

Sumant Nigam is Professor and Chair of the Department of Atmospheric and Oceanic Science at the University of Maryland and a Professor in its Earth System Science Interdisciplinary Center. His research interests include climate dynamics, atmospheric general circulation and teleconnections, ocean-atmosphere interaction in the tropics and high latitudes, multidecadal climate variability, monsoons, and regional hydroclimate variability and change, including droughts and desertification. Unraveling natural variability and secular change in the recent steep warming of Northern Continents, Arctic Sea ice loss, and the warming of West Antarctica is a current focus. Sumant's lab issues seasonal forecasts of ENSO and the South Asian summer monsoon each spring, with the latter informing India's official monsoon forecast. Sumant leads the development of the Maryland Mesonet – a dense network of instrumented towers to collect frequent meteorological observations to advance weather forecast accuracy and emergency preparedness. He also co-leads the University of Maryland Grand Challenges Institutional grant titled Addressing Climate Change for a Sustainable Earth – a multimillion-dollar multiyear effort.

Sumant is the Editor-in-Chief of Elsevier's upcoming Major Reference Work — The Encyclopedia of Climate System Science. He led the drafting of the American Meteorological Society's (AMS) Information Statement on Climate Change and chaired the AMS Climate Variations and Change Committee and the advisory panel of NCAR's Climate & Global Dynamics Division until 2018. He has also served on the advisory committee of NCAR and the NSF-Geosciences directorate. Sumant was a member of the Climate Research Committee and the Board of Atmospheric Sciences and Climate of the U.S. National Academies from 2008-2012. He previously served as Editor of the Journal of Climate and Director of the Large-scale Dynamic Meteorology program at the U.S. National Science Foundation.

Sumant is a Fellow of the American Meteorological Society and the Royal Meteorological Society. He was a Jefferson Science Fellow of the National Academy of Sciences and Senior Science Advisor to the U.S. State Department during 2016-2017, and a 2020 Fulbright-Nehru Fellow. Sumant got his M.Sc. in Physics from the Indian Institute of Technology Kanpur in 1978; he received his alma mater's Distinguished Alumnus Award in 2013. Sumant conducted climate research in Nobel Laureate Suki Manabe's Lab, earning his Ph.D. in Geophysical Fluid Dynamics from Princeton University in 1984. He received postdoctoral training at the Massachusetts Institute of Technology.

Sumant has published over 100 papers and advised 19 Ph.Ds. He was featured on the cover of SCIENCE in May 2004 in connection with a report on foreign-born U.S. scientists titled "Brains & Borders: Many Origins, One Destination."