



# HOW TO BECOME AN EFFECTIVE TEACHER & RESEARCHER

## Prof. J. N. Reddy

### ABSTRACT

Faculty members at major universities across the world are required / expected to fulfill their duties as a teacher, mentor to their students and others who work with them, and as a researcher. The speaker will share his experience and thoughts on how to be an effective teacher, mentor to graduate students and research associates, and researchers with societal impact. What is said here only reflects the speaker's personal views based on his experience as a teacher, mentor, and a researcher. The thoughts expressed in the presentation does not necessarily reflect the views of the institutions involved or his colleagues. However, most experienced colleagues will agree with the thoughts expressed by the speaker. Although attendance at this lecture is not mandatory, those who attend will benefit by knowing and following the advice given.

### Brief Vitae of J.N. Reddy <http://mechanics.tamu.edu/>



#### Prof. J. N. Reddy

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Dr. Reddy is a Distinguished Professor, Regents' Professor, and inaugural holder of the O'Donnell Foundation IV Endowed Chair in Mechanical Engineering at Texas A&M University, College Station, Texas. Dr. Reddy, an ISI highly-cited researcher, is known for his significant contributions to the field of applied mechanics through the authorship of 24 textbooks and over 800 journal papers. His pioneering works on the development of shear deformation theories (that bear his name in the literature as the Reddy third-order plate theory and the Reddy layerwise theory) have had a major impact and have led to new research developments and applications. Some of the ideas on shear deformation theories and penalty finite element models of fluid flows have been implemented into commercial finite element computer programs like ABAQUS, NISA, and HyperXtrude. In recent years, Reddy's research has focused on the development of locking-free shell finite elements and nonlocal and non-classical continuum mechanics problems involving couple stresses and damage and fracture in solids.

Dr. Reddy has received numerous honors and awards. Most recent ones include: 2022 IACM Congress (Gauss-Newton) Medal, 2019 SP Timoshenko Medal from American Society of Mechanical Engineers, 2018 Theodore von Karman Medal from the American Society of Civil Engineers, the 2017 John von Neumann Medal from the U.S. Association of Computational Mechanics, the 2016 Prager Medal from the Society of Engineering Science, and 2016 ASME Medal from American Society of Mechanical Engineers. He is a member US National Academy of Engineering and foreign fellow of the Brazilian National Academy of Engineering, Indian National Academy of Engineering, the Canadian Academy of Engineering, the Chinese Academy of Engineering, the Royal Engineering Academy of Spain, the European Academy of Sciences, and the European Academy of Sciences and Arts.

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