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Mascot of the Arlington Gem and Mineral Club
is an affiliate of



**South Central Federation
of Mineral Societies**



**American Federation
of Mineralogical Societies**

UPCOMING PROGRAMS

- JUNE** - Dr. Richards
- JULY** - Randy Smith
- AUGUST** - Show meeting



Rockhound Club News of the Arlington Gem and Mineral Club
1408 Gibbins Road, Arlington, Texas 76011

Worth the Trip: Houston Museum of Natural Science. The Cullen Hall of Gems and Minerals, part of the museum's permanent collection, houses an extraordinary group of more than 750 beautifully crystallized mineral specimens. Located in a dimly lit room, the display cases are lit from within via fiber-optics to provide an excellent view of the specimens. Many cases are located so that you can walk around them and view the specimen from all sides. We took photos with our digital camera, which turned out quite well. One of the most beautiful specimens is a dinner-plate sized, 2,765 carat boulder opal that shows every color of the spectrum, which is extremely rare. The gemmy rhodichrosite specimens, from the Sweet Home Mine in Colorado, look like raspberry sherbet. Tourmaline crystals the size of your forearm will make you want to linger. The 1,869 carat emerald crystal, the largest ever recovered in North America, will make you green with envy.

In addition, the "vault" contains an exquisite collection of jewelry set with unbelievably large stones that will dazzle the eye. Many of the necklaces have a stone suspended from the clasp to counter-weight the stones in the front!

The museum is located at One Hermann

Circle Drive, in Hermann Park. Their phone number is (713) 639-4629, and their website is www.hmns.org. It is well worth the trip!
Emie Stewart



Club Notes *by Dale Miller, member*

June Program

Our June program will be Dr. Richards from TCU. He will present a program on geothermal energy.

July Program

July's program will be Randy Smith. He will be telling about his experiences on buying Amethyst geodes and Emeralds on his trip to Brazil.

August Program

August is the Show Meeting.

Just a Thought from your President for June

by Rick Litsinger, President AGMC

InterGem

Once again the volunteer members who assisted in the set up of the International Gem and Jewelry Show shined in their activities at our booth at the show. Most of the activities represented the classes available at the club. We had wire work, chain making, cab cutting, silversmithing, faceted stones, egg decorating and several speciality jewelry designers as well.

Annual Show

Show time is only three months away and preparations for the South Central Federation conference, Rolling Rock annual meeting and our 50th Anniversary show are well underway. Dealer chair, Rick Kupke, reported that we are half way to the number of dealers and tables we need for the show. We need donations for the silent auction with profits shared with the SCF. The Speeds have donated another great Grand Prize which is a beautiful jade carving much like last years that they donated as well. Grady Schultz donated a new Genie capping machine and it will be raffled off at the show. Chances are \$5.00 each or 5 for \$20.00 and can be purchased now through the end of the show. Alex Gallia has donated three bottles of black opal and a replica of one of the famous

diamonds of the world. Chances are \$1.00 per item. These raffles are something new suggested by Joyce Speed to add a little extra cash to the club. These items are on display at the club. A big THANK YOU to Delbert and Joyce, Grady and Alex.

Grounds Upkeep

There are a few things we need to do to the club facilities to spruce it up for our 50th anniversary and the meetings and other activities we will be hosting at the club. We need volunteers to help paint the East and South sides of the club building where graffiti has been painted over. It has also been suggested that the carpet tiles in the "break" area be replaced with peal and stick tiles. This was presented to the last executive board but there was not a quorum present to vote. It will be presented to the May Executive board and if approved be presented to the general membership at the June meeting.

Fish Fry

Just a reminder that June 23 is the fish/shrimp dinner. Frank Krystinik has once again graciously donated the fish and shrimp for the first 40 members. Presale tickets will be available at the June meet-

ing at \$7.50 per person. We will eat at 5 PM.

Volunteers needed

So, three months and counting. Volunteer lists will be posted and I encourage each and every member to consider what you can do to help your club and the show.



