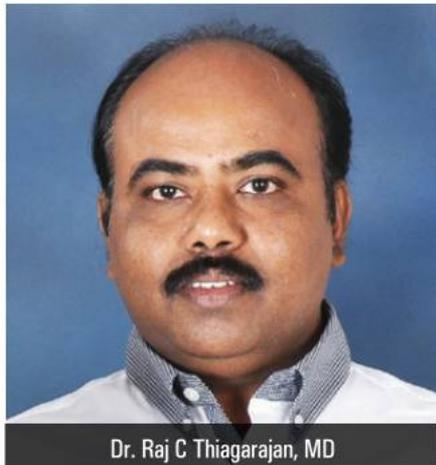


ATOA Scientific Technologies: Providing Engineering Simulation Solution for Innovation

By Nandini Mukherjee

Manufacturers today are faced with the need to bring complex products to market at a faster rate. Faced with this challenge, several organizations spend more time in the design phase using Computer Aided Engineering (CAE) Simulations in order to



Dr. Raj C Thiagarajan, MD

save time in the later phase of the product life cycle. CAE Simulation is a matured technology, wherein all design iteration and testing for new product development is done in a virtual environment. This technology is successfully leveraged by global corporations for automotive to aerospace application development, but the accessibility is limited for many companies. Identifying the unmet need, ATOA Scientific Technologies was created to offer speciality Multiphysics simulation solution for product development companies.

Incepted in 2010, ATOA Scientific Technologies (ATOAST) is an Engineering simulations service

provider. It provides advanced Computer Aided Engineering simulation for engineered material, product, process and system design. With clients spread globally, ATOA finds most of the traction in Europe, USA, UK, Australia, Singapore and China. ATOAST's leadership team constitutes industry, academic and management experts with a cumulative experience of more than 125+ years.

Addressing the Challenges

It is critical to meet multiple engineering design requirements while developing a new product. However, due to cost, time, resource and technology constraints it is usually designed for dominant design requirements. This becomes time consuming and expensive, which leads to unexpected product failure. Thus, maintaining competitive edge at a global scale becomes difficult. ATOA Scientific Technologies provides multiphysics simulation solution to design new products at one go for multiple design requirements. "Our virtual computer aided product development solution from concept to design to engineering analysis to 3D prototyping, helps clients to develop innovative products with lower cost and cycle time at once," says Dr. Raj C Thiagarajan, Managing Director.

An Edge above Others

Specialty Multiphysics simulation technology is a key differentiator in the generic engineering services

industry. ATOA is equipped with state of the art Multiphysics design center. Multiscale simulations for linking macro engineering to micro to nano for products engineered from atomic level are a key area of the company's expertise. ATOA's vision is driven by material unity which helps to find simple solution to complex problems. In addition, ATOA offers prototyping, experimental testing and part performance services through its technology partner network. ATOA invests up front for research and innovation to anticipate and solve future problems of our customers. "We specialize in helping our clients accelerate product development and reduce costs through multiphysics optimization of product designs in areas such as acoustics, chemical, electromagnetics, flow, optical, structural, and thermal," adds Raj.

The Road Ahead

In the near future, the company plans to roll out a specific and affordable multiphysics simulation solution for Indian MSMEs to develop innovative products in India for the global market. The company also plans to introduce 3D printing to enable global clients to develop products from concept to CAD design to CAE analysis to 3D printing of functional prototypes. "We also look forward to a one stop solution for engineering productivity applications for smart phones. Our long-term goal is to grow ATOA into good, great and global company known for Multiphysics CAE for innovation," concludes Raj. 