The jumble of red, blue, yellow and green cubes did not look like a work of art when it was donated to the study collection at Winterthur. A handling mishap during a courier trip, followed by immersion in Hurricane Sandy’s flood waters while stored in the basement of a Manhattan art gallery, had left the fabricated sculpture in 23 separate, grimy and water-stained pieces with many abrasions, chips and losses. The hurricane damage also led to the sculpture’s donation to Winterthur, where this year it became a technical study for Claire Taggart, and a treatment project for Claire and her classmate Ersang Ma, second-year Fellows in the Winterthur/University of Delaware Program in Art Conservation (WUDPAC).

The sculpture, titled Automata No.1, was created in 2005 by contemporary British artist Keith Tyson (b. 1969) and fabricated by Prototype New York as part of Geno Pheno 2, a solo exhibition presented at the Pace Gallery in New York. When the individual cubes are assembled atop a square white Plexiglas acrylic base and arranged to terminate in two rainbow-colored towers, the colorful sculpture stands about 66 inches tall.

Working with Winterthur Scientist, Catherine Matsen, Claire’s analytical findings concluded that the cubes are a polyurethane core, coated with a cellulose nitrate printing lacquer, possibly sprayed on over an acrylic primer. An epoxy adhesive and a metal armature composed of zinc-plated iron had held the cubes in place. One of her first treatment decisions, based on this analysis and the knowledge that the cellulose nitrate lacquer and the Plexiglas base are sensitive to most solvents, was to limit her cleaning to water-based and dry methods.

After surface cleaning, Claire and Ersang designed a protocol for reassembling the sculpture. While analysis was integral to understanding the materials and technology used to create the sculpture, Claire also hoped to consult with the artist and fabricator to better inform her treatment decisions. Using the analytical findings and limited information gained through communication with the fabricator, Claire and Ersang were able to design reversible reassembly techniques; this was particularly challenging due to the sensitivity of the commercial products used in the fabrication of this piece. While these materials may be excellent choices in industrial settings and perfectly serve an artist’s creative vision, they can present a challenge for art conservators. While Automata No.1 requires additional structural and aesthetic treatment, the findings and treatment to date provide an excellent foundation for continued treatment by future second-year students specializing in modern objects conservation.