



Member: South Central Federation of Mineral Societies



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May 2022
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1st Place, 2019 SCFMS Mini-Bulletin
1st Place, 2017 AFMS Mini-Bulletin

How Fast Do Minerals Form?

Don Shurtz, Pleasant Oaks Gem and Mineral Club of Dallas

Have you ever wondered how minerals formed or how fast they formed? A lot of people have studied this topic and the answer may be surprising. Of course, we all know that it takes longer for a larger crystal to grow – the longer the larger. Right?

Crystals form in two stages, nucleation and growth. Nucleation is the process by which the particles (atoms and/or molecules) come together to make the initial stable mineral molecule. This depends on several factors which include the amount of the constituent atoms and/or molecules in the solution, and the temperature of the solution. The solution must be saturated or super-saturated for the initial nucleus to form. The individual components must come together in the correct orientation to form the initial crystal. When the temperature of the solution is hot, the motion of the atoms and molecules is more active increasing the chance that the nucleation is successful. Once the initial crystal forms, the component atoms and molecules



can attach to the initial crystal and cause the crystal to grow. The crystal can continue to grow so long as the solution remains saturated. The solution must be cooled for the crystal to grow. The growth rate will depend primarily on the speed with which the mineral solution is depleted of component particles and how fast the solution cools. In the case of pegmatites which form near the surface of the earth, the magma from which the crystals are formed may cool very rapidly – very large crystals can grow in a matter of minutes. Minerals that form at greater depths where the surrounding temperature is hotter may take thousands of years to form. Crystals formed in the habitat grow slowly and may also grow into very large crystals, particularly those that grow in hydrous fluids. The solution may remain saturated for extremely long periods through the process of replacing the atoms and molecules that are taken out of the solution to form the mineral.

Continued on page 2

PRESIDENT'S MESSAGE: MAY MEETING - TACO THURSDAY

Don Shurtz, POGMC President

Our May 5 meeting will be our first attempt at a Potluck Dinner at the Bradfield Recreation Center. Of course, when you walk into the room where we meet you are greeted by a sign that says "NO FOOD", but we have double and triple checked and been told that the sign does not apply to the room when it is being rented.

Our meeting is on May 5, which is also the real day to celebrate Cinco de Mayo. Many think that this is when Mexico won its independence, but that is not the case. It does celebrate the victory of a small, ragtag Mexican Army over a larger, better equipped French force. The battle was fought on May 5, 1862, and is known as the Battle of Puebla. During the 1 day battle, the French lost about 500 men while the Mexican force lost less than 100 soldiers. The Battle of Puebla was a victory for Mexico, but they ultimately lost the war.

Cinco de Mayo is not a major celebration in Mexico. It is not a national holiday; most celebrations are centered in the state of Puebla. In the United States, many contend that we celebrate Cinco do Mayo as a celebration of Mexican culture and heritage, particularly in areas where there is a larger Mexican-American population. However, many will contend that the celebration is pushed by restaurants and bars as an occasion to sell more Mexican foods (tacos, burritos, etc.) and sell even more Margaritas and Mexican-made beers, or just more drinks of any kind. I would hope we would rather be celebrating the Mexican-American culture rather than being led around by the bars and restaurants, but the truth could be in following the money – and the advertising indicates the restaurants and bars have a lot of influence.

So back to the Potluck Dinner. Carolyn will be bringing the Taco meat. Ling will make up some soft taco shells (tortillas), and Amy will bring some cheese and hot sauce. That should take care of the Tacos, so everyone should bring a dish to fill out the rest of the Taco Thursday celebration. Desserts, drinks, appetizers, vegetables, etc. will make the meal more complete.

The Start Time will be 7:15 PM for socializing. At 7:30 we will open the dinner lines. We need to be cleaned up and on our way out at 8:45.

How Fast Do Minerals Form? (continued from Page 1)

The habitats where crystals may form are numerous, but very large crystals (up to several meters in length) may form in a very short time, as fast as a couple of minutes. Pegmatite formations are but one of the habitats where large minerals may form quite rapidly.

