



Seeram Ramakrishna

Professor of Mechanical Engineering and Former Vice President (Research Strategy) at the National University of Singapore (NUS), Singapore

Dr. Seeram Ramakrishna is a renowned professor of materials engineering and a world-leading expert on science and engineering of nanofibers. Various international databases, including Thomson Reuters Web of Science, Elsevier Science, and Microsoft Academic, have placed him among the top twenty authors and most cited materials scientists in the world. He has authored approximately 500 peer reviewed papers, five books, and delivered over a hundred plenary and keynote lectures around the world. His inventions have been licensed by industry. He mentors entrepreneurs and start-up companies, whose products are sold in several countries. Ramakrishna is a Professor of mechanical engineering and Former Vice President (Research Strategy) at the National University of Singapore, NUS, where he has served in various capacities, including Dean of Engineering, Founding Director of NUS Nanoscience & Nanotechnology, Founding Director of NUS Bioengineering, and Founding Chairman of Solar Energy Institute of Singapore, as well as Director of NUS Industry Liaison Office and Director of NUS Enterprise. His passion led to substantial and high level academic research partnerships with leading institutions. He is a board member of several organizations, and encourages mutually reinforcing partnerships with corporate world to enable relevant and impactful research. He is an invited speaker and panel discussant on various global forums dealing with higher education, scientific research, and innovation trends and strategies. He has also authored the book *The Changing Face of Innovation*.

Abstract

If everything else is equal, the key differentiators of competitiveness of nations are education & skills of people, scientific research capacity & new knowledge generated, and ability to innovate products, services & governance. Since the World War II democratization of tertiary education happened in USA, followed by Europe and rest of the world. This has been realized via growing the number of universities, expansion of enrollments, allowing variety of education providers (public, private & combinations), embracing distance education programs & life-long learning programs, and more recently on-line education. With the tertiary education as the backdrop, the democratization of scientific research & new knowledge occurred over the past decade. Many countries around the world facilitated scientific research on their shores. Globalization of trade, finance & talents, and availability of modern information & communication technologies accelerated the process. The democratization of innovation is in embryonic stage. Glocalization of products & services, and strategic partnerships will accelerate the process of democratization of innovation. What is next in education, scientific research, and innovation in order to be competitive?