June Class Schedule

by Pat Vaughan

Chain making* OPEN

2nd Saturday from 9 AM-Noon

Instructor: Mary Owen

Faceting* OPEN

Wednesdays 7-9 PM

Instructor: Frank Krystinik/Mike Knuth

Glass Fusing & Enameling FULL

Saturday, April 28 9 AM-1 PM

Sunday, May 6, 20 Noon - 4 PM

Instructor: Becky Downey

Patina for Silver & Base Metals OPEN

Saturday, May 19 1-3 PM

Instructor: Karen Rhodes

Silversmithing

Instructors: Sam Howeth/Rick Litsinger

Silversmithing Lab Open

3rd Saturdays from 8 AM - Noon

Level 101 **FULL**

Mondays 7-10 PM

Level 201 **OPEN**

Wednesday, 7-10 PM

Open to those that have completed 103

Level 301 **OPEN**

Fridays 7-10 PM

Open to those that have completed 201

Small Gem Carving **OPEN**

Saturday, May 5, 12, 19, 26 9 AM-Noon

Instructor: Mary LaVigne

* These classes are open to the novice as well as experienced members.

If you have any suggestions for classes or would like to teach a class pertaining to our hobby please contact Pat Vaughan 1st VP in charge of classes.

Please check class board for sign-up sheets.

Note: All classes are \$3.00 per class hour.

JUNE 2007

AGMC Classes and Meeting Schedule

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 Silversmithing 301 Open 7 - 10 pm	2 ** Lab Open 9am-Noon ~ Juniors 9a - Noon ~ Small Gem Carving Open 9a - Noon ~ Cab Class Open 1 - 4 pm
3	4 Silversmithing 101 FULL 7 - 10 pm	5 **Regular Meeting** 7:30 PM	6 Faceting Open 7-9 pm ~ Silversmithing 201 Open 7 - 10 pm	7 ** Lab Open	8 Silversmithing 301 Open 7 - 10 pm	9 ** Lab Open 9am-Noon ~ Small Gem Carving Open 9am-Noon ~ **Chainmaking Open 9 am - noon ~ Freeform Wire Wrapping Open 10a - 4p
10 Glass Fusing & Enameling FULL Noon - 4p	11 Silversmithing 101 FULL 7 - 10 pm	12	13 Faceting Open 7-9 pm ~ Silversmithing 201 Open 7 - 10 pm	14 ** Lab Open	15 Silversmithing 301 Open 7 - 10 pm **DEADLINE FOR JULY NEWSLETTER	16 Silversmithing Lab Open 8a - Noon ~ ** Lab Open 9am-Noon ~ Small Gem Carving Open 9am-Noon
17	18 Silversmithing 101 FULL 7 - 10 pm	19 Free Tuesday 7-9p for Members	20 Faceting Open 7-9 pm ~ Silversmithing 201 Open 7 - 10 pm	21 ** Lab Open	22 Silversmithing 301 Open 7 - 10 pm	23 ** Lab Open 9am-Noon ~ Glass Fusing & Enameling FULL Noon - 4p ~ Fish/Shrimp dinner 5 pm \$7.50 (First 40 Members)
24	25 Silversmithing 101 FULL 7 - 10 pm	26	27 Faceting Open 7-9 pm ~ Silversmithing 201 Open 7 - 10 pm	28 ** Lab Open	29 Silversmithing 301 Open 7 - 10 pm	30 ** Lab Open 9am-Noon

Worth the Read: Shared Images: The Innovative Jewelry of Yazzie Johnson & Gail Bird.

This book is published by the Heard Museum in Phoenix, Arizona in conjunction with its exhibit of Yazzie Johnson's and Gail Bird's jewelry, on view through June 7. Johnson and Bird, both Native Americans (Navajo and Santo Domingo/Laguna, respectively), are recognized as some of the most innovative contemporary jewelers of their generation. Their use of non-traditional stones, such as jasper and agate, along with unusual combinations of materials and designs, elevates their work to the level of fine art. Much of their work is inspired by prehistoric and historic Southwest petroglyphs. Shared Images presents over three decades of

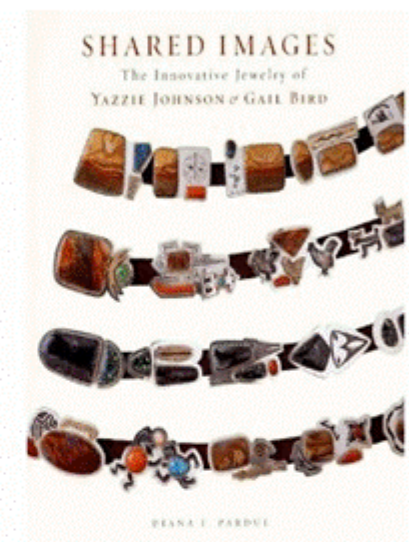
their work, including over forty thematic belts that have won multiple awards at Santa Fe's annual Indian Arts Market.