References:

- Wikipedia, Crystal Growth, https://en.wikipedia.org/wiki/Crystal_growth
- Phelps, Patrick R, Lee, Cin-Ty A, and Morton, Douglas M, Episodes of Fast Crystal Growth in Pegmatites, Nature, <https://www.nature.com/articles/s41467-020-18806-w>
- Smithsonian Education, Minerals, Crystals, and Gems, http://www.smithsonianeducation.org/educators/lesson_plans/minerals/minerals_crystals.html

Picture of Quartz and Emerald Pegmatite:

- Photograph by [Madereugeneanddrew](#) used as permitted by CCA-SA 4.0 International License

Federation News

AFMS President's Message

Margaret Kolaczyk, AFMS 2022 president
From the May 2022 AFMS Newsletter

Spring has finally arrived. Time to dust off the sun hat and head out to see what Mother Nature has uncovered after the rains. I know there really has not been a lot of rain this year but just a light rain can wash away the dust and sometimes at first light one can look across a field and see some rocks that sparkle from the sunlight. This was something I did when I was in high school. There was a large field where I could find thundereggs. Unfortunately, the field now is covered with homes. As time passes, I am sure that many of you can remember places where you could collect some wonderful material, and now those places are no longer accessible. Within each regional federation, there is a committee working hard to help keep these areas open. So, take a second and find out who these individuals are and see if there is something you can do to help. This May I will be giving a Judges Training Seminar. This seminar is going to cover the whole manual. Its aim is for individuals who are wanting to learn to become a judge and to also help anyone who would like to compete. The seminar is open to all AFMS members. All the information is included in the May AFMS newsletter. Safe travels to everyone!



Judges Training - The Federations Need You!

By Larry Hulstrom, NFMS President
From the May 2022 AFMS Newsletter

We continue to have a need for AFMS-certified Judges to evaluate and critique the competitive display cases at our annual shows. This is an important function that enables us to continue to support our members and improve their skills as exhibitors. All of the other Regional Federations throughout the AFMS desperately need more certified judges. This will be a great opportunity for members to “step up” and become highly valued judges to help our exhibitors grow and be competitive at the AFMS level. You need not be an expert in all the sub-fields of the hobby/craft; you will be training on applying the AFMS standards and procedures to the judging process. Plans are in the works to hold AFMS-certified training classes in conjunction with the Lakeside Gem and

Mineral Club 25th Anniversary Show and NFMS Mid-Year meeting in Kennewick, WA. The training takes 4 days and would start 2 days before the Kennewick show and continue throughout the show. The dates are May 19 – 22, 2022. The plan is to have classroom training in a building on the grounds of the Benton County Fairgrounds on May 19-20, practice judging at the show on Saturday, May 21, and a review/debrief on Sunday morning, May 22. We need to get some idea of how many people are interested, and which area clubs (or regional federations) are interested in supporting their members that are willing to attend. If you are interested in being trained for this vital role, or if you are a Regional Federation interested in sponsoring a participant, please use the application form and submit it as soon as possible to Larry Hulstrom, NFMS President at rockhound132@charter.net. I already have a list of names started. If you have questions, get in touch. The instructor for the training will be Margaret Kolaczyk, currently President of the AFMS and in charge of the Judges Training Seminar. As details come together I will keep you posted with updates. Thank you so much for considering serving in this very important capacity. Larry Hulstrom, NFMS President.

