

Technical Seminar Abstract: An introduction to Polymer Aerogels, their features and benefits will be covered. Specific technical challenges involved in production scale-up and commercialization will be discussed.

Dave was recruited to join Blueshift International Materials in 2015 in part because of his proven track record in roll to roll plastics manufacturing. He began his career learning the fundamentals of process development and process control in continuous web process unit operations (pressing, drying, coating, calendering and slitting) in the paper industry. With Avery Dennison, Dave was promoted to Technical Director for the North American R&D center for Roll Materials Worldwide, the largest part of the Roll Materials R&D organization. In this role, Dave had responsibility for all product and technology development for base materials in the pressure sensitive business segment of Avery Dennison.

Following a career development track, Dave accepted the opportunity to become the Plant Manager of Avery Dennison's flagship pressure sensitive coating plant located in Greenfield, Indiana. A 300,000 square foot facility with 200 employees operating two high-speed pressure sensitive coaters, high throughput slitting and automated packaging lines. In addition to the normal responsibilities of a Plant Manager (Safety, Quality, Service, Cost control), Dave gained a strong understanding of the use of Six Sigma and Lean Manufacturing and was able to deploy his technical background to insure the plant reached its milestones for commercialization.

In 2004, Dave accepted an offer to join Bekaert Specialty Films (BSF) in San Diego, California as their V.P. of Manufacturing. BSF was a leading manufacturer of high quality retrofit window films for automotive and architectural applications. Dave brought his experience in Six Sigma and Lean to improve the operations of BSF in a 3-year turnaround plan, with significant improvements in safety, quality and on-time delivery. Window film manufacturing requires a high degree of cleanliness (Class 1000) and engineering expertise, and Dave built a team that would ultimately grow the operation from a single plant to a 6 plant operation in 10 years. In 2008, Dave was asked to assume responsibility for R&D for the BSF organization in addition to his manufacturing responsibility as Vice President of Operations. In the combined role, Dave's team refined and accelerated the commercialization of Hilite, an industry leading, spectrally selective window film with excellent total solar energy rejection and visible light transmittance performance. This technology platform and the associated process development would later lead to developments of a Low-emissivity window film for building retrofit situations. In 2011, BSF was sold to Saint-Gobain and incorporated into the Performance Plastics group. Dave continued to lead the combined group in an integration into Saint-Gobain, along with the construction of a plant in China and the development of a new process for manufacturing a critical raw material for the window film business. A new "outside weatherable" window film was developed and commercialized, along with several specialty products aimed at the solar energy market (Protective backsheets, solar reflectors). Dave's teams were recognized by Saint-Gobain for safety and best practice sharing between R&D and plants in a project to develop a safety window film for automotive applications.

Dave joined Blueshift International Materials in September, 2015 as Director of Operations. Dave will use his previous experience in deploying operational excellence, building and retrofitting manufacturing plants and supply chain management to support Blueshift's Aerogel technology and product development through commercialization to production scale volumes.