

## NTU president Subra Suresh recognised with ASME's most prestigious medal

Professor Subra Suresh, President of Nanyang Technological University in Singapore (NTU Singapore), has been unanimously selected by the Board of Governors of the American Society of Mechanical Engineers (ASME) to receive its highest honour, the 2020 ASME Medal.

A professional society founded in 1880 and currently comprising more than 100,000 members from over 140 countries, ASME awards this accolade annually to no more than one individual to celebrate eminently distinguished engineering achievements.

President Suresh, who is also NTU's inaugural Distinguished University Professor, is recognised for his "pioneering contributions to the science and technology of mechanical engineering through multidisciplinary research, impactful work in education and mentoring, leadership in academia and government, and innovation in connecting research to industry and policy", said ASME.

He joins a distinguished list of only 87 previous recipients of the ASME Medal since the award was first created in 1920. The list includes Theodore von Kármán, aviation pioneer and co-founder of NASA's Jet Propulsion Laboratory; Willis Carrier, the father of modern air conditioning; Dean Kamen, who invented the Segway; and Soichiro Honda, the founder of Honda Motor Co.

Prof Suresh said: "I am deeply honoured and humbled to be selected for the ASME Medal. Over the last hundred years, this award has recognised many notable achievements, and the people behind them. My own humble contributions would not have been possible without the collective efforts of my talented students, collaborators and colleagues, both past and present, and I share this recognition with them."

## Academic, inventor, educator and leader

Prof Suresh's multi-disciplinary research work has produced many scientific discoveries about the properties and performance of structural, functional and biological materials, and has been widely cited and recognised for its impact on industrial applications and on our scientific understanding of materials and human diseases. He is an author of three books and more than 300 scientific articles, co-inventor of about 30 patent applications, and co-founder of a technology start-up.

Prof Suresh is among a small number of Americans elected to all three branches of the US National Academies: Engineering, Sciences, and Medicine. He has also been elected to the National Academy of Inventors and the American Academy of Arts and Sciences, as well as to other prestigious academies around the world, including the Academies of Sciences in China, France, Germany, India, and Spain, and the Academies of Engineering in India, Singapore, Spain and Sweden.

These achievements have earned him 18 honorary doctorate degrees from institutions in the USA, UK, Sweden, Switzerland, Spain, Russia, Greece, India, South Korea and China.

His other major honours include the Padma Shri, one of the top civilian awards, from the President of India; and the 2007 European Materials Medal, from the Federation of European Materials Research Societies, which selected him as the first non-European for this top award. Prof Suresh is also a recipient of the 2012 Timoshenko Medal, the flagship award of ASME's Applied Mechanics Division, and the 2011 Nadai Medal, the highest recognition of its Materials Division.

While serving as Director of the U.S. National Science Foundation (NSF), Prof Suresh initiated, designed, and launched the NSF Innovation Corps (I-Corps) Program in 2011. It is now broadly recognised as one of the most impactful programmes for transforming scientific discoveries to benefit industry and society. In its first six years, I-Corps supported over 1,200 innovation teams from 248 universities in 47 states and created 577 companies in the U.S. I-Corps is now emulated around the world, including in Singapore, where it served as the model for the establishment of the National Lean LaunchPad programme of the National Research Foundation.

As President, Prof Suresh has been a driving force behind the plans for the NTU Smart Campus as a place of discovery, development and deployment, and as a living testbed for sustainable technologies and practices. He and

his NTU team have established some of the largest industry collaborations in academia, including partnerships with multinational companies such as Volvo Buses, GLOBALFOUNDRIES and Alibaba.

In the past two and a half years, this leadership team effort has played a major role in taking NTU to new heights as a leading global university through the integration of education, research and innovation, through the recruitment of top talent from Singapore and around the world, and through the creation of a number of new initiatives.

Examples of such initiatives include the NTU Presidential Post-Doctoral Fellows scheme (which within a couple of years has become the most competitive global talent recruitment effort at NTU) and the NTU Institute of Science and Technology for Humanity, an effort to foster greater industry-government-academia interactions for enhancing the benefits of technology for society.