



Bulletin of the Mineralogical Society of Southern California

Volume 86 Number 3 March, 2013

The 895th meeting of the Mineralogical Society of Southern California

March 8th, 2013 at 7:30 pm

**Pasadena City College
Geology Department, E-Building, Room 220
1570 E Colorado Blvd., Pasadena**

Program: “Mines of Joshua Tree National Park”

A Gentle Reminder:

- ***If you don't pay your 2013 Membership Dues by March 31, ..This will be your last bulletin!***

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Remember: If you change your email or street address, you must let the MSSC Editor and Treasurer know or we cannot guarantee receipt of future Bulletins!

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About the Program: "Mines of Joshua Tree National Park" by D. D. Trent

Dee Trent received his undergraduate degree in geology from the University of Southern California and his Ph.D. from the University of Arizona. His work as an oil company geologist took him to California's San Joaquin Valley, Utah, Arizona and Alaska. Now semi-retired, he taught geology, physical oceanography and physics for 28 years at Citrus College, Glendora, CA, part of which time he was also an Adjunct Professor at USC teaching Field Geology. He has done field research on glaciers in Alaska and California, and in recent years has become involved in monitoring the remediation of abandoned mines, which has taken him to mines in Montana, Nevada, California and Germany. He is author of *Mines and Geology of the Randsburg Area: An Historical Gem of the Mojave Desert*, a co-author of a widely used college textbook, *Geology and the Environment*, now in its 7th edition, and co-author of *Joshua Tree National Park Geology*.

THE MINES OF THE JOSHUA TREE NATIONAL PARK REGION

Mining is an integral part of the history of the of Joshua Tree National Park. There are 288 abandoned mining sites in Joshua Tree National Park with 747 mine openings. In the Pinto Mountains, immediately outside the Park, are two additional mining districts with numerous abandoned mines. As recently as 2000, there were eight claimants having mining claims in Park: the sites include mill and mine sites, and gravel pits.

When did mining activity begin? How much did they produce? What were the miners targeting? How many mining districts were active? When was the peak of mining activity? What is the geologic age of the deposits? What were the mineral associations in the mines? Is there any activity today?

The answers to these and other questions will be given at the February 22nd meeting of the Southern California Mineral Society at Pasadena City College.

From the Editor:

I'm still looking for input from our members. Please think hard on what you can contribute to help make our bulletin interesting for everyone. Please see my list of possibilities in the Jan Bulletin for inspiration.

MEANDERINGS FROM THE PRESIDENT: Ann Meister

The Pacific Micromount Conference was an eminent success. We had a great turn out - about 40 attendees from across the USA (NJ, MS, WA, AZ and ?) and two from France. This assemblage included nine avid enthusiasts who have minerals named for them (see picture elsewhere in this Bulletin). We also had five attendees who have been named to the Micromounters Hall of Fame: John Ebner, George Favreau, Joe Marty, Dick Thomssen, and Sugar White. What a prestigious group with which to be rubbing elbows!

Bob Housley has been the Chairman for umpteen years and is stepping down to give Al Wilkins an opportunity to lead the group. On behalf of MSSC and PMC, I want to thank Bob for his years of service. He's done an outstanding job. Thanks also to the continuing work of Gene Reynolds, Garth and Janice Bricker, Sugar White and Al Wilkins. And I'll pat myself on the back for providing food service.

Why do we care about so many new minerals? Usually they are merely microscopic blebs or flakes, or with luck nano-crystals, on or in another microscopic specimen where the process of studying it to obtain a description may destroy much of the original material, and perhaps the only example of this new mineral. When I asked several scientists and mineral aficionados, they were somewhat aghast that this question would even be asked. I got answers, even though I stained my reputation by asking such an impertinent question. Pure science - scientific curiosity - was the number one reason. Then considering funding and other economic factors, the potential for industrial or other use was mentioned - not necessarily finding economic quantities of the new speck, but knowing that the structure - the crystal lattice - exists in nature may make it easier to figure out how to make it in a lab. During one of the talks at PMC, it was mentioned that the structure of one of the new minerals was considered, then rejected, as a possibility for improving lithium-ion batteries.

