

**THE 777th MEETING
OF
THE MINERALOGICAL SOCIETY
OF SOUTHERN CALIFORNIA**

**7:30 p.m., Friday November 8, 2002
Building E, Room 220
Pasadena City College
Pasadena, California**

**Featuring a Talk by
Dr. James E. Shigley**

on

Gem-Quality Red Beryl from Utah

NOVEMBER PROGRAM

The speaker for the November MSSC meeting will be Dr. James E. Shigley, Director of Research, Gemological Institute of America, Carlsbad, California. The title of his talk will be "Gem-Quality Red Beryl from Utah." The only commercial source of gem-quality beryl is the well-known occurrence in the Wah Wah Mountains of Utah. In the past decade, major efforts have been made to understand the unique geological conditions that produced this deposit and evaluate its potential for further production of this rare American gemstone. Dr. Shigley will bring us up to date on this fascinating mineral occurrence.

Dr. James E. Shigley is director of research at the Gemological Institute of America in Carlsbad, California. Prior to joining GIA in 1982, Dr. Shigley studied geology as an undergraduate at the University of California, Berkeley, and later received his doctorate in geology from Stanford University. He is the author of various published articles on diamonds and other gemstones, and is a well-known speaker on gemological topics to both professional and general audiences. Dr. Shigley directs GIA's research activities that include the study of natural, synthetic, and treated diamonds, colored stones and other pearls; and the evaluation of various characterization techniques for gem identification.

ABOUT GIA

An independent, nonprofit educational and research organization headquartered in Southern California, GIA is recognized as the world's foremost authority in the grading and identification of diamonds, colored stones, and pearls. Established in

1931, GIA has translated its expert knowledge into the most respected gemological education available. In 1953, the Institute created the international diamond grading system, which is recognized today by virtually every professional jeweler in the world. Through research, education, and gemological laboratory services, the Institute is dedicated to protecting the interests of both the jewelry industry and the consumer alike.

LEADERS WANTED

Dave Smith, President

This time of year marks the time for elections to select our Leaders for next year. This year we will be selecting four Directors for the 2003-2004 term. As in every year we will also elect the four officers: President, Vice President, Secretary, and Treasurer. Tradition has held that each officer stands for two terms, and this year we have all served our two terms.

We would like all members to know that nominations are accepted from the floor during meetings in November. If you would like to participate more, or if you know someone who would make a good officer, bring it up at the meeting.

The President, Vice President and Secretary should be persons who attend meetings regularly because their primary duties are to lead the meeting, while the Secretary records the meeting and submits the minutes to be published in the Bulletin. The Treasurer manages the Society funds, files our Tax forms and tracks the membership to determine our Federation Dues.

If an officer position seems too much to take up at this time, there are several committee positions available as listed in the back of the Bulletin. If you are interested in any of those positions, speak to any Board member.

SOUTHERN CALIFORNIA GEM AND MINERAL SHOW

The MSSC and the Los Angeles County Natural History Museum have teamed to present the 2002 Southern California Gem and Mineral Show. It will be held on December 8th and 9th at the Natural History Museum in Exposition Park. Plan to be there. Plan to participate. We need volunteers to set up, man the MSSC booth, help make the show run smoothly, and tear down after the show. Please contact Dave Smith, Ph. 818-908-3071, e-mail dave_topaz@mindspring.com. Look for more information in the December Bulletin.



HEY!
Are YOU ready
for our
BIG SHOW?

VOLUNTEERS NEEDED

Maybe you are ready
for the show but the show will not
go on without your help.

Volunteers are needed.
This show is run by the MSSC,
for the MSSC.

Volunteers are needed for setup on Thursday (Dec 5)
and Friday (Dec 6), during the show (Dec 7 & 8),
as well as during teardown Sunday night.

