

June 14<sup>th</sup> 7:00 – 8:00pm

Dr. Suresh Babu

UT/ORNL Governor's Chair of Advanced Manufacturing Professor

The University of Tennessee, Knoxville

[More information on Dr. Suresh Babu](#)

### **3D Printing of Cars and Other Things Important to Us: Role of Science and Mathematics**

**Abstract:** In this presentation, I will share with the students about my personal journey starting as a student to researcher to faculty. I will summarize the reasons for why I am interested in advanced manufacturing, especially 3D printing. The presentation will highlight different ways we manufacture goods and products for our society and the role of 3D printing. I will also introduce some of the science and technology of 3D printing that is at the intersection of robotics, materials and computational modeling. Also, I will highlight how the students can be part of this exciting new field.

**Bio Sketch:** Dr. Babu obtained his bachelor's degree in metallurgical engineering from PSG College of Technology, Coimbatore, India and his master's degree in industrial welding metallurgy-materials joining from Indian Institute of Technology, Madras. He obtained his PhD in materials science and metallurgy from University of Cambridge, UK in 1992. He also worked as a research associate in the prestigious Institute for Materials Research, Sendai, Japan before joining ORNL in 1993. From 1993 to 1997, he held joint researcher position with ORNL, University of Tennessee and The Penn State University. From 1997 to 2005, he worked as an R&D staff at ORNL. From 2005 to 2007, Suresh held a senior level technology leader position in the area of engineering and materials at Edison Welding Institute, Columbus, Ohio. From 2007 to 2013, Suresh served as Professor of Materials Science and Engineering and Director of NSF I/UCRC Center for Materials Joining Science for Energy Applications, at The Ohio State University. In 2013, Suresh was appointed as UT/ORNL Governor's chair of advanced manufacturing at the University of Tennessee, Knoxville, TN. In 2019, Suresh was also appointed as Director of Bredesen Center for Interdisciplinary Research and Education for Energy- and Data- Science and Engineering. In 2020, Suresh was appointed to the National Science Board by the President of the United States of America for a six-year term.