

# December 2020



# OCMS SHALE MAIL



Join us for our monthly meeting via zoom on December 13, 2020 at 6:30 pm. As you can see it's a good time with exceptional visuals so pull up your couch, make a coffee and join us for a little rock hound socialization. SEE YOU ALL THERE!



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## Come Zoom With Us!

We would like to see all of our members come to the Orange County Mineral Society zoom meetings. I wonder if perhaps the thought of holding virtual meetings may seem a little scary to some of our members. I know that I thought it was terrifying at first but, after the first couple of meetings the phantom of zoom went to rest. I realized it was easy and I had a lot of fun.

The meetings are even easier than the ones we used to hold personally because no ones head is in the way of the screen. The presentation graphics are incredibly vivid. I can screenshot any pictures I want to keep, much easier than pulling out my phone or camera.

We have some really nice discussions before and after the meetings. It is so nice to see every-ones faces. It's been far too long since we have seen some of our members so consider coming out to our December meeting.

Virtual meetings have some benefits as well as downfalls. One of the benefits is that it's a time-saver. We just stop what we are doing, turn on the computer, go to our email, find the invitation and click on the link. NO driving an hour to get to the meeting then an hour to get back home after the meeting. John and I save so much wear and tear on the car, not to mention the gas we save every month. It is a down-fall that we can't see one another in person for hugs but lets be real we are in a pandemic and safety has to be our first priority not only for ourselves but for all the members of the society. If we want coffee and donuts we have to supply our own.

If your interested in joining us for our zoom meetings just [click here](#) for a list of YouTube instructions on how to use zoom. I did not pick only one as it may not be suitable for everyone so you can choose the best one or multiple ones for yourself.

**SEE YOU AT THE MEETING!**



## President's Message

Please join us this Friday via zoom for our monthly business meeting, annual election of officers, and our monthly presentation. Note that it is our intent to have our annual pot luck dinner and holiday Chinese auction featuring around 80 items at the next meeting we can have with personal attendance.

Election of officers for 2021 will take place via zoom. The nominations will hopefully include current officers and prospective officers from our membership. I hope you all have noticed the contributions by our current officers and many you might not see behind the scenes over this past year. Many have been mentioned in my previous president's messages and in other Shale Mail, website, Facebook and emails. WE also welcome new officers, committee chairs and so on as needs arise and to fit whatever contribution you would like to make. If you have new ideas or projects for the club, please do not hesitate to mention them.

We had been hoping for a December or January re-opening of the Chester Senior Center. With due caution and observance of State, County and Town guidelines, it appears that zoom is how we will meet for our meetings in the near future. The audio/visual quality of the presentations has been outstanding via zoom, everyone has a front row seat and no problem hearing over the HVAC blowers. Several other clubs have had successful field trips and mineral shows in the late summer and fall. The EFMLS has had many meetings via zoom that have embraced communication among the clubs and has helped several clubs to keep some activities and start or share in zoom lectures. I hope you all enjoy the EFMLS monthly newsletter and our own Shale Mail. Small scale field trips are possible following guidelines. We still plan to have our annual outdoor mineral, fossil and jewelry show/sale June 5 and 6 2021 at Museum Village. Please observe extra caution in all indoor settings, wear a mask and wash your hands and face frequently. The EFMLS and OCMSNY hope you all remain safe through the holidays and we can all enjoy good health and more peace of mind. Peace on earth is not just another geologic observation but a sincere wish.

Sincerely, Michael G Tedford, MD, MS, MBA

President OCMSNY 2020

# The Ediacarin Fauna

Derek Yoost

Come join Derek Yoost on December 13<sup>th</sup>, 2020. He will be presenting the sequel to Deep time. "The Ediacarin Fauna" - The "Explosion" before the Cambrian is sure to thrill and chill.

There was a group of plants and animals that existed before the "Cambrian Explosion". This fauna, which lasted for 94 million years (nearly as long as the dinosaurs), was very successful and had worldwide distribution. One of the most interesting things was that it was the most peaceful time on planet Earth since there were no predators that had evolved yet. Come and learn about this seldom talked about biota and how it relates to today's flora and fauna.



