



The University of Oklahoma

HOMER L. DODGE DEPARTMENT OF PHYSICS AND ASTRONOMY

VENKATESAN, THIRUMALAI

Director, Center for Quantum Research and Technology (CQRT)

Founding Director, Center of Optimal Materials for Emerging Technologies (COMET)

Professor of Physics and ECE

Lin Hall. University of Oklahoma. Norman OK 73069

Co-Founder of:

Neocera LLC (Beltsville MD)

Neocera Magma LLC (Beltsville MD)

Blue Wave Semiconductors (Baltimore, MD)

Cellivate (Singapore)

Breathonix (Singapore)

Azometrix (Washington DC)

Metanoia Sensing Technologies (Singapore)

Professional Experience:

- | | |
|----------------|---|
| 2021---Present | Director, CQRT and Professor of Physics and ECE University of Oklahoma, Norman OK |
| 2022---Present | Founding Director, Center of Optimal Materials for Emerging Technologies (COMET) |
| 2018---Present | Affiliate Scientist- NIST Gaithersburg, MD |
| 2020 - 2022 | Adjunct Professor, ECE Department, National University of Singapore, Singapore |
| 2008 - 2019 | Founding Director, NUSNNI- NanoCore, National University of Singapore (Singapore) |
| 2007 - 2008 | Visiting Professor, National University of Singapore (Singapore) |
| 1990 - 2008 | Professor of Physics and ECE, University of Maryland, College Park, MD |
| 1990 -- 1990 | Professor of Physics and Ceramics, Rutgers University, New Brunswick, NJ |
| 1989 - 2019 | Founder, Chairman of Board and Chief Technology Advisor, Neocera, Beltsville, MD |
| 1986 - 1988 | Founder/Director, Rutgers University, Surface Modification Center, New Brunswick, NJ |
| 1984 - 1990 | Head of Surface Division, Bellcore, Red Bank, NJ |
| 1984 --1984 | Visiting Scientist, California Institute of Technology, Applied Physics, Pasadena, CA |
| 1973 - 1984 | Research Fellow / Member Technical Staff, Bell Labs, Murray Hill, NJ |

Educational qualifications:

1977 Ph.D. - City University of New York and Bell Laboratories (Physics)
 1971 M.S. - Indian Institute of Technology, Kanpur, India (Physics)
 1969 B.S. (Honors) - Indian Institute of Technology, Kharagpur, India (Physics)

Awards and distinctions:

2022
 2022
 2021
 2021
 2020
 2020
 2016 Elected Fellow of the Singapore National Academy of Sciences
 Elected Fellow of the Asia Pacific Artificial Intelligence Academy
 Elected Fellow of the National Academy of Inventors
 Elected Fellow of the Royal Society
 Elected Fellow of Materials Research Society
 Distinguished Lectureship Award on the Application of Physics- American Physical Society
 Nominated-World Economic Forum- Committee member for future advanced materials
 2016 Outstanding Alumnus Award, IIT Kharagpur
 2015 Outstanding Alumnus Award, IIT Kanpur
 2014
 2013 - 2019
 2013
 2012 President's gold medal - Institute of Physics, Singapore
 Provost Chair Professor, NUS
 Academician, Asia-Pacific Academy of Materials
 George E Pake Prize of American Physical Society for excellence in Research Management
 2005 - 2008 Honorary Guest Professor, Tsinghua University, Beijing

2003 Fellow of World Innovation Foundation
 1987 Fellow of American Physical Society
 1987 Bellcore Award of Excellence

HELPING BUILD RESEARCH TEAMS, CENTERS, INSTITUTE

1977-1984 Facility for Advanced Ion Beam Processing of Materials, Bell Labs, Murray Hill NJ
 1984-1990 Recruiting a world class team to build Bellcore from scratch
 1985-1987 Founding Director of Rutgers Surface Modification Center
 1987-1990 High Tc Superconductivity-University, industry, national Labs collaboration at Bellcore
 1990-2007 Center for Superconductivity- MRSEC-World class Oxides Research Program at UMD
 2008-2019
 2021- Now
 2022- Now NUS Nanoscience & Nanotechnology Institute, NUS Singapore
 Center for Quantum Research and Technology (CQRT), Univ. of Oklahoma
 Center of Optimal Materials for Emerging Technologies (COMET), Univ. of Oklahoma

Research Funding:

1987-1990, High Tc Research at Bellcore ONR, DARPA and EPRI 5M
 1990-2008, University of Maryland (Major Funding in US\$)
 NSF MRSEC Support over three successive terms (15Y, Williams/Ramesh) 30M
 US Army/Navy Funding 3.6M
 DARPA 2M
 2008-2016, National University of Singapore (Major Funding in S\$(- 0.75 US\$))
 Startup funds for establishing Nano Institute at NUS 40M
 Annual support for NUSNNI over 5 years 10M
 NRF CRP on Tailored Oxide Interfaces 10M

