

## **Maneesh K. Gupta, PhD**

Senior Materials Engineer | Air Force Research Laboratory, Materials and Manufacturing Directorate



### **Session 4: Functional Materials and Smart Buildings**

**Title of talk:** Formulation and Testing of Ready to Spray Biocement

**Bio:** Dr. Maneesh K. Gupta is a Senior Materials Engineer at the Air Force Research Laboratory, Materials and Manufacturing Directorate. His field of expertise is the processing and characterization of bio-manufactured materials with specific emphasis on high-throughput measurement of materials properties. Dr. Gupta is the USAF representative on the program management team for the Tri-Service Biotechnology for Resilient Supply Chains (T-BRSC) program funded by the Office of the Secretary of Defense. Dr. Gupta has been leading the development of biomanufactured materials including optical materials, high-temperature resins, and biocement materials for agile infrastructure.

After completion of his Ph.D., Dr. Gupta worked as a postdoctoral fellow developing additive manufacturing methods for the incorporation of controlled release capsules in 3-D printed tissue engineering matrices. Since joining AFRL as a contractor Dr. Gupta has been studying the processing and characterization of bio-inspired protein-based materials with specific emphasis on the ability produce materials with tunable and graded properties.