the textile industry, holding over 2,000 patents and home to the largest textile research center in the world.
Select Upstate Companies: BBA Fiberweb, Cytec Carbon Fiber, Hexcel, Milliken, Sage Automotive, Solutia

OPTICS/PHOTONICS
Over 160 photonics related facilities serve the Carolinas with applications in automotive, telecommunications, biosciences, defense and consumer products markets. Supporting the Optics/Photonics industry in the Upstate is Clemson University's Advanced Materials Research Laboratory.
Select Upstate Companies: AFL Telecommunications, AEDS Fiber Optics, Ceramtec, Fibersource, Global Precision Optics, Optek Systems, Suncall, Woven Electronics

METALWORKING & FABRICATION
The large presence of Upstate companies in transportation equipment and industrial machinery, create a strong manufacturing base for companies interested in metal working and fabrication. It was this presence that led American Titanium Works to announce its location of both its manufacturing and research & development center for titanium alloys in the Upstate.
Select Upstate Companies: Fisher Barton, Flexible Technologies, Hoke, Renfrow Brothers, Spartanburg Steel, The Shaw Group, Timken