



## Antonio Ricco

Affiliate, Program-Senesky, D.

### Bio

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#### BIO

Tony Ricco received BS and PhD degrees in Chemistry from UC Berkeley (1980) and MIT (1984), respectively. In Sandia National Laboratories' Microsensor R&D Department (1984 – 1998), he developed chemical microsensors and integrated microsystems. He was guest professor at the University of Heidelberg's Applied Physical Chemistry Institute (winter 1996 – 1997). From 1999 – 2003, he was ACLARA BioSciences' Director of Microtechnologies and Materials, developing consumable plastic microfluidic systems for genetic analysis, high-throughput pharmaceutical discovery, proteomics, and pathogen detection. He directed Stanford's National Center for Space Biological Technologies from 2004 – 2007; from 2007 – 2024, he served as NASA Ames Research Center's Chief Technologist for Small Payloads while on assignment from Stanford University. From 2003 - 2016, he was a founding member, then adjunct professor, at the Biomedical Diagnostics Institute (BDI, Dublin City University), developing single-platform point-of-care medical diagnostic devices for platelet function, infectious disease, and cardiovascular health. In 2024, he retired from Stanford and joined NASA Ames Research Center as the Instrument Manager for the Programs & Projects Directorate, where he is currently employed.

Dr. Ricco is co-author of some 450 presentations, 300 publications, and 20 patents. He is a Fellow of the American Institute for Medical & Biological Engineering (AIMBE) and of The Electrochemical Society (ECS), former president of ECS's Sensor Division, and, from 2004 – 2024, was Vice President of the Transducer Research Foundation (TRF). He was an editor of the Journal of Microelectromechanical Systems (JMEMS) from 2000 – 2019.

At NASA, Tony works with teams that develop, launch, and operate remote, autonomous bioanalytical and spectroscopy systems for fundamental space biological and astrobiological studies, serving as chief technologist for multiple successful "cubesat" spaceflight missions incorporating living organisms. He is presently adapting these spaceflight technologies to the challenge of searching for molecular indicators of the presence of life on our solar system's "icy worlds", in particular Europa and Enceladus, as well as developing systems to seek molecular evidence of ancient life beneath the surface of Mars.