## Derek's Bio:

My passion for fossil collecting started when I was 10 years old and has never stopped since. Starting at the age of 14, I worked in a rock shop (Jim's Gems) in Wayne NJ and gleaned a vast knowledge for the collecting and lapidary hobby. For the past 27 years, my collection has grown to include fossil amber, fish, reptiles, and mammals that are unique to New Jersey, New York, Pennsylvania, and Maryland. I also collect local minerals from New Jersey, shells, bones, meteorites and other natural history items and artifacts. This hobby has brought me to many interesting localities and fascinating people. I also maintain a web site on my favorite fossil collecting site, Big Brook at [njfossils.net](http://njfossils.net). To date, I would guess that my favorite fossil that I found is the insect (a blood sucking Midge that may have feed on dinosaurs) that I found in Cretaceous aged sediment in Sayreville NJ. It was new to science and was eventually named after me (Culicoides yoosti).



# Minutes of the Meeting

November 13, 2020

John Pacut

**Business Meeting:** Brought to order at 6:33 pm and the Oct 9<sup>th</sup> Minutes approved as written in the Shale Mail.

**Treasurer's report:** The treasurers report was read by Ron Nelson and accepted. EFMLS insurance has been extended to Feb. David Knock as acting coordinator payment will be due around Jan 1<sup>st</sup>.

**Programs:** Under the circumstances Mike said we would be using Zoom for future meetings. Invites will be sent via email each month, we encourage everyone to join us. When the status changes concerning our meeting we will email the information out as well as post it in the Shale Mail.

**Show Report:**

**Membership Report:** No new members.

**Shale Mail Report:** Alison is looking for articles from members & Officers on any topic.

**Old business:** David Knock attended the meeting to present Heather Shields with the "Presidents Service Above & Beyond Award" for the second year in a row.



**New business:** Officer positions are open, no one came forward to fill a position, if your interested please contact Mike Tedford before the next meeting when we will hold our vote.

We voted and approved payment of \$197.00 for the 2 pages the OCMS is sponsoring at Mindat.

**Adjourn business meeting:** Motion and accepted.

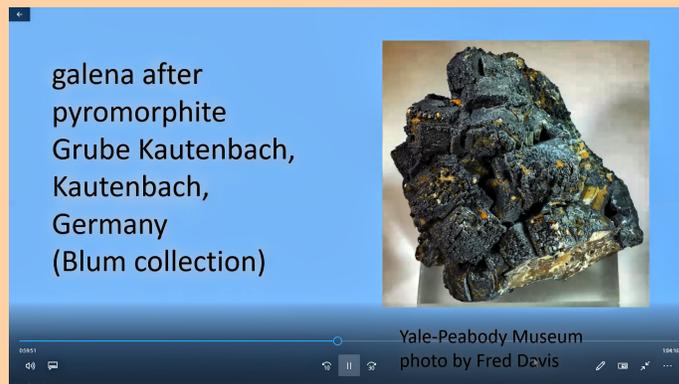
# Pseudomorphs!

