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Professor Ramesh graduated from the University of California, Berkeley with a Ph. D. in 1987. He returned to Berkeley in 2004 and is currently the Purnendu Chatterjee Chair Professor in Materials Science and Physics. Prior to that he was Distinguished University Professor at the University of Maryland College Park. From 1989-1995, at Bellcore, he initiated research in several key areas of oxide electronics, including ferroelectric nonvolatile memories. His landmark contributions in **ferroelectrics** came through the recognition that **conducting oxide electrodes** are the solution to the problem of polarization **fatigue**, which for 30 years, remained an enigma and unsolved problem. In 1994, in collaboration with S. Jin (Lucent Technologies), he initiated research into manganite thin films and they coined the term, **Colossal Magnetoresistive (CMR) Oxides**. At Berkeley, he continues to pursue key scientific and technological problems in complex multifunctional oxide thin films, nanostructures and heterostructures. His group demonstrated the existence of a large ferroelectric polarization in **multiferroic** BiFeO<sub>3</sub> films, in agreement with first principle predictions; they also demonstrated electric field control of antiferromagnetism as well as ferromagnetism, a critical step towards the next generation of storage and spintronics devices that are completely electric field controlled. His current research interests include thermoelectric and photovoltaic energy conversion in complex oxide heterostructures. He has published extensively on the synthesis and materials physics of complex oxide materials and his work is highly cited (over 35000 citations, H-factor =85). He received the Humboldt Senior Scientist Prize and Fellowship to the American Physical Society (2001). In 2005, he was elected a Fellow of American Association for the Advancement of Science as well as the David Adler Lectureship of the American Physical Society. In 2007, he was awarded the Materials Research Society David Turnbull Lectureship Award, in 2009, he was elected Fellow of MRS and is the recipient of the 2010 APS McGroddy New Materials Prize. From December 2010 to August 2012 he served as the Founding Director of the SunShot Initiative at the U.S. Department of Energy, overseeing and coordinate the R&D activities of the U.S. Solar Program. In 2011, he was elected to the National Academy of Engineering. From July 2013 to August 2014 he served as the Deputy Director of Oak Ridge National Laboratory. In September 2014, he returned to Berkeley and LBNL as the Associate Lab Director for Energy Technologies.