Carbon and hydrogen, organized appropriately, have generated a massive global industry with products touching most aspects of modern life. Three quarters of a century later, scientists are still able to extract additional performance from these diminutive polymer chains. Our search for ways to craft polyethylene with a better balance of flexibility and heat resistance led to some fascinating discoveries in catalysis and polymer materials science. Along the way, The Dow Chemical Company commercialized INFUSE™ Olefin Block Copolymers and INTUNE™ Olefin Block Copolymers. The path from “interesting science” to “valuable products” will be explored, with real-world examples of what it can take to commercialize new technology in a seemingly-mature field.