## **Physics-of-Failure methods and PHM of Electronic Components**



Abhijit Dasgupta is Jeong H. Kim Professor of Mechanical Engineering at the University of Maryland (UMD), with research experience in the microscale and nanoscale mechanics and reliability physics of engineered materials used in conventional and additively manufactured 3D flexible electronic packaging and intelligent microsystems. He holds a Ph.D. in Theoretical and Applied Mechanics from the University of Illinois at Urbana-Champaign (UIUC), and has been a principal investigator at the Center for Advanced Life Cycle Engineering (CALCE) at UMD for the past 30 years, conducting research in reliability physics, design for reliability, accelerated stress testing, and real-time health management. He has published over 300 articles and conference papers; served on editorial boards of three international archival journals; presented over 40 workshops and short courses; helped form research and educational roadmaps for the electronics industry, and provided consulting services to numerous industry leaders. He has presented numerous keynote talks at international conferences, received 6 bestpaper awards and received 6 major awards in recognition of his research and educational contributions. He is an ASME Fellow, past Chair of the ASME Electronic and Photonic Packaging Division (EPPD), current member of the ASME Design, Manufacturing and Materials Segment Leadership Team (DMM-SLT) and Reliability Topic Lead in the Heterogeneous Integration Roadmap (HIR) Team sponsored by IEEE/ASME/SEMI/IEPS/EDS.