Curiously, two additional examples presented themselves. I received a newsletter from ASM International (American Society for Metals) that the February speaker's topic is "Metallic Microlattices" for

creating light-weight materials that have extraordinary strength and stiffness. Then our MSSC speaker, Dr Paul Steinhardt, was looking in nature for a substance that had been made in a laboratory. The quasicrystal icosahedrite was found in Russia and was accepted as a new mineral by the IMA (International Mineralogical Association) in 2010. Though icosahedrite may have no current application, other quasicrystals are used in surgical instruments, LED lights and non-stick frying pans. Dr Steinhardt also mentioned in a discussion after his talk that he was working with photonic quasicrystals for efficiently trapping and manipulating light, which could lead to faster computers.

MINUTES of the February 22nd, 2013 MSSC Meeting:

The 894th meeting of the Mineralogical Society of Southern California was held on Friday, February 22, 2013, at Pasadena City College, Pasadena, CA. President Ann Meister brought the meeting to order at 7:35pm.

Regular Business:

Welcome to students attending tonight's meeting.

Minutes of January 19, 2013 meeting were approved by motion (George Rossman), seconded (Robert Housley and Angie Guzman) and carried by the membership.

Announcements:

- Thanks to those who contributed to the silent auction at the Banquet held January 19, 2013;
- Membership dues are now due. If dues are not paid, the last bulletin will be the March 2013 issue. Membership applications are available up front for anyone who would like to sign up, see Jim Kusley, Treasurer;
- Pacific Micromount Conference was a success. Bob Housley reported that the conference is becoming more well-known as there were two attendees from France, and from this country, people from Utah, Washington State and Mississippi. Sadly, not many of our own members attended this conference. Even if you don't collect microminerals, the talks are interesting, the pictures are fantastic and the food is good, so think about coming. [Micromounts are crystals appreciated using an optical aid namely a microscope, versus those visible through the naked eye.] The conference is also a place where new minerals are presented and discussed. At this conference, there were nine (9) people that discovered and had new minerals named after them! Finally, Tony Kampf, Los Angeles County's Natural History Museum curator emeritus, also spoke this year at the conference;
- Bruce Carter announced that Linda and Fred Elsnau will be guest speakers at a MSSC meeting later this year giving a talk illustrating crystallography;
- Information submissions for the Bulletin need to be submitted to Linda Elsnau by February 27th;
- Our next meeting will be March 8, 2013 here at Pasadena City College;
- Monrovia Rockhounds is having their annual Gem and Mineral Show March 2-3, 2013 at the Los Angeles County Arboretum in Arcadia;
- Someone is selling two faceting machines. (Contact Ann Meister for more information);
- GIA in Carlsbad 11th Annual Sinkankas Symposium April 6, 2013, topic will be rubies and will have as a featured speaker George Rossman, MSSC Vice President, who will speak on why rubies are red. The symposium is sponsored by San Diego Gem and Mineral, cost is \$95 for the day and you must register early because only 140 people will be able to attend;
- Tucson show, if you have not attended before, you must go to see for yourself! Angie said she went, it was huge, awesome and beautiful;
- Linda Elsnau reports that, since the new format for the Bulletin, we have switched 18 people from snail mail to e-mail. Copies of January and February bulletins are available up at the front for those who are not yet members for your interest and enjoyment;
- Bruce Carter announced that next MSSC meeting's speaker will be D. Trent who will speak on the Mines of Joshua Tree (March 8, 2013).

The meeting was turned over to Bruce Carter who introduced our speaker for the evening, Dr. Paul Steinhardt, the Albert Einstein Professor of Physics at Princeton University. Dr Steinhardt received his BS from Cal Tech and his PhD in Physics from Harvard. He is a professor of theoretical physics. Dr. Steinhardt works in condensed matter physics where he coined the term *quasicrystal*.

Dr Steinhardt’s in depth presentation titled “Once Upon A Time In Kamchatka” is his report of the research he conducted and the field study undertaken in Russia to collect material to prove the impossible with regard to symmetries forbidden in ordinary periodic crystals.

Dr Steinhardt offered a little history about quasiperiodic crystals: In experiments, crystal aperiodicity is revealed in the unusual symmetry of the diffraction pattern (other than orders of 2, 3, 4 or 6 symmetries) as was observed by Dan Shechtman, a materials scientist. [In 1982 he saw that certain Aluminium-Manganese alloys produced unusual diffractograms which today are seen as revelatory of quasicrystal structures.] Shechtman wrote his findings and in 2011 was awarded the Nobel Prize in Chemistry for his work with quasiperiodic crystals.

