

MEDIA RELEASE

Renowned Scientist & Jio Institute's Provost Dr Guruswami Ravichandran honoured with ASME Timoshenko Medal for Ground-breaking Contributions in Applied Mechanics

This award is the highest honour in the field of applied mechanics

Mumbai, 31st May 2023: [Jio Institute](#) is pleased to announce that its Provost and distinguished scientist Dr. Guruswami Ravichandran, has been named the recipient of the prestigious 2023 [Timoshenko Medal](#) by the American Society of Mechanical Engineers ([ASME](#)). This highly coveted accolade recognizes Dr Ravichandran “for pioneering contributions to the mechanics of engineering materials and biological systems, especially in extreme mechanical environments.”

Named after the illustrious engineer and educator [Stephen P. Timoshenko](#), the Timoshenko Medal established in 1957 is bestowed annually in recognition of distinguished contributions to the field of applied mechanics. The award is widely recognized as the highest honour worldwide in the field of applied mechanics.

Dr Guruswami Ravichandran is the founding Provost of Jio Institute. He is a highly accomplished scientist and academician who has made significant contributions to the field of solid mechanics and materials science and engineering. He is renowned for his expertise in experimental mechanics, particularly in dynamic behaviour and failure of materials. Dr. Ravichandran's multidisciplinary research expanded the understanding of mechanical behaviour and led to significant applications that have influenced engineering practice.

“I am immensely proud to congratulate Dr Ravichandran on this remarkable achievement”, said Dr Palak Sheth, Project Director, Jio Institute. “We are privileged to have Dr Ravichandran as a driving force behind our commitment to excellence in education and research. We look forward to his continued guidance to be able to make a significant impact on education and the society at large,” he added.

Throughout his career, Dr. Ravichandran has conducted pioneering research in the field of mechanics of materials. He has made substantial advancements in understanding the dynamic behaviour of materials, including metals, polymers, and composites, under high strain rates and high pressures. His research has led to crucial insights into the deformation and failure mechanisms of materials and the development of novel techniques for characterizing their thermomechanical properties. He also contributed to the development of a novel three-dimensional traction force microscopy technique for studying biological cell-matrix interactions and a method for investigating the mechanics of large-strain ferroelectric actuators under combined electromechanical loading.

Dr Ravichandran earned his Bachelor's degree in Mechanical Engineering from the National Institute of Technology, Trichy, in 1981. He then pursued his Master's in Engineering and Applied Mathematics and Ph.D. in Engineering (Solid Mechanics and Structures) from Brown University, completing his doctoral studies in 1986. Following his education, Dr Ravichandran embarked on an illustrious career in academia and research.

Dr Ravichandran held the position of the John E. Goode, Jr. Professor of Aerospace and Mechanical Engineering at the California Institute of Technology (Caltech). He had been a part of the Caltech faculty since 1990, where he demonstrated exceptional leadership and made significant contributions to the field of solid mechanics. He served as the Otis Booth Leadership Chair of the Division of Engineering and Applied Science from 2015 to 2021 and the Director of Graduate Aerospace Laboratories (GALCIT) Director from 2009 to 2015.

In addition to his research endeavours, Dr Ravichandran has made significant contributions to education and international cooperation. He has mentored and inspired numerous students and researchers who have excelled in their careers. He is highly regarded as a teacher and mentor and has played a pivotal role in shaping the next generation of scientists and engineers.

Dr Ravichandran's work has garnered international recognition, and he has received numerous awards and honors. He is an elected member of the U.S. National Academy of Engineering and Academia Europaea. He was named Chevalier de l'ordre des Palmes academiques by the Republic of France in 2011. He is a Fellow of various professional societies and has served in leadership roles, including the President of the Society for Experimental Mechanics (SEM) during 2015-16

About Jio Institute:

Jio Institute is an institution of higher learning committed to providing students with a transformative education that prepares students for success in a rapidly changing world. The Institute is dedicated to the pursuit of excellence by bringing together global scholars and thought leaders and providing an enriching student experience through world-class education and a culture of research and innovation. The Institute currently offers full-time professional postgraduate programs in various fields, including Artificial Intelligence, Digital Media & Marketing, Sports Management, and Journalism. More on: (www.jioinstitute.edu.in)