

Biography of President Tim Sands



Timothy D. Sands is the 16th president of Virginia Polytechnic Institute and State University, joining the university in June of 2014. A scientist, educator, and inventor, he has dedicated much of his career to advancing the impact of research and innovation in public education. As president, he has engaged the university community in a visionary plan to advance Virginia Tech's role as a global land-grant institution, confronting the commonwealth's, the country's, and the world's most challenging problems. The initiative, called "[Beyond Boundaries](#)," seeks to define Virginia Tech's role a generation into the future and align the educational experience with the needs and opportunities that will be created by changing world economies and the evolving landscape of higher education.

In collaboration with the provost and academic leadership, President Sands has initiated foundational projects across the university to align Virginia Tech's trajectory with the Beyond Boundaries vision. For example, [Destination Areas](#) are thematic focus areas that leverage the university's signature strengths, attract talent and generate creative energy that extends across the disciplines. The university's residential campus in Blacksburg is being reimagined to support a modern land-grant mission and provide robust and adaptable infrastructure for continued growth in transformational research and community engagement. [Virginia Tech Carilion's](#) rapidly developing Health Science and Technology campus in Roanoke is catalyzing economic opportunity in the Blacksburg-Roanoke region and enhancing NIH-funded research. In 2018, President Sands announced the creation of a 1-million-square-foot [Innovation Campus](#) in Northern Virginia to support the commonwealth's economy with leading programs in computer science, software engineering, machine learning

and artificial intelligence. The Innovation Campus was the centerpiece of the education proposal that was a critical factor in Amazon's decision to locate a new east coast headquarters in Arlington, VA. In 2019, Virginia Tech announced a partnership with Children's National Hospital to develop a biomedical research facility at the Children's National Research & Innovation Campus in Washington, D.C.

The Beyond Boundaries vision has evolved into a new strategic plan for the university, The [Virginia Tech Difference, Advancing Beyond](#) Boundaries. Developed in partnership with the campus community, the plan establishes four strategic priorities: Advancing Regional, National, and Global Impact, Elevating the Ut Prosim (That I May Serve) Difference, Being a Destination for Talent, and Ensuring Institutional Excellence. The plan supports Virginia Tech's ability to anticipate and adaptively respond to changing landscapes in education, industry, and outreach.

Throughout his tenure at Virginia Tech, President Sands has championed [InclusiveVT](#), a program he launched to provide leadership, collaboration, guidance, and resources to support and accelerate the implementation of inclusion and diversity goals throughout the university community. InclusiveVT supports the imperative of inclusion and diversity as key components of a university ecosystem rich in opportunities for experiential learning, cross-disciplinary engagement, and the development of cultural awareness and empathy.

President Sands' vision for Virginia Tech embraces the university's heritage of service and community and its motto, Ut Prosim (That I May Serve). Virginia Tech students will graduate with disciplinary mastery, technology literacy, cultural competency, resilience, empathy for others, and the passions and strengths needed for a life and career of impactful service to humanity.

Before coming to Virginia Tech, President Sands served as executive vice president for academic affairs and provost of Purdue University in West Lafayette, Indiana. He was acting president during the summer and fall of 2012, before Mitchell E. Daniels became the 12th president of Purdue.

He earned a bachelor's degree with highest honors in engineering physics and a master's degree and doctorate in materials science from the University of California, Berkeley. He joined the Purdue faculty in 2002 as the Basil S. Turner Professor of Engineering in the schools of Materials Engineering and Electrical and Computer Engineering. Prior to becoming provost, he served as the Mary Jo and Robert L. Kirk Director of the Birck Nanotechnology Center in Purdue's Discovery Park.

From 1993 to 2002, President Sands was a professor of materials science and engineering at the University of California, Berkeley, and before that, he performed research and directed research groups at Bell Communications Research (Bellcore) in Red Bank, New Jersey. Throughout his career, he has participated in and led research teams and academic programs that have been characterized by open collaboration across a wide array of disciplines.

He has published more than 250 refereed papers and conference proceedings and has been granted 21 patents in electronic and optoelectronic materials and devices. His recent research efforts have been directed toward the design and development of novel nanocomposite materials for environmentally friendly and cost-effective solid-state lighting, direct conversion of heat to electrical power and thermoelectric refrigeration. He holds faculty appointments in the [Bradley Department of Electrical and Computer Engineering](#) and the [Department of Materials Science and Engineering](#) in the College of Engineering, with research interests in microelectronics, optoelectronics, and nanotechnology. He is a fellow of the Institute of Electrical and Electronics Engineers, the Materials Research Society, and the National Academy of Inventors, and a member of the National

Council for Expanding American Innovation and the Economic Club of Washington, D.C. President Sands serves on the Board of Directors for the Innovation and Entrepreneurship Investment Authority, the Center for Innovative Technology, the Northern Virginia Technology Council, the Business Higher Education Forum, and is Chair of the Board for the Virginia Space Grant Consortium. He also serves on the Board of Visitors for the National Intelligence University. Recent awards and honors include The Edward Bouchet Legacy Award, the National GEM Consortium's Academic Leadership Award, the Virginia Latino Higher Education Network's Leadership Impact Award, and the Roanoke-Blacksburg Technology Council's Regional Leadership Award.

President Sands is joined at Virginia Tech by his wife, Dr. Laura Sands, a professor of gerontology in the Department of Human Development at Virginia Tech. All four of their children graduated from Purdue and are proud members of the Virginia Tech community. Follow President Sands on [Twitter](#) and [Instagram](#) at @VTSandsman.