

## Mechanical and Materials Engineering Seminar Series

Dr. Prashant K. Sarswat Dr. Sarswat's impactful research has garnered international attention, featuring prominently on renowned platforms such as the Discovery Channel, Fox, BBC, AIP Inside Story, and The Economist



## Dr. Prashant K. Sarswat

Research Associate Professor, and Director of the Materials Synthesis, Testing, and Analysis Facility University of Utah

Tuesday, September 17th | 2:00 PM | EC 1114

## Pushing Boundaries in Metal Additive Manufacturing: Innovations, Challenges, and the Path Forward

Abstract: The development of metal additive manufacturing has opened new frontiers in material design and production, offering unprecedented flexibility and innovation opportunities. This presentation explores the advancements and challenges in metal printing, focusing on the potential of technologies such as selective laser melting (SLM) to revolutionize novel alloy fabrication. By employing advanced alloy design strategies, printing methodologies, and computational techniques, this work highlights key factors that drive innovation in the field. Additionally, it addresses current limitations and outlines future directions in the pursuit of high-performance materials. The presentation will offer insights into cutting-edge research while identifying critical areas for ongoing improvement in 3D metal printing technologies.