



June 2024

Leidy Strikes While the Iron is Hot

By Eric Brosius



The Leidy Microscopical Society took a brief pause in April from the business of the March Micromount Symposium, the regular society meeting and the demonstration display at the Philadelphia Mineralogical Society 2024 Mineral Treasures and Fossil Fair. But as they say, “You have to strike while the iron is hot”. So, once again the Leidy Microscopical Society was once again very active in the month of May.

The Delaware County Institute of Science (DCIS) was the center for a working demonstration on making micromounts by the Leidy Microscopical Society in conjunction with the Philadelphia Society for Microscopy (PSM). Several members from both organizations along with several guests both young and older met on May 11, 2024, at the DCIS as Robert Carlton President of PSM gave a brief power point program on the history of micromount along with some visuals on how to make a micromount. After the power point adjourned, the group proceeded with a hands-on demonstration on making your own micromount. Leidy Microscopical Society treasurer Don McAlarnen, with the help of several other Society members, tutored four youngsters in selecting a micromount specimen, preparing the specimen for mounting, labeling the specimen and then actually mounting the specimen in the micromount box. Once the mounts were made and the participants were proud of their accomplishment, the group viewed a selection of historical micromounts provided by Robert Carlton and others. The group then ventured off into the DCIS museum to study the exhibits that were on display.



The Leidy Microscopical Society and the PSM would like to thank DCIS, their trustees and the curators for allowing our groups to use their facility for the demonstration. We would also like to thank Robert Carlton and Don McAlarnen for their talk and working demonstration. Additionally, we thank John Ferrante for the specimens and for preparing the micromount kits. Another thanks goes to all the volunteers for making the demonstration a success.

The next joint demonstration meeting at DCIS is scheduled for September 7, 2024. The subject will be preparing and making a diatom mount.

But that's not all. The May 16, 2024, regular meeting of the Leidy Microscopical Society didn't let that hot iron cool off as the program for the evening was the element iron.

Treasurer Don McAlarnen gave a brief talk on the element iron. Iron gets its symbol "Fe" from the Latin ferrum 'iron'. Its atomic number is 26 and is by mass, the most common element on earth. It's the fourth most common element in the Earth's crust, mostly from meteorites in the metallic state. Iron is considered the end of life for every star in the heavens. As you travel through the universe, you are travelling through iron.

To try and explain iron in the universe along with the other heavier than iron elements, Don McAlarnen gave a couple of analogies. He indicated, "If you throw wood into a fire, you get ashes as the wood burns up. If you throw the elements into a star, you get energy as the elements fuse to make newer elements all the way up to iron. If you throw more iron into a star, you don't get any more energy. Iron is a dead end". Don questioned the group on how the elements that are larger than iron are formed. Don posed another analogy, "When a human dies its body swells up. When a star dies it swells up into a supernova which produces enough energy to make elements larger than iron."

The group used the remainder of the time to view micromounts of iron minerals along with Bill Prince's collection of cabinet sized specimens of iron minerals. Incidentally, of the approximately 5,500 different minerals 1,172 contain iron.



In other society business, those in attendance suggested the DCIS link their website to the Leidy Microscopical Society website and the videos John Ferrante made on micromounting. A motion was made to conduct an on-line vote to move the meeting place to the Giant Supermarket Community Room, Willow Grove, Pa and change the time to the third Wednesday of the month at 6:30 PM. This location was proposed as the majority of the membership has moved away from the Fairless Hills area. Karenne Snow indicated she has Lee Tori's old study mineral collection for sale and Matt Okasinski's wife recently acquired a 3-D printer and has been experimenting with making plastic inserts for micromount boxes using various colors. The Dr. Dave Rilling memorial service is scheduled for June 8, 2024, at the Williams-Bergey-Koffel Funeral Home in Telford, Pa from 10:00 AM to 12:00 PM.

Finally, the June meeting has been moved to Wednesday June 19, 2024, at 7:30 PM at the Northminster Presbyterian Church due to an unforeseen scheduling conflict with an event at the Church. The subject of the meeting will be "Gadgets and Jig used in Micromounting". Members and guests are requested to bring in their unique gadgets and jigs that they have found useful in making their own micromounts. Also please bring micromounts on what you are currently working on. Everyone is invited.