SCFMS and AFMS Convention Information

From the January-February SCFMS Newsletter

SCFMS ANNUAL SHOW 2022, AFMS ANNUAL SHOW 2022

Hosted by the Gem and Mineral Society of
Louisiana in New Orleans (Westwego)

October 14-16, 2022

AFMS ANNUAL MEETING
October 14, 2022 at 10:00

SCFMS ANNUAL MEETING
October 15, 2022; 1 pm

SCFMS WEBSITE: www.scfms.net

Shows and Activities – Upcoming Show and Activity Dates

Please note that some shows are still being canceled in response to health concerns associated with COVID-19
Check with the show contact to verify the show status

May 2022

- 30 April – 1 May, Waco, TX, Waco G&MC, Waco Convention Center, website: www.WacoGemandMineral.org
- 28–29 May, Fort Worth, TX, Fort Worth G&MS, Will Rogers Memorial Center, website: <http://www.fortworthgemandmineralclub.org>

June 2022

- 18-19 June, Grapevine, TX, Arlington G&MC, Grapevine Convention Center, website: AGMC57.org

July 2022

- 1–3 July, Farmington, NM, San Juan County G&MS, McGee Park, Email: torvchonner@gmail.com
- 16 – 17 July, Tulsa, OK, Tulsa R&MS, Exchange Center at the Expo Square, website: www.tulsarockandmineralsociety.org

August 2022

- 20 – 21 August, Bossier City, LA, Ark-La-Tex G&MS, Bossier Civic Center

September

- 24-25 September, Lubbock, TX, Lubbock G&MS, Lubbock Memorial Civic Center, website: www.lubbockgemandmineral.org
- 24-25 September, San Antonio, TX, Southwest G&MS, Wonderland of the Americas, website: www.SWGMS.org

October

- 8-9 October, Tri-City G&MS, Mayborn Civic and Convention Center, email: selovelace@showdirection.com
- 14 - 16 October, Westwego, LA, G&MS of Louisiana, The John A Alario Event Center. SCFMS & AFMS Show and Convention, Contact J. David Cope, (504) 214-6754.

November

- 19 – 20 Mesquite, TX, Dallas G&MS, Mesquite Convention Center, website: dallasgemandmineral.org

Ref: Rock & Gem Show Dates, <https://www.rockngem.com/ShowDatesFiles/ShowDatesDisplayAll.php?ShowState=ALL>

Ref: January – February 2022 SCFMS Newsletter

Bench Tip from Brad Smith

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Try a Toothpick

The round, stronger toothpicks have a multitude of uses on the jewelry bench. I use them for mixing epoxy resin, for applying paste solder, and with Zam for polishing in tight spots.

Toothpicks are also handy for holding a small faceted stone while setting it. Just break off the sharp tip, mold a little beeswax over it, and press it onto the table of your stone.

Work Smarter & Be More Productive With Brad's "How-To Books"



VISIT AN AREA CLUB

- [Arlington Gem & Mineral Club](#), meets the 1st Tuesday of each month at 7:30 pm, 1408 Gibbins, Arlington, TX
- [Cowtown Gem, Mineral, & Glass Club](#), meets the 2nd Tuesday at 7:00 pm, CERA 3300 Bryant Irvin Rd. Fort Worth
- [Dallas Bead Society](#), meets 1st Saturday of each month at 10:00 am at The Point at CC Young, 4847 W. Lawther Dr., Dallas, TX
- [Dallas Gem & Mineral Society](#) meets the 3rd Tuesday of each month at 7 pm, American Legion, 10205 Plano Rd, Dallas (next to their shop)
- [Dallas Paleontological Society](#), meets 2nd Wed. of each month at 7:00 pm, Brookhaven College, Building H, 3939 Valley View Lane, 75244
- [Fort Worth Gem & Mineral Club](#), meets 4th Tuesday of each month at 7:30 pm, 3545 Bryan Avenue, Ft. Worth
- [Oak Cliff Gem & Min Soc.](#), meets the 4th Tuesday of each month at 7:30 pm, Unitarian Universalist Church, 3839 W. Keist Blvd, Dallas,
- [Pleasant Oaks Gem & Mineral Club](#), meets the 1st Thur. of each month see website while we work to find a new home.
- [Wild West Bead Society](#), meets 3rd Tuesday of each month at 6:30, Wild Beads, 2833 Galleria Dr., Arlington, TX

CLUB OFFICERS FOR 2022

President: Don Shurtz
1st VP, Programs: Carolyn Grady
2nd VP, Field Trips: Judy Wilson
Secretary: Amy Vulk
Treasurer: Ling Shurtz
Editor: Don Shurtz
Contact us by e-mail: don.shurtz@gmail.com or
L.SHURTZ@gmail.com

Minutes of the April Meeting

POGMC President Don Shurtz called the April 2022 club meeting to order at 7:25 pm.

