

The Department of Mechanical Engineering
PRESENTS

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Friday, January 18, 2019
WCH Room 205/206
11:10-12:00PM

Army Composite Materials Technology Supporting the Future Soldier

Abstract:

As the U.S. Army establishes the Army Future's Command and the obligations associated with this new leadership structure, the scientific community presses forward to develop the cutting edge science and engineering requirements that will enable materials technology to meet the protection and lethality demands of the soldier. The U.S. Army Research Laboratory is serving the soldier by providing materials based solutions to threats and battlefield environments and develops the materials understanding to respond to a constantly changing and dangerous environment that faces our war fighters. The presentation will provide an understanding of the priorities of the U.S. Army for technical capabilities that support mission requirements and identify how composite technologies are positioned to offer light weight solutions to our soldiers. Composites engineering and science products will be demonstrated that show how engineering solutions and materials sciences can be applied to military applications, both in the present and with an emphasis toward the future.

About the Speaker:

Dr. James Sands is a materials engineer with the U.S. Army Research Laboratory and has served as the leader for the Composite and Hybrid Materials research for the last 7 years. He is currently on a sabbatical rotation in the region expanding the technical links between the Army research programs and the industrial base that builds equipment for the war fighter. Dr. Sands has supported the technical research needs of the soldier as a civilian of the Department of Defense for the last 18 years and has documented hundreds of papers, patents, and technical transitions related to resins, adhesives, transparent armor, and composite armor.