

## Mineral Spotlight: Rutile

Would you be surprised to learn that some of the most fragile minerals in the Dice Collection are also made of titanium? Rutile is a titanium oxide mineral, taking its name from the Latin "rutilus" meaning "red" or "glowing". Most of our Museum examples are a metallic gold color, but in other forms rutile can appear a fiery red.

Rutile is well-known for its thin, hairlike crystals. Mineralogists describe these crystals as acicular, meaning needle-like. These crystals are quite fragile and brittle, breaking easily despite rutile's hardness of 6. Rutile's tiny, sharp crystals often appear as inclusions in other mineral crystals. A mineral with rutile inclusions is called rutilated. The Museum has a few beautiful samples of rutilated quartz. Here, the quartz crystals grew around and enclosed the rutile crystals during growth. Rutilated quartz has been used as a decorative stone for centuries, sometimes called "Venus's hairstone" because of the fine, fiber-like golden intrusions.

Rutile can be used as a titanium ore. Titanium is an extremely important metal in modern times, used in aircraft, spacecraft, and ship manufacturing. It's also quite important to the medical industry because it doesn't react or corrode when in contact with organic tissues.

This feature was posted on Dice Museum social media by Museum curator Jillian Herlinger on 9/20/2022.

