Emily A. Carter is the Gerhard R. Andlinger Professor in Energy and the Environment and Professor of Mechanical and Aerospace Engineering, the Andlinger Center for Energy and the Environment, and Applied and Computational Mathematics at Princeton University. She is also a member of the executive management team at the Princeton Plasma Physics Laboratory (PPPL), serving as Senior Strategic Advisor and Associate Laboratory Director for Applied Materials and Sustainability Sciences. Upon her arrival at PPPL in 2022, she first began working to diversify this Department of Energy National Laboratory's research portfolio into the science of electromanufacturing and solar radiation management; her portfolio expanded to include plasma science of microelectronics and quantum information science in 2023. Dr. Carter began her independent academic career at UCLA in 1988, rising through the chemistry and biochemistry faculty ranks before moving to Princeton University in 2004, where she spent the next 15 years jointly appointed in mechanical and aerospace engineering and in applied and computational mathematics. In her early years at UCLA, she helped launch two institutes that still exist today: the Institute for Pure and Applied Mathematics and the California NanoSystems Institute. During her first stint at Princeton, she held the Arthur W. Marks '19 and the Gerhard R. Andlinger Professorships. After an international search, she was selected to be the Founding Director of Princeton's Andlinger Center for Energy and the Environment. From 2010-2016, she oversaw the construction of its award-winning building and state-of-the-art facilities, the development of novel educational, research, and external partnership programs, and the hiring of its initial faculty and staff. After a national search, she served from 2016-2019 as Princeton's Dean of the School of Engineering and Applied Science, where she spearheaded major research (in bioengineering, data science, robotics, smart and resilient cities), education (e.g., new first-year engineering exposure to increase student retention), outreach (e.g., revamped marketing and communications), and diversity (e.g., hiring the inaugural associate dean for diversity and inclusion) initiatives. Thereafter, she was recruited back to UCLA as its Executive Vice Chancellor and Provost (EVCP) and Distinguished Professor of Chemical and Biomolecular Engineering. As chief academic and operating officer, she had the responsibility for the campus' day-to-day operations as well as oversight of UCLA's entire academic enterprise, and worked with the Chancellor and the leadership team to guide strategic planning and policy development, define budgetary and advancement priorities, and support strategic initiatives across campus and beyond. During her two and one-third years tenure as EVCP (2019-2021), she co-led UCLA through myriad crises including the COVID-19 pandemic and brought transformative change via launching new or expanded initiatives: a widened scope for the Sustainable LA Grand Challenge to help the multicultural communities of LA to become exemplars for sustainable, resilient, equitable future cities worldwide; a summer doctoral research fellowship program; Rising to the Challenge actions in support of Black life; professional development for administrative leaders; innovative faculty hiring strategies; transparent, equitable processes for administrative leadership appointments and compensation; improved institutional effectiveness via a "busting bureaucracy" working group and hub-and-spoke models for improved services; a campus-wide "DataX" initiative; increased support for Latinx education and scholarship, realignment of education innovation support services; and a cross-campus "Advancing Faculty Diversity" initiative under development led by the deans. She made outstanding senior leadership appointments, six female and seven first-generation, LGBTQ, Asian American, Latinx, Black, and/or Native American out of 10 leaders appointed in two years. Each school/division completed strategic plans focused on world-class excellence in the 21st century in fall 2020, which informed budgets and hiring plans.

She also began efforts aimed at increasing access to a UCLA education via expanded summer sessions and internships coupled with remote courses, as well as a UC systemwide "grow our own" diverse pipeline from undergraduate to the professoriate. Upon her departure, UCLA appointed her Executive Vice Chancellor and Provost (EVCP) Emerita and Distinguished Professor Emerita of Chemical and Biomolecular Engineering. Dr. Carter maintains an active research presence, developing and applying quantum mechanical simulation techniques to enable discovery and design of molecules and materials for sustainable production of fuels, chemicals, and materials. Her research is supported by grants from the U.S. Department of Defense and the Department of Energy. The author of over 475 publications and patents, Dr. Carter has delivered over 600 invited and plenary lectures worldwide and serves on advisory boards spanning a wide range of disciplines. She is the recipient of numerous honors, including election to the U.S. National Academy of Sciences, the American Academy of Arts and Sciences, U.S. National Academy of Inventors, the U.S. National Academy of Engineering, the European Academy of Sciences, and the Royal Society. Dr. Carter earned a B.S. in Chemistry from UC Berkeley in 1982 (graduating Phi Beta Kappa) and a Ph.D. in Chemistry from Caltech in 1987, followed by a brief postdoc at the University of Colorado, Boulder.