

THE ROCKORDER

February 2007

Vista Gem & Mineral Society, P.O. Box 1641, Vista, CA 92085

To contribute articles and event notices, email to: Rockorder@sbcglobal.net

ROMANCING THE STONE



If you've ever seen the movie, "Romancing the Stone", or even if you haven't, you won't want to miss this month's meeting, February 15.

Let's welcome back the Gemological Institute of America's Marisa Zachovay, who wowed us last February with her "Pearls: the Second Most Popular Gem" presentation.

This time, Marisa will speak and give a slide presentation about the mining, cutting and marketing of Colombian emeralds, as well as the current

Continued on p. 5

STONE OF THE MONTH

DRUZY QUARTZ GEMSTONES

Source: Found in different forms worldwide

A bed of tightly-packed crystals is a common growth habit particular to quartz and amethyst, where the crystals grow up from a matrix and only one termination pyramid is present. When the bed has a very fine crystalline structure similar to sugar or salt crystals, it is known as "Druzes", "Druzy", "Drusies" or "Druzi" quartz which has an "encrustation" crystal habit. This aggregate of minute crystals coating a surface is also referred to as "druzy encrustation."

There is a wide variety of color found in druzy quartz jewelry, mostly the result of artificial heat and irradiation treatment. In it's natural state, druzy quartz is clear, white, tan, golden (citrine), and light purple (amethyst). Druzy crystal is typically cut into flat planes (calibrated) to be placed into a jewelry setting.

Druzy Quartz and Geodes

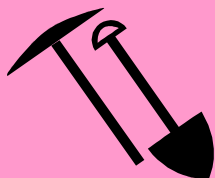
Most druzy quartz occurs inside of chalcedony geodes that form as nodules in ancient volcanic rocks or lava where cavities where filled by silicate and zeolitic minerals deposited in layers upon the walls of the cavity. When the

Continued...



What's Inside

- From the President 3
- Coming Events 3
- Getting to Know You 4
- Tips & Tricks 6



TWO NEW WEBSITES FOR KIDS

The San Diego National History Museum presents a double-header for kids. Some California regional minerals and fossils are featured.

"Mineral Matters" at

www.sdnhm.org/kids/minerals/index.html

And

"Dinosaur Dig" at

www.sdnhm.org/kids/dinosaur/index.html

DRUZY QUARTZ

(continued)

deposition process does not proceed to the point of filling the cavity, a hollow space is left causing a geode. The interior of the geode can then become encrusted with a fine layer of druzi amethyst or quartz crystals.

Druzy Quartz Enhancements

Vapor-coating (aka *vapor-deposition*) is one of the more common gemstone enhancements used to achieve the scintillation and myriad of colors and that are found in druzi quartz jewelry. This is a similar process to the application of thin films and metallic coatings onto silicon wafers, used in electronics. In a vacuum chamber, vaporized titanium metal is mixed with oxygen and deposited onto the crystal, bonding to the surface at a molecular level. Titanium is used to create intense hues of blue, green, and purple, as well as adding an iridescent (schiller effect)

quality and/or play-of-color.

Druzy crystal can be vapor-coated with a variety of other metals to create interesting effects. Gold is used as a vapor-coating to create golden druzi, Platinum is used to create pure white, or silver druzi, and Silicone Oxide is used to create pink and green hues.

Quartz Crystal Properties

The name "quartz" comes from the German "Quarz", which is of Slavic origin. The name may also originate from the Saxon word "Querkluffertz", meaning cross-veined ore. Quartz is one of the most common minerals found in the Earth's crust. It has a hexagonal crystal structure made of trigonal crystallized silica (silicon dioxide). The typical shape of a Quartz crystal is a six-sided prism that ends in six-sided pyramids.

Quartz is a hard

material with a hardness of 7 on the Mohs scale. Quartz is usually found in metamorphic rocks but are not necessarily the result of the process of metamorphism. Quartz is also a piezoelectric crystal that can create electricity through a process called piezoelectricity when the crystal is put under mechanical stress.

