

## **Vision Statement for EMI Board of Governors**

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Thank you for taking the time to read this brief description of my background and vision as a candidate for the EMI Board of Governors.

I completed an MS degree in Theoretical & Applied Mechanics at Northwestern University and an MS in Mathematics at Carnegie Mellon University (CMU). My PhD was awarded from CMU in Mechanical Engineering where I studied phenomena related to the dynamics of particulate systems. In 1987, I began my academic career at the New Jersey Institute of Technology where I am a professor of mechanical engineering. Over the span of my career, I have endeavored to promote the field of engineering mechanics as broadly as possible through my teaching, graduate students, and research agenda, through active involvement with professional organizations and various international boards, and as Editor-in-Chief of *Mechanics Research Communications*.

My involvement with the engineering mechanics community has spanned more than 38 years. I have been an EMI member since 2014, an active member of the Granular Materials Committee (GMC) and its former chair. In these roles, I have organized symposia that are amongst the most successful at the EMI conferences in terms of attracting presentations and session attendance. In addition, I have provided financial gifts to support student competitions in both the Granular Materials and the Inelasticity-Multiscale Committees. As a past GMC chair, I participated in the planning of a special issue of the *Journal of Engineering Mechanics*, initiated a student video competition (now in its 4<sup>th</sup> year), and revised the GMTC by-laws. Except for 2023, I have attended every US-EMI Conference since 2014, co-organized symposia at three EMI International Conferences, and I continue to be actively involved with the GMC. Over the course of my tenure in the EMI, I have recruited and mentored younger committee members and have guided the current Committee leadership. I have further served the EMI on an ad-hoc committee that reviewed and revised its operations manual.

I strongly believe that engineering mechanics is the foundation of all technological developments, and as such, its importance cannot be understated. My vision as a potential member of the EMI Board is (1) to serve the engineering mechanics community and encourage innovative collaborations, (2) to attract and promote new members who will ultimately form EMI's future constituency, (3) to establish and facilitate living connections between mechanics communities in the US, North America and overseas, (4) to promote transparency at all levels and (5) to contribute to the Institute becoming the pre-eminent engineering mechanics organization.

If elected, I intend to do my very best to promote this vision, and, more importantly, to remain open and receptive to ideas of the community as embodied by the EMI's Technical Divisions and its members.

Anthony Rosato is a Professor of Mechanical Engineering at the New Jersey Institute of Technology (NJIT), where he has been since 1987. He received an MS degree in Theoretical and Applied Mechanics from Northwestern University, an MS in Mathematics and PhD in Mechanical Engineering from Carnegie Mellon University. His research interests are focused on the dynamical behavior of discrete interacting particles, continuum modeling of granular systems, computational approaches and experimental studies with applications in the solids handling and processing industries. His work regarding the mechanisms of vibration-induced size segregation is widely known for coining the term “Brazil Nut Effect”. He was the founding director of NJIT's Particle Technology Center (1995-99) and has been the director of the Granular Science Laboratory since 1999. Prof. Rosato has held visiting appointments at Lawrence Livermore National Laboratory, Worcester Polytechnic Institute, the Lovelace Institutes, ESPCI in Paris, the University of Salerno (Italy) and Stanford University. At NJIT he has held various leadership roles, including Graduate Chair of his department, Chair of the University Faculty Council, President of the Faculty Senate and member-at-large of the NJIT Professional Staff Association. He is a member of the editorial boards of *Kona Powder and Particle* and the *Vietnam Journal of Mechanics*, serves as Chair of the International Hoover Medal Board, and as Editor-in-chief of *Mechanics Research Communications*. He has been instrumental in establishing the *Elsevier Distinguished Lectures in Mechanics* and recently the Stuart B. Savage Award. He is a Fulbright Scholar, a Fellow of the ASME, and the American Academic of Mechanics. He has served as the Chair of the Granular Materials Committee of the ASCE Engineering Mechanics Institute, and is a member of the American Physical Society, the Society of Engineering Science, and the ASME.