



MaterialZ Seminar Series

Additive Manufacturing: Adoption and Industrialization Challenges at Lockheed Martin

Friday, January 14, 2022, 11:00 am MST

Abstract

Lockheed Martin has a long history with additive manufacturing (AM) both as a user and developer of AM processes. This talk will cover past and ongoing technology adoption efforts spanning rapid design prototyping, tooling, and direct digital manufacturing of aviation & space metallic structures. Business drivers and challenges limiting broader use, especially the lack of material feedstocks compatible with additive process physics and long qualification timelines, will be discussed.

Dr. Prabhjot Singh

Lockheed Martin Space

Dr. Singh is an Associate Fellow for Advanced Manufacturing at Lockheed Martin Space's Advanced Technology Center (ATC) in Littleton, CO. His background is in additive manufacturing (AM) process development and the computational aspects of manufacturing technologies. He earned his PhD in mechanical engineering from the University of Michigan, Ann Arbor (2004). Subsequently, he joined GE Research (GE-R) in Niskayuna, NY in 2004. While at GE, Dr. Singh founded & led GE-R's additive manufacturing lab which focused on the development of ceramics and metal additive manufacturing methods spanning aerospace, energy generation and healthcare applications. At Lockheed Martin Dr. Singh's focus is on expanding the use of additive manufacturing for space applications. His research has been supported by the NIH, US Army, ARPA-E and US Airforce funded Manufacturing-USA institutes. He holds 15 issued patents.



Zoom link: <https://arizona.zoom.us/j/85438103154>



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