Now displayed in the History Center’s Special Collections gallery, the Vanadium stained glass window originally served as an artistic statement on a new and important industry headquartered in Pittsburgh. Commissioned for the Vanadium Building (now Parkvale Savings Bank), at the corner of Meyran and Forbes avenues in Pittsburgh’s Oakland neighborhood, the window was a centerpiece of this F.J. Osterling-designed building. At 9 x 10 feet, it is a commanding piece of secular glass, and an exceptional example of the work of the Rudy Bros. Studio.

The Rudy brothers came to Pittsburgh from the Lancaster/York area of Pennsylvania in 1894, recruited by H.J. Heinz to create windows for his home, Greenlawn, as well as his North Side factory. They set up business in the East End and quickly acquired both residential and religious clients. The studio flourished, providing church windows for the region’s rapidly expanding population as well as serving the new professional and managerial class that began to settle Pittsburgh’s Shadyside, Point Breeze, Highland Park, and Squirrel Hill neighborhoods in the late 19th and early 20th centuries. A list of the Rudys’ clientele published around 1905 documents this, with industrialists, attorneys, physicians, and managers dominating, as does the evidence that still exists today – the stained glass windows found in homes throughout the East End.

Windows for businesses are much less common than residential and religious commissions. The Vanadium window served as the aesthetic...
centerpiece of Osterling’s building, an allegorical rendering of the story of vanadium. Created in opalescent glass, similar to many Tiffany windows of the period, the window features three figures rendered in multiple layers of colored glass with finely painted faces. The central figure, who resembles an angel, provides the attribution for the window to the Rudy Studio, as a sketch of this figure appeared in the 1912 Pittsburgh Architectural Club journal. The figure is probably Vanadis (or Freyja), the Norse goddess for which the element vanadium is named. In Scandinavian mythology, Vanadis wears a cloak of falcon feathers; what appear to be an angel’s wings actually closely resemble the wings of a large bird.

To the right of Vanadis is an older man with a flowing beard. He sits on an anvil and holds a blacksmith’s hammer. This figure is probably the Greek god Hephaestus, the blacksmith of the gods and the god of metals and metallurgy. The figure to the left, a young man with a miner’s pick at his feet, is more difficult to attribute, but may be Prometheus, the Greek god associated with fire and the discovery of metals. The imagery in the window speaks to the discovery of vanadium and the work of extracting the element and forging a new business centered on the metal.

The Flannerys must have been pleased with the Rudys’ work on the Vanadium window; two years later they contracted the firm to produce $1,300 worth of windows for the family mausoleum in Calvary Cemetery. Sally Flannery Hardon says the windows have been vandalized, and the family hopes to have them restored if it is not cost prohibitive. With the Vanadium window, they recognize a nearly forgotten chapter in Pittsburgh’s history of innovation.

Workers outside the Rudy Brothers Studio in East Liberty. The man in the center of the doorway is referred to in a handwritten caption as “Old Man Rudy,” probably John Rudy, the father of the four brothers. (HIM IAA, Rudy Brothers Company Records, MSS 8278, Box 1, Folder 28.)


66 Among the off-site locations was the AVC site in Bridgeville. When SCC commenced operations, vanadium was a production byproduct. Since the Flannerys owned AVC and SCC, the vanadium byproduct from SCC was shipped to AVC. But, it was tainted with radium. That was the beginning of the contamination of the AVC site. Later, after Vanadium Corporation of America took over, it closed the Peruvian mines and produced vanadium from carnotite leading to additional contamination of the site. The AVC/VCA Bridgeville site was one of the “off-site” locations cleaned up as part of the remediation of the Canonsburg site.

67 From footnote 41 of Christopher W. Wells, “The Road to the Model T: Culture, Road Conditions, and Innovation at the Dawn of the American Motor Age” in Technology and Culture, Vol. 48, Number 3, July 2007, pp. 497-523, published by The Johns Hopkins University Press, which comments on Ford’s application of vanadium steel: “As the company's metallurgical sophistication grew, its goal of a strong, lightweight design remained, but its use of vanadium steel declined. The company’s chief metallurgist, John Wandersee, came to realize that heat treatments of different alloys produced steels with the particular characteristics that engineers desired for different components. Vanadium steel proved impractical for crankshafts, for example, whereas properly heat treated manganese carbon steel worked admirably in that capacity. See John Wanderee, The Reminiscences of Mr. John Wandersee, in The Henry Ford’s Benson Ford Research Center, Dearborn (hereafter BFRC), acc. 65 (bound), 20-27. ‘With the proper kind of heat treat you could improve any kind of steel,’ Wandersee said. ‘Any steel that had enough alloy or carbon content to permit hardening could be tempered to the requirements’ (24–25). Other considerations included price, ease of machining, and availability. See also Ford, My Life and Work, 66–69. Ford’s belief in vanadium steel was thus crucial to the development of the Model T, but at the same time put unfounded faith in the ‘revolutionary’ nature of the alloy.’