Quorum: We have a quorum

Visitors: There were no visitors

Minutes: We reviewed the March 2022 Minutes as published in the April 2022 Chips and Chatter. A motion to accept the minutes as published was made and seconded. The motion passed

Ling presented the Treasurer's Report for March 2022. A motion to accept the minutes as published was made and seconded. The motion passed

Old Business:

- Dues are due.
- The April IGEM is this coming weekend (April 8, 9, and 10). Those who will be selling from the club booth are (1) Julie and Warner, (2) Carolyn, and (3) Ling and Don.

New Business:

- The May meeting will be on May 5 – Cinco de Mayo – which goes well with the planned Taco Thursday potluck dinner

Break

Presentation: We will resume watching the video about gems from Russia.

Raffle

Raffle: We held the raffle

Don adjourned the meeting at 8:30 PM

MAY MEETING

TACO THURSDAY POTLUCK DINNER

May 5 starting at 7:15 PM

Bradfield Recreation Center

1146 Castle Drive, Garland, TX

Presentation Review

Russian Gem Mines, presented

by Dr. Peter Lyckberg

From the 2013 Dallas Mineral Symposium

Review by Don Shurtz, POGMC

Dr. Peter Lyckberg is a noted Swedish Mineralogist. His earliest interest in minerals was when he was a toddler when he started finding muscovite, quartz, and other minerals in his grandparent's granite walkway. He went on to study civil engineering and geology at the Chalmers University of Technology in Gothenburg, Sweden. He is noted for his knowledge of mineral deposits in Norway, Sweden, Finland, Ukraine, and Russia. The video presentation from the 2013 Dallas Mineral Symposium focused on his travel and troubles with travel to Russian Mines. His video has many pictures of Russian Minerals in situ. The presentation included Ukrainian mines and minerals – at the time of his visits, Ukraine was part of the Soviet Union. He detailed some of the troubles he encountered in traveling to the mines, both political and just physically getting to and into the mines. Local and KGB officials asked Peter many questions about his travel, often detaining him for hours or even days to try to verify his answers. They were also suspicious of the number of photographs that Peter was taking. However, the stars of the video were in pictures of the minerals, often in situ pictures from dark mines. There were several pictures of fabulous Beryl specimens, especially aquamarines, heliodors, and emeralds.

VISITORS ARE ALWAYS WELCOME

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PLEASANT OAKS GEM and MINERAL CLUB of DALLAS



Meetings

First Thursday of each month. Next meeting on April 7 is at the Bradfield Recreation Center starting at 7:00 PM

Membership

Single Adult: \$16.50,
Junior: \$5.00, Family: \$27.50
(Plus badge fee for new members)

PURPOSE

The Pleasant Oaks Gem and Mineral Club of Dallas is organized for charitable and educational purposes to promote interest in the various earth sciences, particularly those hobbies dealing with the art of cutting and polishing gemstones, the science of gems, minerals and metal crafts, as well as their related fields. Pleasant Oaks Gem and Mineral Club of Dallas is a Section 501(c)(3) not-for-profit organization

CHIPS AND CHATTER

Pleasant Oaks Gem & Mineral Club
PO Box 831934
Richardson, TX 75083-1934

To

VISITORS ARE ALWAYS WELCOME

Meetings: First Thursday of each month. Our next meeting will be on **May 5, 2022, starting at 7:15 PM. We will meet at the Bradfield Recreation Center, 1146 Castle Dr., Garland, TX. We will be celebrating Cinco de Mayo with a Potluck Dinner – Taco Thursday**

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