The 185-page book contains over 140 dazzling full-color photographs of their work, captioned with information about the stones and the images used in each piece. The book describes and shows one of the trademarks of their work, the use of the Hopi overlay technique—or, as Johnson and Bird refer to it, underlay, because it is located on the back side of the piece. These “underlays” are often detailed cut-outs based on petroglyphs that represent the theme of a particular piece.

The book is available through Amazon.com or the Heard Museum's

website, www.heard.org, which also has photos of their work. For anyone interested in contemporary Southwestern jewelry, this book is well worth the read (and study of the photos)!

Emie Stewart



AGMC Hound's Tale Advertising Rates

Size	Dimensions	Members		Non-members	
		6 months	1 month	6 months	1 month
Full page	9.5" x 7.75"	\$120	\$25	\$240	\$50
Half page (v)	9.5" x 3.75"	\$72	\$15	\$144	\$30
Half page (h)	4.625" x 7.75"	\$72	\$15	\$144	\$30
Qtr page (v)	4.625" x 3.75"	\$48	\$10	\$96	\$20
Qtr page (h)	2.375" x 7.75"	\$48	\$10	\$96	\$20
Biz Card (v)	2" x 3.5"	\$30	\$6.25	\$60	\$12.50
Biz Card (h)	3.5" x 2"	\$30	\$6.25	\$60	\$12.50

All ads are subject to approval by the AGMC executive board. Layout of the ad is included in price as long as all ad content is included with the initial request. Digital artwork must be included with the initial request or the ad will be created as text only. Ad requests must be received by the 2nd Thursday of each month for the following month's newsletter by email at: editor@agemclub.com. Make payable to **Arlington Gem & Mineral Club**. Send payments to:

Arlington Gem & Mineral Club
P.O. Box 986
Arlington, TX 76004

For any questions regarding layout, please contact Paula Truitt at: editor@agemclub.com.

For any questions regarding appropriate content, please contact Rick Lisinger at: Rockdoctor76016@aol.com.



In chemistry and mineralogy, a **crystal** is a solid in which the constituent atoms, molecules, or ions are packed in a regularly ordered, repeating pattern extending in all three spatial dimensions.

The word *crystals* originates from the Greek word "krystallos" meaning *clear ice*, and once referred particularly to quartz, rock crystal.

Most metals encountered in everyday life are polycrystals. Crystals are often symmetrically intergrown to form crystal twins. Which crystal structure the fluid will form depends on the chemistry of the fluid, the conditions under which it is being solidified, and also on the ambient pressure. The process of forming a crystalline structure is often referred to as **crystallization**.

While the cooling process usually results in the generation of a crystalline material, under certain conditions, the fluid may be frozen in a non-crystalline state. In most cases, this involves cooling the fluid so rapidly that atoms cannot travel to their lattice sites before they lose mobility. A non-crystalline material, which has no long-range order, is called an amorphous, vitreous, or glassy material. It is also often

Crystals

referred to as an amorphous solid, although there are distinct differences between solids and glasses: most notably, the process of forming a glass does not release the latent heat of fusion. For this thermodynamic reason, many scientists consider glassy materials to be viscous liquids rather than solids, although this is a controversial topic; see the entry on glass for more details. Crystalline structures occur in all classes of materials, with all types of chemical bonds. Almost all metal exists in a polycrystalline state; amorphous or single-crystal metals must be produced synthetically, often with great difficulty. Ionically bonded crystals can form upon solidification of salts, either from a molten fluid or when it condenses from a solution. Covalently bonded crystals are also very common, notable examples being diamond, silica, and graphite. Polymer materials generally will form crystalline regions, but the lengths of the molecules usually prevents complete crystallization. Weak Van der Waals forces can also play a role in a crystal structure; for example, this type of bonding loosely holds together the hexagonal-patterned sheets in graphite.

Most crystalline materials have a variety of crystallographic defects. The types and structures of these defects can have a profound effect on the properties of the materials.

Other meanings and characteristics

While the term "crystal" has a precise meaning within materials science and solid-state physics, colloquially "crystal" refers to solid objects that exhibit well-defined and often pleasing geometric shapes. In this sense of the word, many types of crystals are found in nature. The shape of these crystals is dependent on the types of molecular bonds between the atoms to determine the structure, as well as on the conditions under which they formed. Snowflakes, diamonds, and common salt are common examples of crystals.

