This paper centers on the transition from cellulose acetate film base to the use of a polyester substance as the substratum for Kodak color film. In other words, it narrates the move from an economy based on cotton and coal based to one built on oil. Drawing on archival and ethnographic research in Rochester, New York where Kodak was based for over a century, I interweave the chemistry of Kodak film with the story of Kodak’s early to mid-twentieth century labor policies in order to explore the styles of capitalism that emerged around chemical photography and that made film possible. I argue that the chemical substitutions engineered in the Kodak research labs were metonymic of the commodity fetish and precipitated a conceptual and historical relationship across industrial chemistry, utopian capitalism, and the American welfare state. This piece concludes at the moment of the dismantling of the welfare state and the uncertain, reproductive futures generated through the production of the photochemical, American Dream.

This paper is a chapter of my dissertation on the afterlives of Kodak film. Working from the molecules up, I explore the chemical microontologies of Kodak film through its industrial manufacture and developing, its circulation as image, and its decay or transformation over time. Thinking with the materiality of the chemical emulsions that become the photographic image, this account of molecular temporality reconfigures modernist categories of time—the boom and bust cycles of industrial production, the linear time-myths of capitalist progress, the idea of obsolescence, the affect of nostalgia, and the notion that photographs “freeze time”—in order to unpack the material and temporal logics that make possible the age of the image. This dissertation builds from forty months of archival and ethnographic research in Rochester. It is organized into four chapters, following the components of Kodak film—silver, gelatin, dyes, and “dope,” or film base—and integrates documentation from visual and performance art collaborations with local artists and scientists.