

# ENGINEERING COLLOQUIUN

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The Department of **Mechanical Engineering PRESENTS** 

Damon D. Brink, Ph.D.

**VP Engineering** Architected Materials, Inc.

Friday, March 6, 2015 WCH Room 205/206 11:10-12:00PM



# Architected Lattice: Development and Commercialization of a New Material System

## Abstract:

A new materials system has been developed wherein self-propagating waveguides are used to create a polymeric lattice structure. This novel structure was invented at HRL Laboratories and offers unique benefits including impact absorption, air and fluid flow, and tailorable core materials for sandwich structures. The Architected Lattice platform can be fabricated from a wide array of formulations that allow a range in mechanical properties and can be functionally graded so that properties can be optimized by location. Importantly, most products can be produced in less than one minute, opening the door for many commercial applications. This talk will provide an overview of the technology, explore some of the unique properties it offers, and discuss early commercialization efforts at Architected Materials, Inc.

### About the Speaker:

Damon Brink is the VP Engineering at Architected Materials and leverages more than 15 years of leadership in manufacturing and product development. Dr. Brink's creative approach has led to the formation of two businesses, the commercialization of multiple products, and 31 patent applications worldwide. He has employed the tools of Six Sigma and Lean in three different industries to improve both development processes and manufacturing operations, and specializes in linking technologies and manufacturing systems with new market opportunities. Prior to Architected Materials, Dr. Brink was Chief Technology Officer and Sr. VP Engineering & Operations at IntriMed Technologies, a design and manufacturing firm in the Medical Device industry. Previous roles include serving as Chief Technology Officer, Executive Vice President, and Board Member in industries including Data Storage, Thermal Management, and Nanotechnology. He has consulted with numerous start-up companies on technology strategy and innovation, and serves as Marketing Chair for the Central Coast MIT Enterprise Forum. Dr. Brink is also Board Member for the Business & Technology Partnership at CSU Channel Islands, is Secretary and Board Member for the Channel Islands YMCA, and is an Advisor to the Technology Management Program at UCSB. He is a certified PMP, CSSGB, and CSSBB, holds a Ph.D. in Materials Science from the University of California at Santa Barbara, and a BSE in both Mechanical Engineering and Materials Science and Engineering from the University of Michigan.