BUILDING A MATERIALS ENGINEERING SOFTWARE PRODUCT: FROM ACADEMIC RESEARCH TO COMMERCIALIZATION

Flavio V. Souza[1]

[1] Siemens Industries Software, 2101 Park Center Drive, Suite 290. Orlando, FL 32835 USA, fsouza@siemens.com

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During my undergraduate studies, I was amazed by innovative products, especially software products, and wanted to pursue a path where I could somehow advance the field of engineering through innovative approaches and technologies. In my graduate studies, I was presented to the theory of viscoelasticity and multiscale modeling techniques by my academic supervisors at Universidade Federal do Ceara (Brazil) and University of Nebraska-Lincoln (USA). At that point, I recognized an opportunity to further develop the theory and eventually build a software product that could fill the gap of existing finite element software when it comes to modeling advanced materials including highly heterogeneous viscoelastic media, e.g. fiber-reinforced thermosets and thermoplastics composites. In this presentation, I will outline the path to developing a software product based on knowledge built through academic research and founding the startup MultiMechanics Inc. With a growing team, we embarked on a path to build a valuable solution to accelerate innovation and adoption of advanced materials, while partnering with customers and industrial players to further mature and commercialize the product centered on TRUE Multiscale technology for a wide range of material-driven applications. The latest step has been the M&A with Siemens Digital Industries Software, through which our team has become the foundation of a new product line – Simcenter 3D Materials Engineering.