Some crystalline materials may exhibit special electrical properties such as the ferroelectric effect or the piezoelectric effect. Additionally, light passing through a crystal is often refracted or bent in different directions, producing an array of colors; crystal optics is the study of these effects. In periodic dielectric structures a range of unique optical properties can be expected as described in photonic crystals.

Crystallography is the scientific study of crystals and crystal formation.

Crystalline rocks

Inorganic matter, if free to take that physical state in which it is most stable, always tends to crystallize. Crystalline rock

masses have consolidated from solution or from fusion. The vast majority of igneous rocks belong to this group and the degree of perfection in which they have attained the crystalline state depends primarily on the conditions under which they solidified. Such rocks as granite, which have cooled very slowly and under great pressures, have completely crystallized, but many lavas were poured out at the surface and cooled very rapidly; in this latter group a small amount

of non-crystalline or glassy matter is frequent. Other crystalline rocks such as rock salt, gypsum and anhydrite have been deposited from solution in water, mostly owing to evaporation on exposure to the air. Still another group, which includes the marbles, mica-schists and quartzites, are re-crystallized, that is to say, they were at first fragmental rocks, like limestone, clay and sandstone and have never been in a molten condition nor entirely in

solution. Certain agencies however, acting on them, have effaced their primitive structures, and induced crystallization. This is a kind of metamorphism.

From Wikipedia, the free encyclopedia

The Ten Commandments of Mineral Collecting

- 1. Thou shall not touch thy neighbors minerals unless he places them in thy hands.
- 2. Thou shall not test the strength of crystals by pushing, biting, or hitting.
- 3. Thou shall not drop thy neighbor's fossils, for many do not bounce properly.
- 4. Thou shall not place they neighbor's specimens in thine own pocket.
- 5. Thou shall not test thy neighbor's agate for hardness by rubbing them together.
- 6. Thou shall not argue the name of a mineral too violently; sometimes thou could be wrong.
- 7. Thou shall not climb above they neighbor's head when on a field trip, least thou are willing to spend the rest of the day digging him out.
- 8. Thou shalt protect thine own eyes, hands, and feet so they can enjoy many more field trips.
- 9. Thou shall not encroach upon thy neighbor's diggings lest his hammer be dropped upon thee.
- 10. Thou shall neither complain about, nor denounce the club officers under the penalty of being elected one thyself.

From the Penn Minerals Web Page via Rock & Rose July '98

HELP!! BLANK SPOTS HELP!!

Help me fill up those blank spots!

I need your input. I need your help to make this a great newsletter. Does anyone have anything they want to share with the club? We need rockhounding tips, tricks, tidbits, and article reviews that you think others in the club might enjoy. Got any good club pictures. Send them to me with captions or narratives. I'll try my best to get them posted for everyone to enjoy.

June 2007 Show Calendar

Date	Place	Name	Phone
Jun 5 - 10	Roswell, NM	AFMS & RMFMS Hosted by Chaparral Rockhounds	505-622-5679
Jun 15 - 17	Carlsbad, NM	Roadrunner Gem & Mineral Club	505-885-5509
Jun 15 - 17	Lancaster, CA	CFMS Hosted by Palmdale Gem & Mineral Society	661-916-9479

Club Mission:

The objectives of the Arlington Gem and Mineral Club shall be to educate the public in the study of the earth sciences, lapidary arts, designer jewelry and all related fields.

Yearly Enrollment recommended donation:

Initial Adult Enrollment	\$35.00 (includes \$5.00 badge)
Adult Renewals	\$30.00 per calendar year
Junior Members	\$3.50 per calendar year

Activities take place at:
Arlington Gem and Mineral Club
1408 Gibbins Road, Arlington, TX 76011
Phone 817-277-2286

Mailing Address:
P.O. Box 986
Arlington, TX 76004

E-mail Address:
editor@agemclub.com or
webmaster@agemclub.com

World Wide Web Home Page:
<http://www.agemclub.com>

Business Meeting on 1st Tuesday at 7:30 PM
Board Meeting on the last Tuesday of each
month at 7 PM.

The Hound's Tale

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Ads and Articles

Lapidary-related ads and articles from Members of AGMC are welcomed. They will be placed on a space-available basis, first in first out. Any articles may be edited for space and content. Non-enrollees ads are accepted after student ads. You must include your name and contact information.

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