



# High Desert SAMPE

SOCIETY FOR THE ADVANCEMENT OF MATERIAL AND PROCESS ENGINEERING | HIGH DESERT CHAPTER



San Fernando Valley  
Chapter



## Elastomer Seals 101 for Aerospace



Our Guest Speaker

**Vinay Nilkanth**

VP of Technology &  
Program Management

This presentation will showcase the critical role of elastomeric seals in aerospace systems, highlighting how they prevent leakage of fuels, hydraulic fluids, air, and other media under extreme temperatures, pressures, and environmental conditions. Seals are equally important for preventing environmental contaminants such as moisture, dust, and debris from entering critical systems. The presentation will provide an overview of common aerospace elastomers including FKM, FVMQ, HNBR, EPDM, silicone, and FFKM and discuss how material selection is driven by fluid compatibility, temperature capability, and performance requirements.

The presentation will cover essential design considerations as well as common manufacturing methods, such as compression, transfer, injection, and liquid injection molding. Together, these elements demonstrate how material selection, qualification testing, design, and manufacturing integration ensure long-term sealing integrity in demanding aerospace environments.

**Wed, Mar 25<sup>th</sup>, 2026 @ 5:30 PM**  
**@ Antelope Valley College,**  
**Discovery Lab, Fire Tech Lab DL-110**  
**3041 West Avenue K, Lancaster, California**

**RESERVE YOUR SEAT  
AND COMPLIMENTARY  
DINNER ON EVENTBRITE!**

