

Academia to Entrepreneurship- Why not?

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There has been a sea change over the last few decades in the way academic institutions view entrepreneurial activities of the faculty and the role of the Institution in fostering an ecosystem conducive to such activities. This has become a global phenomenon and many of the leading Institutions in Europe and Asia are also beginning to replicate the model of the Boston or Silicon Valley academic Institutions. This clearly presents a wonderful opportunity for those who want to strike out on their own as opposed to waiting for someone else to offer them a job. This is the transition from a job seeker to a job creator.

However, an average Science/ Engineering graduate student instinctively thinks about a future in the academia even though the probability for decent employment as an academic professional is extremely low. So, working for a company or a non-academic option is viewed as a necessary default option! How about planning for a future as an entrepreneur? Are entrepreneurs born or made? In my observation, a much higher proportion of graduate students/ post docs ought to become entrepreneurs as the qualities required for a successful entrepreneur are possessed by a fairly large proportion of students than they realize. In my talk I will discuss a variety of models that are available to the academic entrepreneur, their pros, and cons and some of the critical knowledge one needs to understand about the world of entrepreneurship in general. I will use examples from several of my students and colleagues' startups and my own experience in running a company for over three decades amidst an academic career.

T. Venkatesan, FRS - A Short Biography



Prof. T. Venkatesan is currently the Director of the Center for Quantum Research and Technology at University of Oklahoma and is a Scientific affiliate at NIST and an adjunct Professor at NUS (ECE). He is also Chairman and CEO of Neocera Magma and President of Neocera LLC. Prior to this he was the founding Director of the Nano Institute at NUS where he was a Professor of Physics, ECE, MSE and NGS. He wore various hats at Bell Labs and Bellcore before becoming a Professor at University of Maryland. As the inventor of the pulsed laser deposition (PLD) process, he has more than 800 papers and 35 patents and is

globally among the top one hundred physicists (ranked at 66 in 2000) in terms of his citations (50,850) with a hirsch Index of 115 (Google Scholar). He has graduated over 56 PhDs, 35 Post Docs and over 35 undergraduates.

Close to 14 of the researchers (PhD students and Post Docs) under him have become entrepreneurs starting over 25 different commercial enterprises. He is a Fellow of the Royal Society, APS, MRS, winner of the Bellcore Award of excellence, Guest Professor at Tsinghua University, Winner of the George E. Pake Prize awarded by APS (2012), President's gold medal of the Institute of Physics Singapore, Academician of the Asia Pacific Academy of Materials, Fellow of the World Innovation Forum, was a member of the Physics Policy Committee (Washington DC), the Board of Visitors at UMD and the Chairman, Forum of Industry and Applications of Physics (FIAP) at APS. He was awarded the outstanding alumnus award from two Indian Institute of Technologies- Kanpur (2015) and Kharagpur (2016), India. He has been awarded the 2020 APS Distinguished Lectureship Award on the Applications of Physics. He is part of the following start-ups in Singapore- Cellivate and Breathonix, and in the US- Neocera, Blue Wave Semiconductor, Azometrix and Neocera Magma.