Vision statement: I advocate that systems engineering, as a profession and a discipline, can significantly benefit from bridging the gap between education and practice. Hands-on experience in real settings seems to be necessary to truly comprehend systems engineering. At the same time, academics continue to develop theories, methods, and tools that could significantly improve practice but remain largely unknown to practitioners. I believe that our Academic Affairs colleagues have done a phenomenal job in tightening the relationships between academics and practitioners. I intend to keep the same spirit and work with many of you around four main ideas. Provide value to faculty. Collectively, INCOSE practitioners possess a wealth of “not-in-the-textbook” experiential wisdom that many academics could use to shape their teaching and contextualize their research. I believe that it should be our priority to elicit and capture that knowledge for academic institutions to use. Provide value to practitioners. Collectively, INCOSE academics have a broad and critical knowledge of the state-of-the-art that many practitioners could use to assess and shape their work. I believe that academics should help in increasing the breadth, currency, and rigor to INCOSE technical products. Provide value to students. Students are the future of systems engineering. As systems engineering matures as an academic discipline, we must continue our efforts to make it known and appealing to students at all levels, and to formalize it and make it relevant within academic institutions. Furthermore, we must work on a strategy to make INCOSE valuable for students during their studies with a clear path to transition into regular members. Increase international representation. Probably because of its size, several initiatives of Academic Affairs have been unable to reach regions beyond North America. As academic programs grow in the rest of the world, we must be proactive in both engaging them and supporting their creation.

Bio: Dr. Alejandro Salado has been a systems engineer, consultant, researcher, and instructor for over 17 years. He is currently an associate professor of systems engineering with the Department of Systems and Industrial Engineering at the University of Arizona. In addition, he provides part-time consulting in areas related to enterprise transformation, cultural change of technical teams, systems engineering, and engineering strategy. Alejandro conducts research in problem formulation, design of verification and validation strategies, model-based systems engineering, and engineering education. Before joining academia, he held positions as systems engineer, chief architect, and chief systems engineer in manned and unmanned space systems of up to $1B in development cost. He has published over 100 technical papers and his research has received federal funding. He is a recipient of the NSF CAREER Award, the International Fulbright Science and Technology Award, the Omega Alpha Association’s Exemplary Dissertation Award, and several best paper awards. Dr. Salado holds a BS/MS in electrical and computer engineering, a MS in project management, a MS in electronics engineering, an MEng in space systems engineering, and a PhD in systems engineering from the Stevens Institute of Technology. Alejandro has been a member of INCOSE since 2005 and has served as Liaison to ISO and Assistant Director for Student Divisions.