Donna J. Nelson is an American chemist and professor of chemistry at the University of Oklahoma. Nelson specializes in organic chemistry, which she researches and teaches. Nelson was science advisor to the AMC television show *Breaking Bad*. She was 2016 President of the American Chemical Society (ACS) with her presidential activities focusing on communities in chemistry. Nelson's research focused on five primary topics, generally categorized in two areas, *Scientific Research* and *America's Scientific Readiness*. Within Scientific Research, Nelson's topics have been on mechanistic patterns in alkene addition reactions and on Single-Walled Carbon Nanotube (SWCNT) functionalization and analysis, yielding the first COSY NMR spectrum of covalently functionalized SWCNTs in solution. Under America's Scientific Readiness, she focuses on science education and impacting science via its communities, ethnic and gender diversity (the Nelson Diversity Surveys) among highly ranked science departments of research universities, and improving the image and presentation of science and scientists to the public.

Nelson has published over 200 publications. She received many honors and awards, including ACS President, Royal Society of Chemistry Fellow, Honorary Doctorate from the University of Edinburgh, Israel Chemical Society Fellow, ACS Fellow, ACS Henry Hill Award (professionalism), Guggenheim Fellowship, NSF Special Creativity Extension, AAAS Fellow, Sigma Xi Fellow, National Organization for Women "Woman of Courage" Award, Ford Fellowship, Fulbright Scholarship, and NSF ADVANCE Leadership Award. She was named one of the "70 Most Inspirational Women Leaders Impacting the World" by Business.org in 2018 and among "These 12 Texas Women Made History" by UT Austin in 2021.