



A NEW DEAN FOR THE COLLEGE OF ENGINEERING

Professor Umesh Mishra brings to the office a formidable combination of scholarship and innovation in both academia and industry

The UC Santa Barbara College of Engineering (COE) has a new dean. **Umesh Mishra**, professor of electrical and computer engineering and an expert in energy-efficient electronic devices built on a gallium nitride (GaN) platform, was named dean in March. He will begin serving in his new role on July 1 while assuming the Richard A. Auhl Professorship and Dean's Chair of Engineering.

"We are confident that our College of Engineering will continue to thrive and achieve new heights under Dr. Mishra's leadership," said UCSB chancellor **Henry T. Yang**.

"I am honored, humbled, and very excited to be granted the opportunity to lead one of the finest faculties, most exceptional student bodies, and most outstanding staffs in a college of engineering in the United States," Mishra said. His appointment

During his time at UCSB, Mishra has served as the chair of his department as well as associate dean of advancement for the College of Engineering. He has served as the director of numerous multidisciplinary university research-initiative centers, and he co-founded the university's Solid State Lighting and Energy Electronics Center. In an effort to bring GaN into wider use, in 1996 Mishra co-founded Nitres (now part of Wolfspeed), the world's first start-up to commercialize radio-frequency GaN transistors and GaN LEDs. In 2007, he co-founded Transphorm to commercialize GaN transistors for power conversion.

"During my tenure as dean, I would like to amplify UCSB's advantages — its location, reputation, diversity, and culture of collaboration — while leveraging its perceived disadvantages, which include its small size and limited local industrial ecosystem, to its advantage through interdisciplinary hyperconnectivity and engagement," Mishra said. "We have to punch above our weight class, and we can only do it together, collaborating not only within the College of Engineering, but also across the campus and the local community as a whole. We will be the best in the world in areas that we choose to focus on — areas that can also have maximum social impact."

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came after a rigorous two-year nationwide search following the retirement of previous dean, **Rod Alferness**, in 2021. Since then, UCSB materials professor **Tresa Pollock** has provided outstanding leadership and guidance as interim dean.

Mishra joined the UCSB faculty in 1990, bringing with him years of research experience in both industry and academia. Here, he has specialized in gallium nitride, a high-performance wide-bandgap semiconductor material that continues to play a primary role in the development of ever-more-energy-efficient devices, such as LEDs, highly efficient microwave-power amplifiers for 5G connectivity and Department of Defense applications, and advanced electronics that convert power with minimal energy waste, such as solar inverters, server power supplies, and chargers and inverters for electric vehicles.

A member of the National Academy of Engineering, Mishra is also a fellow of the Institute of Electrical and Electronics Engineers (IEEE) and the National Academy of Inventors. He has been recognized for both his research and his teaching, with honors including IEEE's David Sarnoff Award and Jun-ichi Nishizawa Medal; the International Symposium on Compound Semiconductors' Quantum Device Award and Heinrich Welker Award; as well as the Distinguished Education Award from the IEEE Microwave Theory and Technology Society, and the Faculty Research Lecturer recognition, the highest award given to a faculty member by the UC Santa Barbara Academic Senate. Recognized as a highly cited researcher by the Institute for Scientific Information, Mishra is also a dedicated mentor, having supervised 76 PhD students, mostly in the field of GaN materials and devices.