Joe DeSimone  
Executive Chairman and Co-Founder  
Carbon

Dr. Joseph M. DeSimone co-founded Carbon in 2013 and served as the company's CEO until being named Board Chair in 2019. As CEO, Joe grew Carbon from a small team of scientists and engineers into an over 400-person global company valued at almost $2.5 billion that is defining the digital revolution in manufacturing. In September 2020, Joe also joined Stanford University’s faculty as a professor with appointments in the School of Medicine, School of Engineering, and (by courtesy) the Graduate School of Business.

Previously, as a professor at the University of North Carolina and North Carolina State University for over 20 years before launching Carbon, Joe made scientific breakthroughs in areas including green chemistry, medical devices, and nanotechnology, also co-founding several companies based on his research. When Joe took on 3D printing, he brought together insights from diverse fields to co-invent Carbon’s core technology, Digital Light Synthesis™ (DLS™), which is enabling companies to break free of traditional polymer manufacturing methods to advance product innovation across numerous industries. Under Joe's leadership, the company also pioneered the world’s first subscription business model for manufacturing hardware, which provides Carbon unprecedented visibility into future revenue, advances strong partnerships with customers, and enables customers to be future-proofed from obsolescence. In recognition of his entrepreneurial success at Carbon, Joe was recently recognized as the 2019 EY Entrepreneur of the Year U.S. National Overall winner.

Joe grew up in the Philadelphia area and studied chemistry at Ursinus College. He earned his Ph.D. at Virginia Tech in 1990, joining the faculty at UNC that same year. He quickly achieved international recognition as a scientist, inventor, and entrepreneur, earning major accolades including the U.S. Presidential Green Chemistry Challenge Award and the $500,000 Lemelson- MIT Prize. In 2016 President Obama awarded him the National Medal of Technology and Innovation, the highest U.S. honor for achievement and leadership in advancing technological progress. At UNC, Joe built a strong culture in his research group centered on the notion that diversity is a fundamental tenet of innovation. He mentored 80 students through Ph.D. completion, half of whom are women and members of underrepresented groups in STEM. Joe frequently emphasizes how both human and disciplinary diversity accelerate progress in team problem-solving, and Joe brought this
perspective to Carbon as well, considering it crucial for Carbon’s growth and progress.

An author of over 350 scientific publications and a named inventor on over 200 issued patents, Joe maintains an affiliation at UNC as the Chancellor’s Eminent Professor of Chemistry Emeritus in addition to his faculty appointments at Stanford. He is one of only 25 individuals elected to all three U.S. National Academies (Sciences, Medicine, Engineering). Joe currently resides in Monte Sereno, California with his wife of 30 years, Suzanne. They have two children and two grandchildren.