Chemical composition of Quartz: SiO₂

Taken from:
www.allaboutgemstones.com
February 1, 2007



From the President

January is behind us and I hope everyone got a chance to get to Quartzsite and maybe even to the Cloud's show in Laughlin. I made both shows and had a really good time, spent more money than I should have and bought several things I probably didn't need but just couldn't live without. I missed our January meeting but understand that Barbara did an excellent job of filling in for me and that we had an outstanding program on Australian opals. The only problem that I heard of was the lack of refreshments brought in for the break, please try to remember to bring in a few goodies for the club to snack on during the intermission between the business part of the meeting and the program.

I realize that it may be a little early but please start thinking of things for the silent auction in March. We always have such a good auction and a lot of people from other clubs really look forward to being at ours because of



the amount of things that are donated to us. All in all, we have an excellent club and I really appreciate all the help and hard work that our members put into it.

Ray Pearce, VGMS President

COMING EVENTS

Feb 8 - 11 - TUCSON Gem and Mineral Show
Kim Hutsell (619) 294-3914

Feb 16 – 25 - Indio, CA; San Geronio Mineral & Gem Society, Riverside Co. Fair & National Date Festival, Gem & Mineral Building #1, 46-350 Arabia St; 10 to 10 daily

Feb. 24 - FIELD TRIP WITH SDMG
FOSSIL OYSTER BEDS
Call Jim Mellos (858)486-2438

Feb. 9, 10, 11 GEM FAIRE – Santa Monica (for coupon, please see the following website:
members.cox.net/kahnfagan/sc/sc3aa.html)

NOTICE FROM SAN DIEGO COUNTY FAIR GEM AND MINERALS DEPT.

There will be TWO one-day contests this year!

Saturday, June 16 – Bola Tie Contest
Saturday, June 23 – Belt Buckle Contest

To enter, print the contest form from the Fair website, www.sdfair.com/entry, fill it out and bring it with your entry to get into the Fair for free on either of these two days.

Getting to Know You...

Laura Stearn

Laura became a VGMS member in October of 2005, finding out about the club from the Lapidary class and Lois. She saw the newspaper article about our Lapidary class and was very interested in learning silversmithing. Laura thought the class was great and everyone was so generous with their knowledge.

Laura was born in Los Angeles and grew up in Santa Barbara. She went on to college at UC Riverside and majored in Business. After college, she moved to San Diego where she met her husband, Jon. Together they have two great boys,

Dominic, five and Nicolas, four.

After ten years in management and Human Resources, Laura became a stay at home mom. She took a beading class and got hooked. Since then she's taken wire wrapping, Dichroic glass, and PMC classes from one of other VGMS members, Mary Ann Mital.

Laura started making jewelry about four years ago and now has a successful business, called SoCal Jewelry. Doing some craft shows and home parties she stays very busy.

Her husband Jon is a computer engineer for ViaSat in Carlsbad. He shows his support for Laura's business by taking care of the kids during her shows and occasional road trips. He coaches Dominic's T-ball team and they share their love of sports. While Nicolas looks to be a possible rock hound in training.

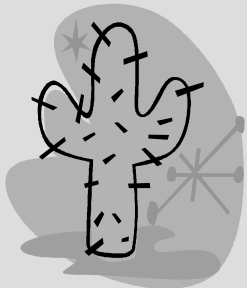
Laura is not only a stay at home mom, business owner, member of a book club and woman's networking group, but she also helps raise money for The Children's Hospital research. Supporting Children's Hospital in their

research became very important to her especially after her son Nicolas had to undergo heart surgery at just four days old.

We thank you Laura, with your busy schedule for not only becoming a new VGMS member but also taking on the "Ways and Means" position!

Please visit Laura's website and check out her creative jewelry; www.socaljewelry.com

Two Newbies to Quartzsite



Drove for four long hours
For the desert gardens flowers
All we saw was dust in the air
Until we found shinning opals everywhere!

