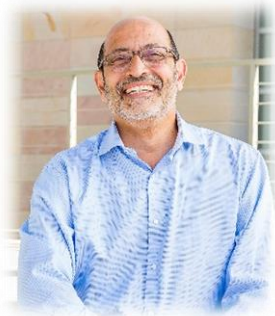


THE 63RD ANNUAL FACULTY RESEARCH LECTURE

Umesh K. Mishra

Thank God for Gallium Nitride!

Monday, November 26, 2018 / FREE
4:00 PM Reception / 5:00 PM Lecture
Corwin Pavilion
University Center



Ever since the development of the blue LED and white LEDs by Nobel Laureate Shuji Nakamura, the excitement about the possibilities that Gallium Nitride (GaN) offers has been relentless and exhilarating. The applications have spread beyond general lighting to lasers to horticulture to now electronics. Hybrid and electric vehicles, data servers, solar inverters, robotics, gaming, and communications across a large band of interests are all being served by GaN.

Umesh K. Mishra is a Distinguished Professor of the University of California and the Donald W. Whittier Professor of Electrical and Computer Engineering at UC Santa Barbara. He received his B.Tech from the Indian Institute of Technology in Kanpur India, his M.S from Lehigh University in Bethlehem, PA., and his Ph.D. in 1984 from Cornell University in Ithaca, NY.

Mishra has supervised more than 65 Ph.D theses with over 40 of them in the field of GaN materials and devices. He has more than 1,000 papers with a Web of Science h index of 88 and was included in the Thomson Reuters 2014 list of Most Cited Researchers. He co-founded the first start-up in the world to commercialize RF GaN transistors and LEDs in 1996 (Nitres) which was acquired by CREE in 2000. He co-founded Transphorm in 2007 which has commercialized GaN-on-Si transistors for power conversion where he currently serves as Chairman and CTO.

Mishra has received numerous awards including the IEEE MMT-S Distinguished Educator Award, IEEE David Sarnoff Award, the ISCS Welker Medal and the ISCS Quantum Device Award for his contributions to the development and commercialization of GaN electronics. He is a Fellow of the IEEE, an International Fellow of the Japanese Society of Applied Physics, Fellow of the National Academy of Inventors and a Member of the National Academy of Engineering. Most importantly, his students are doing extremely well and emerging as leaders in their own right!



The highest honor bestowed upon UCSB professors by their peers, the Faculty Research Lectureship recognizes extraordinary scholarly distinction.