



ARTC Spotlight—January 2020

The University of Delaware's Art Conservation Department educates and trains professional conservators who are well versed in the treatment, analysis, documentation, and preventive conservation of individual artifacts and entire collections. For more news about our students and other department activities visit our web site at www.artcons.udel.edu.

Top: WUDPAC Fellow Yungjin Shin using a heated microspatula to remove a tape carrier from the Einstein letter.

Above: Recto of the Einstein letter before treatment. Right, above: Detail of tape residue, before and after treatment. Below: With the letter on a suction table, Shin uses ethanol to reduce tape adhesive; Shin and WUDPAC Fellow Laura McNulty using microspatulas to remove tape carriers. Images: Y. Shin, J. Irving, E. Krape.

Art Conservation and hidden histories

In July 1929, Albert Einstein (1879-1955) wrote an apologetic letter to a respected Bulgarian colleague who he hoped would get him out of "a very difficult position." Physicist Georgi Manev (1884-1965), an assistant professor of theoretical physics at the Sofia University, had developed a gravitational theory

that ran counter to Einstein's theory of relativity. Einstein's less-than-glowing assessment of Manev's theory had complicated his colleague's prospects for a full professorship at the University. Einstein was offering to help make the situation "good again."

The typewritten letter, signed "A. Einstein," has become a treatment project for Winterthur/University of Delaware Program in Art Conservation (WUDPAC) Fellow Yungjin Shin, who is specializing in library and archives. The letter belongs to Manev's family, which includes great grand-daughter and 2018 WUDPAC graduate Mina Porell. Mina





now works at the Winterthur Museum, Garden and Library. The letter was creased, partly from being folded, mailed, and tucked into a book for safekeeping during World War II. Mina asked that the creases be retained, so Yungjin's goal was to remove adhesive tape without damaging the typed words on the paper.

Yungjin manually removed the carrier, or top layer of tape, with a heated microspatula. Removing the remaining adhesive required a solvent that would not smear or wash away the ink. After testing nine different solvents on small bits of tape that she had carefully removed from the letter, Yungjin decided ethanol would best loosen the adhesive without affecting the ink. Once the adhesive is reduced, Yungjin proposes mending the tears with thin Japanese paper and wheat starch paste on the reverse of the letter. Her plan is to return the letter to Mina and her family in a custom-made, acid-free matte folder stored in an archival box. She also recommended that the letter be kept in a stable environment with minimum light exposure and minimal fluctuation in heat and relative humidity.

While Mina's family retains the original letter, a copy is with Einstein's other personal papers at the Albert Einstein Archives on the Givat Ram (Edmond J. Safra) campus of the Hebrew University of Jerusalem. Manev eventually was awarded a full professorship and became the first chair of the department of Theoretical Physics at Sofia University, but his academic career was cut short in the political upheaval of the 1940s. His theory was largely forgotten until about 20 years ago when a conference was held to discuss its merits in 2003. Known as "Manev's Field," the nonrelativistic model today is applied in celestial mechanics and theoretical and gravitational physics.



