With expertise in chemicals, energy, environmental issues and advanced software, MATRIC | Mid-Atlantic Technology, Research & Innovation Center provides contract R&D services to help its partners rapidly move ideas from conception to market.

MATRIC assists its customers with innovation in both breakthrough technologies and product/process improvements. This dual focus has been possible due to experienced product researchers and process manufacturing experts that make up our professional and technical staff.

MATRIC’s R&D and engineering staff average over 25 years experience, including 30 Ph.D. level researchers, several Professional Engineers and two members of the National Academy of Engineering.

A large part of MATRIC’s culture of innovation stems from the desire of our staff to make a difference in the world and leave behind a legacy of achievement for future generations to build upon. Evidence of this legacy is illustrated by the number of new patents based on our research that have been filed in the last few years. From 2008 to 2011, MATRIC staff were listed as inventors on 89 patent applications.

One of the primary advantages in contracting with MATRIC is that we study market developments and trends to identify market opportunities and raw materials cost and availability that often prove invaluable to our customers in developing timely, cost-effective solutions to meet those needs. We sometimes refer to this effort as market-driven innovation at the speed of business.

With that in mind, the “building blocks” of MATRIC’s brand represent the stages of product and process development:

- Discovery
- Development and Design
- Deployment

While staff at MATRIC have deep expertise in all these areas and we can assist you in the discovery and deployment processes, we believe that development and design is where we provide the most value to our customers.

MATRIC applies rigorous project design and management strategies, professional and scientific assessments and risk mitigation with unique interdisciplinary teams to solve customer problems. These strategies combined with extraordinary expertise, first-rate facilities and an intense focus on customer success create The MATRIC Advantage.

MATRIC has also developed strategies for how we work with our customers, providing maximum flexibility to meet customer needs and protect customer intellectual property. We strive to make working with MATRIC a genuinely rewarding experience.
The MATRIC Advantage

MATRIC is a strategic innovation partner providing deep, uncommon expertise and infrastructure to enable its customers to:

• Analyze and solve complex known and unrecognized technology and business problems;

A customer had carried out its own economic evaluation of a multi-step process they were developing, but they wanted an independent assessment of the technology. MATRIC performed process simulation studies that identified a critical separation issue and was able to propose an alternative practical approach to solve the problem.

• Achieve growth, cost and mission targets in their technology development & deployment efforts;

MATRIC provided chemical process and engineering expertise to a specialty chemical company that led to the development of a novel isolation and purification process. This process has substantially lower capital expenditure and operating expenses than the currently practiced methods of purification. The novel process has been scaled up at MATRIC’s pilot plant facilities in South Charleston, W.Va. and the customer is now building a full scale plant based on our design.

• Rapidly discover and develop technologies to meet critical business and mission objectives.

A bioenergy company engaged MATRIC as a strategic innovation partner in developing a continuous production process. MATRIC developed a new process then designed, built and operated a continuous pilot plant. Next MATRIC designed and engineered a full scale commercial plant. All within 22 months.