



ARTC Spotlight—February 2019

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: Winterthur/University of Delaware Program in Art Conservation Fellow Natalya Swanson using a five-part cleaning solution she developed to use carefully controlled water chemistry in the cleaning of the shoes. This treatment has required extensive analysis and testing by Natalya to safely reduce the surface efflorescence. Above: Detail of proper left shoe showing the extent of efflorescence before treatment, and the same area after cleaning. Right: X-radiography allows us to see how the shoes were constructed; this image shows the internal metal hardware used to join and structurally support the shoes. Images by Melissa King and Natalya Swanson.

Art Conservation and best foot forward

Square-toed with stack heels and large, eye-catching buckles, "pilgrim" shoes were introduced in 1962 by fashion designer Yves Saint Laurent and shoe designer Roger Vivier. Immediately popular with consumers also drawn to the mini-skirts, paisley prints, and go-go boots that were part of the fashion scene in the youth-oriented "Swinging Sixties," the pilgrim patent leather shoes were reinterpreted by many designers. These included Dior, whose label "Souliers (Shoes) Christian Dior," is printed with a gold embossed stamp on the heel seat of the insoles of a pair that this year became a treatment project for Winterthur/University of Delaware Program in Art Conservation Fellow Natalya Swanson.

The size-8½-regular shoes belong to the Philadelphia Museum of Art's Costume and Textiles conservation department and have never been displayed. Made of leather coated with a dyed synthetic polymer laminated to a synthetic fabric, the shoes have no tears or breaks and show minimal damage related to their use. However, the uppers, tongues, and buckles are partially covered with blotchy, matted patches and a white haze, likely due to polymer deterioration in the patent leather. Natalya's goals through conservation are to make the shoes exhibitable by removing the efflorescence and to reduce the rate of deterioration so the shoes do not become structurally unstable.

Scientific testing and analysis allowed Natalya to characterize the degrading materials so that she could determine the most effective means of removing the efflorescence without abrading the surface. Efflorescence, a

cloudy, waxy, powdery or hazy deposit that can develop on wood, leather, paint, metal or plastic and be mistaken for mold, develops for reasons that differ from object to object and are usually exudates from the object's materials. Natalya has gently cleaned the surface using a soft brush and HEPA filter-equipped vacuum, and is working to remove the efflorescence with a custom-designed gelled cleaning system that does not affect the mechanically compromised and solvent-sensitive plastic surface.

Natalya will complete her treatment by humidifying and reshaping parts of the shoes that have deformed in storage. Before returning them to the PMA where they will rejoin an array of other iconic fashions from the "Swinging Sixties," she will construct a housing and mounting system that supports the shoes, while protecting them from light, dust, and fluctuating environmental conditions.