Contact:
Dave Smith, 818-908-3071, dave_topaz@yahoo.com
Carolyn Seitz, msscshow2002@mindspring.com

Original "Hey!" artwork for 1966 show by Bob Brewer

SULFAMIC ACID



A USEFUL REAGENT FOR CARBONATES

Charlie Crutchfield

All rockhounds routinely use Hydrochloric Acid [HCl, Muriatic, or Pool acid] to test for the presence of carbonate minerals. We also use it to dissolve carbonate deposits from the surface of non-carbonate acid-resistant minerals, even the bricks in our patios. Hydrochloric acid is very well known, in common use, easily available, and quite cheap. However, Hydrochloric acid does have several pronounced liabilities. It is a liquid, thus it will eventually be spilled and it will attack most matter it contacts - desk tops, most metals, clothing, paper, etc. It is also quite volatile,

unless the container is completely and firmly sealed the acid fumes will escape and cause corrosion in the vicinity. The fumes of the concentrated acid are also extremely irritating to the eyes and nose. [N.B. If the concentrated acid is diluted with an equal volume of water, it is nearly odorless.]

In addition Lead, Silver, and Mercurous [Hg₂] chloride salts are essentially insoluble in water, which can cause confusion and error in identification. For example, I once applied a drop of HCl to a fragment of mineral that I suspected was Cerussite. One small bubble was quickly formed, but a white coating of insoluble lead chloride was instantly formed over the entire fragment and only after about a minute did another bubble slowly form.

What would be desirable, especially for field testing is a strong acid that is a stable solid, soluble in water, odorless, whose salts are all water soluble. Citric and Tartaric acids are not satisfactory as they are too weak, their reaction with carbonates, e.g., Calcite, is slow.

In my opinion and experience Sulfamic Acid is an excellent convenient replacement for hydrochloric acid. Especially in a field kit. It is a white solid, non-hygroscopic, very soluble in water with no odor or acidic vapors at all. The dry powder is completely stable. Dissolved in water Sulfamic is a strong acid, comparable to Hydrochloric or Nitric acids. A water solution is also stable for months at normal temperatures. But eventually, especially when heated, the Sulfamic acid solution decomposes to ammonium bisulfate. All the salts of Sulfamic acid are very soluble in water [except basic mercury sulfamate]. The solution is strongly acidic thus if spilled it will corrode metals, desk tops, clothing, paper, etc., as will any strong acid. I have found it convenient to keep the dry acid in a sealed plastic or glass container, and to make up a water solution only when I need it. Sometimes it is easier to just put a few drops of water on the test specimen or a fragment, add a pinch or a few crystals of Sulfamic acid and examine for carbon dioxide "fizzing". When finished, just wash the residue down the drain.

Is Sulfamic Acid hazardous to the health? Yes, all strong acids are to some extent hazardous, but Sulfamic is a lesser hazard than Hydrochloric acid. I will send a MSDS to anyone interested. Sulfamic acid does cost more than Hydrochloric acid, about \$17.00 per pound of Technical grade powder Sulfamic Acid. But a pound would probably last the entire MSSC membership for a lifetime.

October MSSC Minutes

Our 776th meeting was called to order by President Dave Smith at 7:40 pm. Attendance was good. Dave then turned to floor of to Bob Housley who introduced Garth Bricker, our evenings speaker. Before beginning his talk Garth took a few minutes to tell us about the "Fall Festival of Gems" sponsored by the Fallbrook Gem and Mineral Society. It serves to inaugurate their new permanent meeting place and mineral museum site. Garth is also curator of the museum. Following his talk Garth sold raffle tickets on some fabulous gem and mineral prizes as part of the

Festival.