The basis for study was a mineral called Khatyrkite (CuO+Al₂O₃) found to be the rock that contains quasicrystal. Its origin is extraterrestrial but found in ancient meteorites, in Kamchatka, Russia where the Koryaks reside. Dr. Steinhardt’s quest was to find a provable sample in the field. After many years of research, much searching then collaborative efforts with Luca Bindi (in Europe), Lincoln Hollister (Princeton), Glenn Macpherson (Smithsonian Institute) and others, a small sample was located.

Dr. Steinhardt mentioned the Golden Ratio, Fibonacci numbers, metallic aluminum, he provided a laser “show” of quasicrystalic “pattern” and even had sample specimen blocks as extra visuals. He delved into the mathematical 2-D crystals (5 point spot pattern) and 3-D periodics (14 possibilities) elements and mind boggling undeterminable quasicrystal structures. Upon conclusion of his presentation, a Q&A followed where there were many questions by members and student guests. There was a short photo-op by the school’s photographer.

We wish to thank Dr. Steinhardt for his enlightening presentation on quasicrystals.

Ann Meister announced that refreshments were being served down the hall where further discussion with Dr. Steinhardt could take place.

The monthly drawing was won by Rudy Lopez who deferred to a student in the audience which was won by Yen Kei Ynez Lau, who was delighted with her prize.

Adjournment at 9:15 p.m.

Respectfully submitted by Angie Guzman, Secretary.

Ride Share Listing

Can You Provide A Ride?

Would You Like Company On The Drive To Meetings?

We have heard from several of our members that they would like to ride-share with someone to the meetings. We will list the names, general location and either a phone number or an email address of anyone who would like to connect for a ride-share. If you would like to catch a ride or would like company for the trip, let me know at msscbulletin@earthlink.net and I’ll put the information in this section of the bulletin. After that, any final arrangements made are up to you. Also, If you make a connection that works for you, let me know so that I can remove your information from the bulletin. The Editor

Looking for	Who	Where	Contact at
A ride	Richard Stambert	North Orange County, near Cal State Fullerton	714-524-3577

Lady Heart Diamond Collection February 1 to June 30, 2013

The Natural History Museum of Los Angeles County (NHM) is pleased to present for the first time on public exhibition [The Lady Heart Diamond Collection](#) from February 1 to June 30, 2013. Each of the five diamonds in this exceedingly rare collection is a different amazing color: [red, pink, orange, yellow and blue](#). The stones are all heart-shaped in cut, ranging in weight from 1.71 to 2.28 carats. They are set in separate pieces of jewelry custom designed for this temporary exhibition in NHM’s Gem and Mineral Hall “Gem Vault.”

"A heart-shaped diamond itself is immensely rare," says Bernard Bachoura, a fourth generation jeweler from Southern California’s Sophia Fiori and designer of The Lady Heart Diamond Collection. “While the diamond is in the rough, the

final shape of the stone is determined by the diamond cutter based on which shape will best maximize carat weight, symmetry, and value. The unusual heart shape requires the cutter to sacrifice significant carat weight in order to achieve the desired result. It makes the heart shape a risk the cutter must be certain he or she is willing to take." As of the diamonds themselves, the grade of Fancy Vivid color given by the Gemological Institution of America (GIA) to each single diamond in the collection represents the best grade for a colored diamond. According to GIA, over the millions of diamonds mined each year, only a handful achieves this top grade. The pure red color of the 1.71-carat diamond is the most sought-after in the gem market today, while the 2.00-carat pure orange diamond is probably the rarest to be found.

An exhibit not to be missed!

The Natural History Museum of Los Angeles County 900 Exposition Boulevard, Los Angeles, CA 90007
(213) 763-DINO

Changes In Mineralogical Nomenclature: Varieties by Alan R. Plante, Gorham, NH.

Published in 2006 in <http://www.rockhounds.com>

A recent discussion about mineral nomenclature on a mineralogical eBB brought me an email from a friend asking about the IMA definition of a "variety." My answer, in a nutshell, was: "The IMA doesn't define 'variety' - in fact the IMA is trying to kill the concept in scientific literature."

"IMA" stands for the "[International Mineralogical Association](http://www.rockhounds.com)," which is the professional association that regulates mineral names and related terms within the professional mineralogical community. It is a commission of the IMA which reviews proposals for new mineral species and their names. (This commission used to be called the "Commission on New Minerals and Mineral Names" (CNMMN), but just this past summer - 2006 - that group and the "Commission on Classification of Minerals" (CCM) merged to form a new commission: "[Commission on New Minerals, Nomenclature and Classification](http://www.rockhounds.com)" (CNMNC).) The original CNMMN was established in 1959 - shortly after the IMA itself was established. In short, a newly proposed mineral species and name are not considered to be scientifically "valid" unless the IMA's commission says it is.