Then off to the next row
Only to find Turquoise lower than low.
With the help of a yummy funnel cake
And enough water to fill a lake
We lasted all day at the QIA.

Spent all our money by the Second Day
When we call our husbands what will they say?
Off to the ATM we will go
For our last day we need more Dough!

For our last night we splurged for Denny's
Thank goodness we could still wear our dusty tennies

Morning came, and the end was near
Our last day at Tyson Wells, with no fear
If we can't buy it all today,
There's always next year anyway!

By: Laura Stearn and Dawn Zimmer
2007 Road Trip



February program continued...

political climate of Colombia and its effect on the emerald trade. She recently attended a conference in Columbia. Marisa speaks many languages.

Marisa Zachovay has had a lifelong passion for the jewelry industry. It began as a child, watching her mother work in a jewelry store in her native Canada. Later she trained at the Swiss Art and Design school, graduating as a certified goldsmith. She also is a graduate gemologist of the Gemological Institute of America, a certified gemologist of the American Gem Society, and a member of the Gem & Mineral Council of the Los Angeles County Museum of Natural History.

Marisa has held a variety of positions during her 15 plus years in the industry, including work as a goldsmith, a bench jeweler, and a jewelry designer, along with working in retail sales specializing in luxury watches and fine jewelry. She worked for three years as a technical assistant at the Gubelin Lab in Lucerne, Switzerland and as head of appraisals and as assistant buyer, [diamonds, pearls and estate jewelry] for Edigem LTD., a group of retail stores owned by Gubelin. She also is the author of the article "What is the Price of an Emerald?" published in Extra Lapis no. 2 Emeralds of the World. In 2002 Marisa joined GIA as a gemology instructor.

We will have the pleasure of dining with Marisa at The California Pizza kitchen, 5:30 PM, just prior to the meeting. It will be a self pay dinner. Included on the menu is Thai



Chicken Pizza, Jamaican Jerk Pizza, Mango Tandoori Chicken Pizza, Shanghai Garlic Noodles, Chicken Picatta, Chicken Marsal, Chicken Milanese, BBQ Chicken, Chopped Salad, Steakhouse Chopped Salad. Please contact Cherie Wilson [760.941.7073] if you would like to attend dinner so we can make reservations.

Programs - Carolyn Jungwirth & Margaret LaMontagne

Tips and Tricks – Argentium Silver

Argentium Sterling Silver is a patented and trademarked alloy that is at least 92.5% pure silver, just like traditional sterling silver. What makes it different is that a small amount of germanium replaces some of the copper that is usually the other 7.5% of sterling silver. Peter Johns, a professor of silversmithing at Middlesex University in England, invented Argentium Sterling Silver in 1996.

Argentium Sterling Silver:

- is highly tarnish-resistant.
- has greater conductivity and malleability than traditional sterling silver.
- can be recipitation-hardened using a kitchen oven.
- can be fused and welded.
- does not firescale.

Working with argentium silver is not very different from working with traditional silver, although it is useful to know as much as possible about the differences.

Annealing: Argentium Silver has a melting point

Continued....

Tips and Tricks continued

around 60 degrees lower than traditional sterling silver. Similarly, it has a lower annealing temperature range of 1050 to 1150 degrees Fahrenheit. It glows a pale red when heated to annealing temperature. In practice it is easy to overheat if you are annealing in a lighted room. It is good practice to use a new, clean soldering board for this silver and label it prominently to keep it separate from the surface that are used for other metals, especially copper alloys. This will avoid the possibility of contamination.

Quenching: This silver retains heat longer than traditional sterling silver. **It is important to wait for any visible red heat to disappear from the alloy before quenching.** Wait about 10 seconds to quench a small piece and up to a few minutes to quench a large piece.

Soldering: Because this silver is lower-melting temperature (1410 degrees F), hard solder is not

recommended. Medium easy or extra-easy traditional silver solders are recommended. Germanium-containing Argentium Sterling Silver solders have been developed. This silver can be fragile when it is red-hot. It is also advisable to flux the solder joint only.