Alison Pacut & Howard Heitner

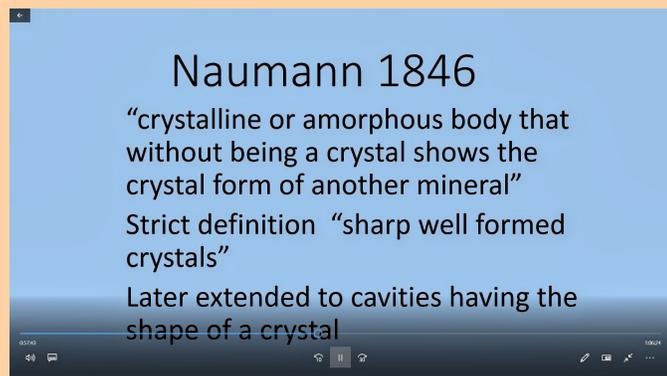
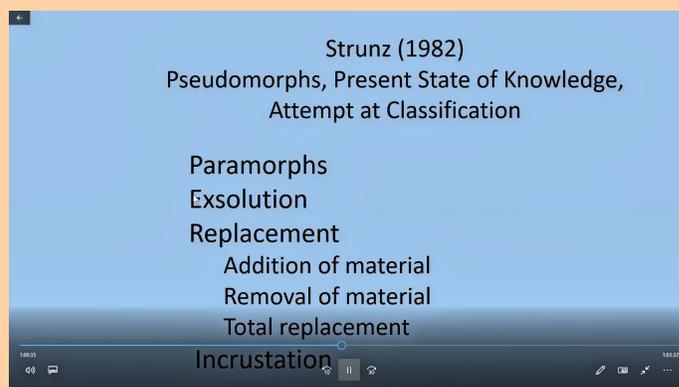
Howard Heitner gave an awesome presentation on November 13<sup>th</sup>. I will attempt to do it justice for those of you who missed it. The first slide of the presentation simply stated, “Pseudo What? Trickster Mineral Specimens. To tell you all the truth I had no idea what a pseudomorph was. How could a mineral trick us?”

The word pseudomorph comes from the Latin and when translated to English means, “false form”. This term was first used by a French scientist in 1801 to describe fossils and concretions. Howard went on to explain that fossils **ARE NOT** pseudomorphs because there is nothing false about a fossil. A brachiopod looks like a brachiopod, a fern looks like a fern and a dinosaur bone looks like a big dinosaur bone.

Much of this collection is being photographed and put online for the enjoyment of rock hounds around the world.



Strunz made this classification in 1982.



In other words without being a crystal a mineral shows the form of another crystal so, in that sense it’s false. The original mineral is sharp and well formed. It’s been later extended to negative crystals like cavities having the shape of a crystal. So, either the positive or negative shape is false.

He mentioned Johann Reinhard Blum who did the first major work about pseudomorphs. He published his first edition in 1843 and three supplements by 1879. Blum had an enormous collection of specimens that were purchased by and still sit in the Yale Peabody base-

I was not too sure about the concept of exsolution pseudomorphs so I looked it up. I found that its a chemical reaction that separates the atoms of a crystal. It causes the formation of thin layers of two different minerals which forms a pseudomorph. These thin layers retain the same basic composition of the original mineral.

Howard talked about the crazy replacement pseudomorph talc after quartz. It’s crazy because the softest mineral has replaced one of the hardest minerals. In this example you can see the quartz crystals that have been altered by the tan talc.

# Pseudomorphs! - Cont.

Alison Pacut & Howard Heitner

# 2020



Not all pseudomorphs have to have a relationship. Some examples of this are quartz after aragonite, copper after aragonite and cassiterite after orthoclase.

The only way to explain a replacement by a chemically unrelated mineral is by a more soluble and/or a less stable mineral being replaced by a less soluble and/or a more stable mineral, this is not 100% but is mostly the case.

This specimen of calcite after halite looks like



its hollow in the center and it started replacing the halite on the outside but never got to the center. It seems that whatever halite was left was dissolved out afterwards.

Howard did an excellent job of showing examples and explaining what we were seeing. On behalf of the Orange County Mineral Society we would like to thank you!

As 2020 comes to a close there is much to reflect upon. As a year goes I don't think I have lived through a more disastrous time in my life-time.

Not long after the beginning of the year Covid-19 hit the United States and the entire world. Soon after, it became apparent just how life shattering this virus would be. We saw canceled, canceled, canceled everywhere we looked.

Our meetings were canceled, our shows were canceled, our field trips were canceled, they even closed the museums. They told us not to get together or socialize in groups.

The shut down of real life events brought about an awakening of virtual life. This contactless virtual reality has not only kept us safe but has given us comfort in the friendly faces we see looking back at us. Further proof that when we are stuck between a rock and a hard place we shall overcome!

Here we are in December, the year is waning. We are still holding our meetings via Zoom. Why is that relevant? Well the Christmas party will not happen this year. Perhaps it will be postponed or even canceled until next year. Something the powers that be will need to decide once we are allowed to meet in person.

