

IEEE-PEAL Prominent Technical Lecturer Event
(Tour will follow in the same building)

- Who** **Mr. Thad Kacsandy, Senior Advanced Manufacturing Engineer**
University of Dayton Research Institute
- Date** **Monday, Oct 29, 2018**
- Place** **University of Dayton Research Institute, Curran Place – Rm. S1050 (Auditorium)**
1700 South Patterson Blvd, Dayton, OH (originally NCR-HQ building)
- Parking** Park in lot to right of main building. Proceed to Auditorium via adjacent rear entrance.
- When** **5:45 pm** Light Buffet and Refreshments (complimentary)
- 6:15 pm** UD student Ryan Kronk presentation on his ETHOS experience
 (ETHOS = Engineers in Technical, Humanitarian Opportunities of Service Learning)
- 6:30 pm** Featured Presentation by Mr. Thad Kacsandy followed by a tour (**Tour is for US Citizens Only**)
- For** PEAL and/or IEEE Section members; members may bring one non-IEEE member as a guest
- RSVP** Please reply through the PEAL website (<http://sites.ieee.org/dayton-peal/>) whether attending as self or self plus guest. Questions should be directed to Ms. Seana McNeal (seana.mcneal@us.af.mil) or Dr. Bang Tsao, (bang.tsao@udri.udayton.edu)
- Subject** **Introduction to Additive Manufacturing**

Abstract

Most conventional manufacturing technologies work by removing or forming material. In additive manufacturing (AM), material is added only where needed and as required. This introduction to additive manufacturing will focus on two processes: metal powder bed fusion and polymer material extrusion. Powder bed fusion, which employs a laser beam to fuse layers in a powder bed, provides the best mechanical properties amongst AM technologies and offers high detail resolution. Powder bed fusion technology can be used with both metals and polymers. In material extrusion, continuous plastic wire filament is heated and dispensed selectively through a nozzle. Although mechanical properties are low in comparison, the technology is mature and relatively inexpensive. The University of Dayton Research Institute is the site of the first USAF Advanced Technology and Training Center, whose mission is to qualify state-of-the-art advanced technologies for the sustainment enterprise while providing training for engineers and operators through a collaborative environment.

Speaker's Bio

Thad Kacsandy is a Sr. Advanced Manufacturing Engineer for the UDRI Additive Manufacturing & Repair Technologies Group. His primary focus is material property and process development for selective laser melting additive technologies. Prior to his 2 years at UDRI, he was a materials or process engineer for Clevite Elastomers, General Motors, Delphi, Eastman Kodak, and L-3. Thad has

a BS in Chemical Engineering from the University of Akron, MS in Engineering Management from UD, and MS in Materials Engineering also from UD. He resides in Springboro, OH with his Wife Sheri, and four children, and occasionally finds time to play guitar.