University Materials Council Spring 2026 Meeting
March 19, 2026, 8 am-noon
Gallery 1, Omni San Diego Ball Park

8:00 am Breakfast

9:00 am Elections and other updates

9:15 am Overview of the 2026 UMC data

9:45 am Break

10:00 am – 11:45

Challenges and Opportunities in Applied Materials Research and Education

10:00-10:30 Keynote Address: Jim Wright, SpaceX*

10:30-11:00 Panelists:

- ✓ John Mauro, *Penn. State University*: Academic-Industry Relations
- ✓ Mohsen Asle Zaeem, *University of Tennessee Knoxville*, Working with National Laboratories
- ✓ Greg Scofield, *Purdue Applied Research Institute, Purdue University*, Defense-Related Research

11:00-11:45: Open Discussion of Best Practices in Applied Research and Education, *Don Brenner/Mike Kessler, co-moderators*

11:45 Wrap up

*James Wright is a Principal Engineer in the Materials Engineering department of SpaceX. He has over two decades of experience in alloy design and development in aerospace, consumer electronics, and space exploration industries. He earned his B.S. in Materials Science and Engineering from Lehigh University in 1997 and went on to complete his Ph.D. in Materials Science and Engineering at Northwestern University in 2002, and subsequently a B.S. in Product Design and Development from Northwestern University. His research and expertise have significantly contributed to the advancement of high-performance materials for critical applications. At QuesTek Innovations, he led the invention of Ferrium C64 (AMS 6308), a high-performance gear steel that improved bending and contact fatigue resistance, survivability in oil-out conditions for helicopters, and manufacturability via vacuum carburizing. In 2012, he joined Apple as a Manager of Product Development in Materials Engineering, where he was part of a team who developed high-strength, stress corrosion cracking (SCC)- resistant aluminum alloys used in iPhones and Apple Watches. Since 2017, he has been with SpaceX, where he has helped develop new alloys such as advanced nickel-based superalloys for high-pressure oxygen environments; highly castable, corrosion-resistant martensitic steels optimized for cryogenic operations; and advanced 300-series stainless steels tailored for primary structural applications at cryogenic temperatures.