December has also brought a glimmer of hope to rock hounds everywhere in the form of a vaccine. It could be summer or even fall before we are all vaccinated but 2021 will free us from our solitude.

With Christmas coming and until we meet again, stay safe, mask-up and social distance. Let's keep our extended families safe by celebrating at home!



# EFMLS Holiday Bash!

Remember please register Here in advance!



*A Festivus for the Rest of us*

# Holiday

## Zoom

# Party BASH

**A Petrified Yule Log Event!**

Brought to you by the Change Masters of the EFMLS

Show & Tell ❄️ Best Petrified Specimen Contest ❄️ Festivus "Get Up" Contest ❄️

~~Door~~ Window Prizes may also be available depending on donations!

<b>WHEN</b>	<b>WHERE</b>
December 16 @ 6:30	<a href="https://us02web.zoom.us/join/zoom/register/tZUqdeysrD8qE9w10KviSSeHaAEGt1LC6jhy">https://us02web.zoom.us/join/zoom/register/tZUqdeysrD8qE9w10KviSSeHaAEGt1LC6jhy</a> click the link above to register on Zoom!

**Show & Tell:** Bring your best most recent specimen you collected since 2019 and show it off!  
**Petrified Specimen Contest:** Participants show their specimen and audience votes on winning specimen. Winner gets a petrified specimen!  
**"Get Up" Contest:** Participant's attire and/or background presentation (not virtual background). You choose holiday themed sweater, outfit, accessories, or non-virtual mineral background. 4 Awards for top choice in the Prettiest, Ugliest, Most Original and Merriest categories!

CONTACT: [efmlsinc@gmail.com](mailto:efmlsinc@gmail.com) for more details or to donate mineral specimens!

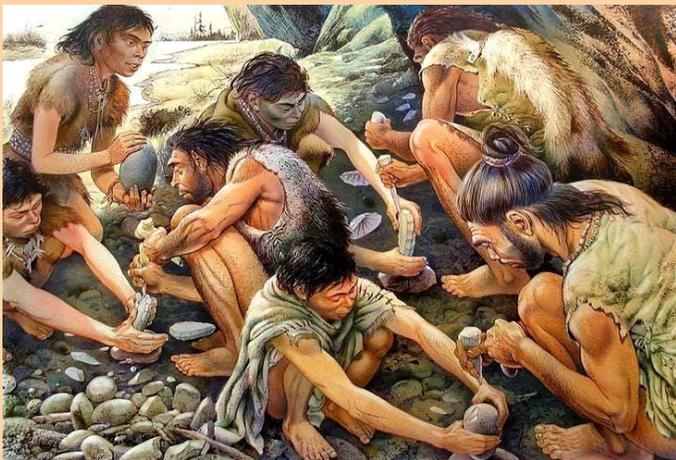
Date: December 16<sup>th</sup>, @ 6:30 pm. To donate or for details Contact [efmlsinc@gmail.com](mailto:efmlsinc@gmail.com)

# Brief History of the Lapidary Arts

Keith Allen

In prehistoric times, man learned to make tools from stone, using one stone to chip away at another, and in the process learned that stones could be worked and that they had different harnesses.

By 3,000 B.C. man had developed his lapidary skills to such an extent that they could make cylinders from serpentine stone. In all ancient civilizations history records the cutting of natural stone for tools and adornment. Beads, scarabs, amulets, seals, even bowls were cut from stone.

