

# Curriculum Vitae of Prof. Krishna C. Saraswat

## Personal Data

Professor of Electrical Engineering  
Stanford University, Allen 326X  
Stanford, CA 94305  
Married, 2 children

Tel. # (650)725-3610  
Fax # (650)723-4659  
E-mail: saraswat@stanford.edu  
Web: <http://cis.stanford.edu/~saraswat/>

## Field of Research

New and innovative materials, structures, and process technology of silicon, germanium and III-V devices, interconnects for nanoelectronics and solar cells.

## Education

1971 - 74 Ph.D. Electrical Engineering, Stanford University, CA  
1968 - 69 M.S. Electrical Engineering, Stanford University, CA  
1963 - 68 B.E. Electronics, Birla Institute of Technology and Science, Pilani, India

## Employment

2004 - Rickey/Nielsen Chair Professor of Engineering, Stanford University  
1983- Professor of Electrical Engineering, Stanford University  
1974-83 Member Technical Staff., Integrated Circuits Laboratory, Stanford University  
1969-70 Product Engineer, Texas Instruments, Dallas Texas

## Publications and Patents

Over 700 papers in technical journals and conferences, 10 best paper awards, and 12 patents

## Honors and Awards

Listed by ISI as one of the 250 Highly Cited Authors in the field of semiconductor devices and electronic materials  
Semiconductor Industry Association (SIA) University Researcher of the Year Award, 2012  
Alum of the Year Award BITS, Pilani, India 2012  
Technovisionary Award from the India Semiconductor Association in 2007  
Inventor recognition award, MARCO/FCRP, 2007.  
IEEE Andrew Grove Award, 2004  
Thomas D. Callinan Award by The Electrochemical Society, 2000  
Elected Fellow of the IEEE, 1989 and Life Fellow in 2013.  
Won inventor recognition award, Semiconductor Research Corporation, 1987.  
Best paper awards: IEEE DRC. 2002, IEEE IITC 2001, IEEE IEDM 1990, IEEE IEDM1985, IEEE VMIC, 1984.  
Gold medal for ranking first in the B.E. examinations, BITS Pilani, India 1968.

## Memberships in Professional Societies

Institute of Electrical and Electronics Engineers (IEEE)

## Professional Activities

IEEE Daniel E. Noble Award committee, 2010-todate, IEEE Grove Award evaluation committee, 2008-2010, IEEE Fellow evaluation committee, 1994 – 2003.  
India Semiconductor Association Technovisionary Award Committee 2009,  
Advisor to IIT Bombay, India; Indian Institute of Science, Bangalore, India; BITS, Pilani, India, and King Saud University, Saudi Arabia.  
Member, Technical Program Committee, ISTDM 2010 conference in Sweden, International Workshops on New Group IV (SiGeC) in Japan 2005, IEEE Int. Interconnect Tech. Conf. 97 – 2003, (Chair 2002), IEEE Int. Reliability Physics Symp. 97 – 98, IEEE Int. Symp. on VLSI Tech. 1984-89, 92 - 97, Int. Workshop on Statistical Metrology. 95 - 97, ESSDERC'92, Workshop on CVD Tungsten 1985-86 (Chair 1989), IEEE Int. Device Research Conf. 1985-88.  
Associate Editor, IEEE Transactions on Electron Device, 1988 – 90, IEEE IEDM Device Technology group 1982-83 (Chair 1984).  
United Nations UNIDO expert on microelectronics in India, summer of 1985  
Chairman, AIME Symp., Santa Clara, 1984, Member Technical Committee, 1982 -88  
Secretary, Int. Symp. on Physics of VLSI, Palo Alto, 1984  
Member, SEMI/IEEE Steering Committee on Semiconductor Manufacturing 1988