

I am a fourth-year graduate research assistant at the University of Nevada, Las Vegas, working under the mentorship of Dr. Pradip K. Bhowmik in the field of organic and polymer chemistry. My research focuses on the synthesis of advanced functional materials, including ionic liquids, fire-retardant polymers, and fluorescent dye probes. For my project, I am developing a new class of pyrylium salts that exhibit piezochromism, which produces materials with pressure-sensitive optical properties that can be used for a variety of applications, such as materials failure diagnostics for NASA in-flight systems.

I aspire to become a professor of materials science, specifically organic and polymeric materials. I want to become actively involved in a research-related career to investigate new materials that offer the same or improved properties to replace commonly used materials that damage the environment and are harmful to human health. Creating a bridge between chemistry and the environment encourages a healthier and conscious interaction with our changing planet and modern society.