

THE OSCAR E. MONNIG METEORITE COLLECTION AND MUSEUM. R. G. Mayne¹ and T. Moss¹ Department of Geology, TCU Box 298830, Texas Christian University, Fort Worth, TX 76109 (r.g.mayne@tcu.edu)

The Man Behind the Meteorites [1]: Oscar Monnig was born in Fort Worth, Texas in 1902, and he lived there till his death in 1999. He was a businessman and he started work for his family's dry goods company after earning his law degree from the University of Texas in 1925 and was the CEO of the company when it was sold in 1982. However, Oscar's passion was for meteorites, he was an avid collector. He even gave self-printed brochures to his traveling salesmen to distribute that described how to identify meteorites and offered to purchase any that were found.

In 1960 Oscar Monnig introduced himself to a new hire in the TCU Geology department, Dr. Arthur Ehlmann, a clay mineralogist. Oscar asked for Dr. Ehlmann's help in identifying many of the 'meteor-wrongs' he was sent and a partnership was forged that was, in fact, the start of a great friendship. Over the years Oscar lent TCU meteorite specimens for display and in the early 1970's he asked if the University might like to have his collection. Dr. Ehlmann agreed,

not knowing the full extent of what was to come. In the years that followed a number of meteorites were transferred to TCU, but it was not until his death in 1999 that the full generosity of Oscar's offer came to light. TCU not only inherited all of Oscar's meteorite collection, but also a large amount of his estate for "education, care, and maintenance of the meteorite collection."

The Monnig Meteorite Collection at TCU: The collection donated by Oscar Monnig was one of the finest private collections of its day, and it is now one of the finest University-based collections in the world, due largely to the tireless work of Dr. Ehlmann. After his retirement from TCU, Dr. Ehlmann became the curator of the meteorite collection. Oscar's collection had many duplicates: for example, in 1982 there were 392 meteorites in the collection but thousands of specimens. Oscar had never turned down the purchase of a meteorite for fear that word would spread and he would miss the offer of something new or rare. In the



Figure 1. The Monnig Meteorite Gallery at TCU.

ten years since Oscar's death, Dr. Ehlmann has developed the collection through trades, sales, and purchases and it now contains 1622 different meteorites.

This year marks a new stage in the collection's history. For the first time in TCU's history an endowed joint faculty-curation position in Meteoritics has been created using the money donated by Oscar Monnig. This new geology faculty member will not only be responsible for bringing planetary science into the curriculum at TCU, but also for the care, curation, and expansion of the meteorite collection.

The Monnig Meteorite Gallery: On February 1st, 2003 the Monnig Meteorite Gallery (Figures 1 and 2) was opened to the public by astronaut Harrison Schmitt. This world-class facility is open to the public and displays about 10% of meteorites in the current collection. The gallery's exhibits teach visitors how meteorites are formed and how to identify them. They are given the opportunity to touch a piece of Mars and create their own terrestrial impact crater. Guided tours are offered to small groups and several local schools make this a regular activity for their students.

The gallery website at:

<http://www.monnigmuseum.tcu.edu> contains information about Oscar Monnig, outreach activities, photos of meteorites, and past and upcoming events. There is also an online searchable database of all the meteorites in the collection, which is updated regularly.

Outreach Activities: The Monnig Meteorite Gallery provides an ideal platform for educational outreach into the local community, an effort that is led by the gallery director, Teresa Moss. Past events have included a Space Day, where the local community was invited to take part in: lectures debunking space movie myths; hands on experiments relating to rockets, comets, craters, and spectroscopy; gallery tours; telescope tours of the night sky. January will see the Gallery host a Moon Night for a local school. Grades 3-5 have been invited, along with their families to come learn how the moon was formed, examine it through a telescope, and see samples of its surface.

Currently the Gallery is embarking upon a distance-learning program to connect to schools throughout Texas and the United States through the Texas Education Service and Connect2Texas. Four programs are in development:

1. Meteorites and Meteorwrongs
2. Meteorite Classification
3. Meteorite Hunting
4. Impacts and Craters

These programs will not only provide an opportunity to continue educating local children, but also allow us to broaden our educational outreach to schools who live out of field trip range from the Monnig Gallery,



Figure 2: Texas Meteorite Exhibit at the Monnig Meteorite Gallery

throughout the United States. Live link-ups to both the Director of the Gallery and the new Curator of the collection will be possible, allowing children to ask questions and discover the science that takes place behind the scenes.

Most educational outreach opportunities focus on the K-12 range. However, planetary science is an ever-increasing field and it is a popular subject at many Universities that do not have access to their own meteorite collections. It is much easier to excite and engage students when they are able to observe the samples for themselves. For this reason, the Monnig Meteorite is developing meteorite-teaching kits to loan to other institutions. These kits will differ from many currently available, as they will contain thin-sections as well as hand samples. The addition of thin-sections will make these kits applicable to more upper level undergraduate courses, such as mineralogy and petrology, and even graduate courses where planetary materials are discussed. We hope to have these kits available by Fall 2010. When available, information will be posted to the Gallery's website.

References: [1] Ehlmann A. J. (2008) The Oscar E. Monnig Meteorite Collection Catalog. Stanegate Press, Arizona.