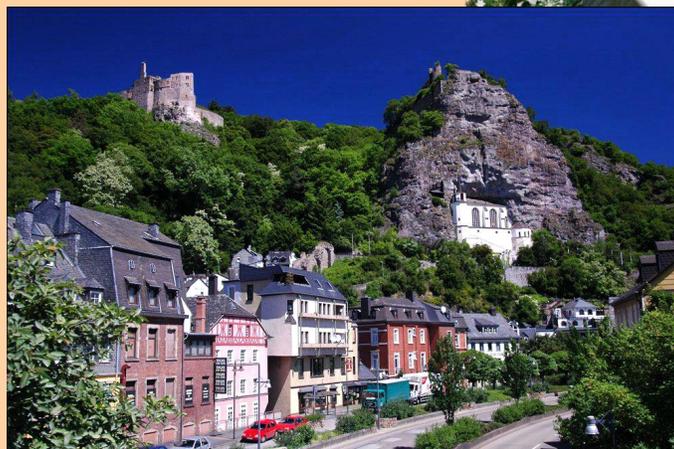
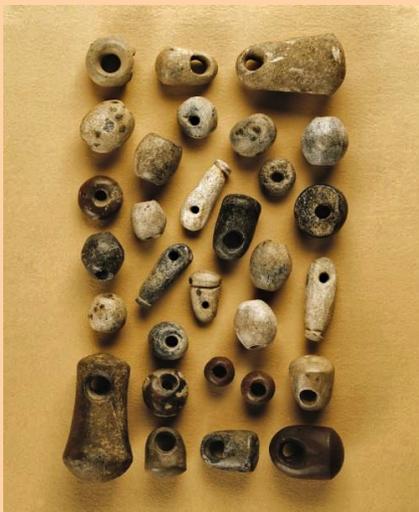


It is believed that around the 1300's early faceting occurred. But in the 1400's real developments began. Grinding wheels were developed, shapes were improved upon, and better polishing rock techniques emerged. The

lapidary field of gem cutting for jewelry began to divide into two techniques. Faceting—described as to place and polish facets onto a mineral specimen; and cabochon cutting or cabling—described as shaping and polishing a stone usually with a convex top and a flat bottom.

Traditionally semi precious stones or opaque and translucent stones are cut into cabochons and transparent stones are faceted. However that distinctive has become more blurred as fantasy cuts, sculpted stones and carved stones have hit the market.

The town of Idar-Oberstein in Germany soon emerged as the gem cutting capital of the world. According to historical records, miners in the late 14th century found agates not far from the tiny towns of Idar and Oberstein and began to cut it into cabochons and sculptures. The actual history of the industry there probably predates the existing records of it. It is known that mechanized mining operations for the extraction of stones within the vicinity of the towns, began in the late 1400s, creating a demand for gem-cutters, and stone-carvers who migrated to the area.



# Brief History of the Lapidary Arts-Cont.

Keith Allen

By the start of the 18th century, there were about 15 cutting gem shops. This number doubled by the beginning of the 19th century. A large boom occurred when German emigrants discovered large agate deposits in Brazil and

and onyx. Even the turquoise boom in the 70's failed to introduce opaque gemstones to the public. Mention chrysocolla or chalcedony to somebody not in the field and you are likely to still get that "huh?" response.



brought the material back to be cut. By the late 1800s, there were more than 150 gem cutting shops in Idar-Oberstein.

In China, lapidary work specializing in jade carving has been continuous since the Shang dynasty. But in the early 1900's it emerged as the place where mass amounts of commercial cabochons could be produced cheaply. To this day there is no way Americans can compete in that market. For this reason, up until the 1960's any lapidary work done in America was mostly just for hobby or competition.

The 1970's saw a strong surge in the craft market, and the 80's was a time when it was big to "invest" in gemstones. Still it wasn't till the late 1980's when lapidary really took off in America, and the American lapidary market began to emerge as the leading lapidary in the world.

Unfortunately the general public still thinks of gemstones as diamonds and rubies, with maybe some knowledge of tiger's eye

The rise of the metaphysical belief in energy of healing crystals and healing stones in the last 20-30 years has definitely made people more aware of the rock and mineral field. But we still have a long way to go.



For members who are interested in learning the lapidary arts please contact me (Alison Pactu). There is nothing more satisfying than giving the gift of yourself to a loved one by giving them a creation you have made.

For those of you who have never worked a stone before it's not hard to do but as with anything else practice makes perfect.

I enjoy working with the wheels and creating a cabochon. It's a great hobby even for young adults so let me know if you are interested. If I get enough interest we can discuss specific details.





**OCMS members** are covered by Society-sponsored insurance.



**OCMS Disclaimer**

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