Fusing and Welding:

Due to its lower thermal conductivity, it can be fused and welded.

Pickle: To avoid cross-contamination with other alloys, have a separate pickle pot for Argentium Silver.

Polishing, Finishing and Tarnish Resistance: It is good practice to use separate polishing wheels for this silver to avoid contamination from other alloys (residues left on the buff from another metal could be transferred onto the surface of the Argentium Sterling and could cause tarnish. Make sure that any tools you use (grinding wheels, files, sandpaper, etc.) do not apply other metals to the surface of the silver, causing contamination that could tarnish. Ultrasonic solutions should be neutral in pH (pH6 –

pH8). High alkaline liquids attack all sterling alloys.

If you want more information, log in at www.riogrande.com and look for Argentium Sterling Silver. The article on the internet is 12 pages long and has all the information you will need if you would want to work with this silver.

Excerpts from: **Working with Argentium Sterling Silver – Tips and Procedures** by Cynthia Eid. Copies may be made for personal and instructional use with permission from the author and SNAG, the Society of North American Goldsmiths.



Welcome new Members!

Russ & Carrie Barber
Robert Covert,
Joao Da Silva & Mary Jo Poole & Oxala, Nick & Rosie Barnett and Family Lynn Ellis, Margaret LaMontagne, Lynn LePage, Jaime Marroquin, Angie Smith, Spencer Twitty, "Red" and Becky Zwissler.

**The Rockorder
Bulletin of Vista Gem & Mineral Society
P.O. Box 1641
Vista, CA 92085-1641**

Membership in this Society is open to anyone interested in mineralogy, gemology, and related educational subjects. Regular meetings are held

The **3rd Thursday** of each month except July and August at

**Gloria McClellan (Senior) Center
1400 Vale Terrace
Brenge Terrace Park
Vista, CA
7:30 P.M.**

Please send exchange Bulletins to:
Cherie Wilson
4904 Amador Dr.
Oceanside, CA 92056-4969

**Vista Gem & Mineral Society
Officers for 2007**

- PresidentRay Pearce 726-7570
- 1st Vice President Barbara Gelman
- 2nd Vice President..... Cherie Wilson 941-7073
- TreasurerMary Anne Mital 758-4599
- CFMS Rep Fred Wilson 433-8446
- County Council Rep Ray Pearce
- Secretary Debbie George,

Committee Chairpeople

- Programs Carolyn Jungwirth
- PublicityLois Harr 724-0395
- Bulletin Co-editor.....Dawn Zimmer
- Bulletin Co-editorAleta Dirdo 726-4486
- Lapidary SchoolFred Wilson, Ray Pearce
- Educational SvcsCarolyn Elliott 295-6505
- SunshineCarol Pelly 630-5674
- Field Trips Ray Pearce 726-7570
- Field Trips Monte Hazen 940-0379
- Hospitality Ruby & Ernie Schmidt 724-4737
- Hospitality Sue Wilson 433-8446
- Hospitality Ellie Page
- Membership Sharron Smith 724-8673
- Finance Director Calvin North 433-9527
- Ways & Means Laura Stearn

Application for Membership Vista Gem & Mineral Society

All information for club use only

Date _____

Last Name First Nickname

Spouse and Children

Street Address City Zip Phone

E-mail address

Are you willing to take part in Committee work? _____

Please list any special talents and abilities _____

Dues (includes bulletin):	Family (husband, wife & children under 18)	\$25.00 year
	Couple	\$22.00
	Single member	\$12.00

Please make checks payable to Vista Gem & Mineral Society
P.O. Box 1641, Vista, CA 92083-4599
For more information phone (760) 724-0395 or (760) 758-4599

VISTA GEM & MINERAL SOCIETY
P.O. BOX 1641
VISTA, CA 92085-1641



Feb 15 – VGMS meeting

Feb 16 – Indio Date Festival

Feb 25 – Field trip to Fossil
Oysters

