**JAMES M. TOUR Ph.D.**

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James M. Tour, a synthetic organic chemist, received his Bachelor of Science degree in chemistry from Syracuse University, his Ph.D. in synthetic organic and organometallic chemistry from Purdue University with Ei-ichi Negishi, and postdoctoral training in synthetic organic chemistry at the University of Wisconsin and Stanford University with Barry Trost. After spending 11 years on the Department of Chemistry and Biochemistry faculty at the University of South Carolina, he joined the Center for Nanoscale Science and Technology at Rice University in 1999. Tour’s scientific research areas include a broad array of materials and nanomaterials chemistries, from advanced materials synthesis to nanomedicine and nanoelectronics, with a special focus on the synthesis of carbon materials, including fullerenes, nanotubes, and graphene. Specifically, his group invented Laser-Induced Graphene (LIG) and Flash Joule Heating (FJH) synthesis of graphene, namely flash graphene (FG). Additionally, FJH is used to upcycle waste and separate metals from electronic wastes and ores. He has developed molecular machines and has used them extensively in medically related applications. He has also developed strategies for retarding chemical terrorist attacks. He has founded 15 companies, three of which are now public companies.

Professor Tour has over 800 research publications and over 140 granted patents and over 100 pending patents, with an h-index = 178 with total citations over 150,000 (according to Google Scholar). He is an elected member of the National Academy of Engineering and the Texas Academy of Medicine, Engineering, Science & Technology. In 2024, Tour won the Rice University Breakthrough Research Award for Flash Graphene Synthesis. In 2021, he won the Oesper Award from the American Chemical Society which is awarded to “outstanding chemists for lifetime significant accomplishments in the field of chemistry with long-lasting impact on the chemical sciences.”  In 2020, he became a Fellow of the Royal Society of Chemistry and in the same year was awarded the Royal Society of Chemistry’s Centenary Prize for innovations in materials chemistry with applications in medicine and nanotechnology.  He was inducted into the National Academy of Inventors in 2015. Tour was named among “The 50 Most Influential Scientists in the World Today” by “TheBestSchools.org” in 2019; listed in “The World’s Most Influential Scientific Minds” by Thomson Reuters in 2014; and recipient of the Trotter Prize in “Information, Complexity and Inference” in 2014; and was the Lady Davis Visiting Professor, Hebrew University, June, 2014. Tour was named “Scientist of the Year” by R&D Magazine, 2013. He was awarded the George R. Brown Award for Superior Teaching, 2012, Rice University; won the ACS Nano Lectureship Award from the American Chemical Society, 2012; was the Lady Davis Visiting Professor, Hebrew University, June, 2011 and was elected Fellow of the American Association for the Advancement of Science (AAAS), 2009. Tour was ranked one of the Top 10 chemists in the world over the past decade, by a Thomson Reuters citations per publication index survey, 2009; won the Distinguished Alumni Award, Purdue University, 2009 and the Houston Technology Center’s Nanotechnology Award in 2009. He won the Feynman Prize in Experimental Nanotechnology in 2008, the NASA Space Act Award in 2008 for his development of carbon nanotube reinforced elastomers and the Arthur C. Cope Scholar Award from the American Chemical Society for his achievements in organic chemistry in 2007. Tour was the recipient of the George R. Brown Award for Superior Teaching in 2007. He also won the Small Times magazine’s Innovator of the Year Award in 2006, the Nanotech Briefs Nano 50 Innovator Award in 2006, the Alan Berman Research Publication Award, Department of the Navy in 2006, the Southern Chemist of the Year Award from the American Chemical Society in 2005 and The Honda Innovation Award for Nanocars in 2005. Tour’s paper on Nanocars was the most highly accessed journal article of all American Chemical Society articles in 2005, and it was listed by LiveScience as the second most influential paper in all of science in 2005. Tour has won several other national awards including the National Science Foundation Presidential Young Investigator Award in Polymer Chemistry and the Office of Naval Research Young Investigator Award in Polymer Chemistry.