Garth's talk itself consisted of two parts. The first was on the Stewart Mine, and the second on the White Queen Mine. Both presented fascinating pictorial histories of the respective mines starting from the early 1960s when most mines in the area were idle and neglected and one could come and collect at will. Garth showed the subsequent sequence of developments and operators at the Stewart starting in the early 1970s, interspersed with pictures of outstanding gems produced during different periods of time. He mentioned that the Stewart Dike is an amazing 35 meters thick. He also included pictures of many of the rare and unusual micro minerals produced by the Stewart including namibite and clinobisvanite. He concluded this section with a really striking picture of yellow stewardite crystals in a cavity lined with purple purpurite. In contrast the White Queen Mine remained in the Dawson family during this period of activity. Because his brother-in-law was one of the owners Garth was able to periodically participate in the actual mining there. He showed underground photographs of a pocket containing 6 foot long clear quartz crystals and showed striking pictures of 4 foot long clay pseudomorphs after kunzite. He also showed pictures of some outstanding morganites and aquamarines produced. Unfortunately although this mine could still be an important producer ownership has reverted to the Pala Indians who will not let anyone work it.

Following the program Dave Smith asked us to think about nominations for 2003 officers to be formally proposed at the November meeting. He will not be available to continue as an officer. According to the Bylaws past president Bob Housley is chair of the nominating committee. He would more than welcome any help either by volunteering to fill an office or to serve on the committee.

Carolyn Seitz reported on the status of the 2002 Show. Publicity is going well and everyone including dealers and museum personal are enthusiastic. Show flyers in the form of postcards were handed out and Show posters were available for sale. Both featured an outstanding 10 inch pink tourmaline from the Cryo Genie Mine.

In an announcement from the floor Ann Meister mentioned that one of our former members, Gene Singer, has written an e-book on the geology of the Imperial Valley region. It will be sold at the MSSC booth during the Show for \$15 with half of the proceeds going to the club.

Door prizes were distributed and the meeting was adjourned by Dave at 9 pm. Informal discussions continued over cookies and hot drinks.

CALENDAR OF EVENTS

NOVEMBER

2-3 Anaheim CA The American Opal Society
Quality Hotel Maingate, 616 Convention Way
Hours: Sat. 10-6, Sun. 10-5

Robert Dixon (714) 534-5063
Jay Carey (714) 525-7635

2-3 Cayucos CA San Luis Obispo Gem & Mineral Club
44th Cayucos Gem, Jewelry & Mineral Show
Cayucos Veteran's Hall at the Pier
Hours: Sat. 10-6, Sun. 10-5
(805) 772-7160 or (805) 772-2321

2-3 Oxnard CA Oxnard Gem & Mineral Society
800 Hobson Way, Oxnard, CA
Hours: Sat. 9-5, Sun. 9-4
Show Chair: Anne Lewis (805) 485-6356
Web: <http://www.ogms.net>
E-mail: webmaster@ogms.net

2-3 Ridgecrest CA Indian Wells Gem & Mineral Society
Desert Empire Fairgrounds, Mesquite Hall 520 S. Richmond Road
Hours: Sat 9-5 Sun 9-4
field Trips leave at 9:30
John De Rosa (760) 375-7905

2-3 San Diego, CA Palomar Gem & Mineral Club
Al Bahr Shrine Center 5440 Kearny Mesa Road
Hours: 9-6 both days
Don Parsley (760) 745-6181

16-17 Palmdale CA Palmdale Gem & Mineral Club
"Rock n' Gems"
California Elks Lodge, 2705 E. Ave. Q
Hours: 9-5 both days
Gail Becker
E-mail: Gail1010becker@aol.com

23-24 Victorville, CA Victorville Gem & Mineral Club's 27th. Annual Show, San Bernardino County Fairgrounds, 14800 7th. Street
Hours: Sat. 9-5; Sun. 9-4
Gil Gilbert (760) 868-6900

30 - Dec. 1 Barstow, CA Mojave Desert Gem & Mineral Society
Barstow Community Center, 841 South Barstow Road
Hours: 10 – 5 both days
Bob Depue (760) 255-1030

DECEMBER

8-9 Los Angeles CA Mineralogical Society of Southern California and the Los Angeles County Museum of Natural History

“Southern California Gem and Mineral Show”, Los Angeles County Natural History Museum, Exposition Park

Hours 10 to 5 Both days

Carolyn Seitz; e-mail msscshow2002@mindspring.com

Web site: www.mineralsocal.org



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