My friend was floored to learn that there is no current official definition of "variety." Based on my talks and correspondence with other collectors, she was hardly alone in her belief that "variety" is a valid term with scientific relevance in modern mineralogy. There is quite a bit of confusion outside the professional community regarding this issue.

In order to understand the current IMA stance it is necessary to look at the issue from a historical perspective. It was during the late 1700s and early 1800s - when modern chemistry and physics were being developed and spreading around the globe - that mineralogists came up with the concept that variations of a mineral species could be distinguished and given names - varietal names - as a shorthand way of noting these distinctions. They recognized that there were three types of distinctions: 1) morphological (shape), 2) chemical, and 3) optical (eg. color). Using this concept they coined or borrowed names such as "selenite" (for water-clear crystals of gypsum), "chalcedony" (for the form of quartz that is composed of matted SiO₂ fibers), "aquamarine" (for blue-green gem quality beryl), "manganapatite" (for Mn²⁺-rich apatite,) and so on - for literally hundreds upon hundreds of variations of a great many mineral species (as they were defined back then.)

By the end of the 1800s two things had happened. First, so many varietal names had entered the lexicon of mineralogy that it was becoming difficult to remember them all and know what they referred to. Second, the leisure class was growing in numbers by leaps and bounds as more and more people had time and money to spend on pursuits other than survival - and more and more of these people were "dabbling" in things such as nature studies and the arts - including mineral collecting and the lapidary arts. These people were scurrying about the globe (or at least that bit of it within their reach...) - and they were finding all sorts of new and interesting things. Among these finds were many distinctive mineral materials, both species and varieties of species - even whole new "Groups" or "Families" of them. And they were giving these new finds names. Many of the names they came up with were actually localized nicknames (eg. "Herkimer Diamond," "Pecos Diamond," "Cape May Diamond"), but they treated them like they were varietal names - and even the mineralogists of the time treated many of them as such, without regards for the consequences this might have down the road. So as the early 1900s unfolded the professional community found itself dealing with a morass of mineral names - many of which had little or no scientific value.

For the first half of the 1900s efforts were made to get a grip on mineral names - to make sense of them and present them in an organized way. And a large part of this effort was spent trying to sort out varietal names and make it clear that they were varietal names - not species names. Thus "selenite" became more frequently seen in the scientific literature as "gypsum var. selenite," and "chalcedony" was presented as "quartz var. chalcedony," and on and on... Also, advances in the science throughout the 1800s and early 1900s were refining the definition of what constitutes a mineral species - and in quite a few cases it was determined that what had previously been thought to be a single species actually encompassed materials that included two or more species. (The reverse also happened, where two or more materials thought to be separate species were actually found to be variations of a single species.)

A good example of this is the case of "apatite." During the mid to late 1800s apatite was considered to be a valid species with a number of chemical and morphological varieties. Among these varieties were "carbonationapatite," "fluorapatite," "hydroxylationapatite," "strontianapatite" and "manganapatite". Then in the early 1900s our understanding of crystal structure and the role cations and anions play in them caused a change in the definition of a mineral species - and this resulted in "apatite" being broken out into the species "fluorapatite," "chlorapatite," "hydroxylapatite," "carbonate-fluorapatite," and "carbonate-hydroxylapatite" (based on the predominant anions). But "strontianapatite" and "manganapatite" remained varietal names because the Sr and Mn they noted were not present in sufficient quantities in the structure to warrant being given species status. The problem was that these varietal names could be applied to more than one of the newly defined Apatite Group species - you could have an Sr-rich fluorapatite or hydroxylapatite, or either of them might be Mn-rich. And since names such as "fluorapatite var. manganapatite" would be cumbersome and somewhat redundant, the decision was made to replace them with simply "fluorapatite v. strontian" and "fluorapatite v. manganapatite" - using chemical adjectives as varietal names. In the process names such as "strontianapatite" and "manganapatite" were rendered obsolete - after all, there was no longer a mineral named "apatite" that the chemical adjectives could be tacked onto. If you thumb through a copy of "Dana's System of Mineralogy, 7th Edition" you will find hundreds of examples of where chemical adjectives are used following the species name and a "v." The two main volumes of this edition were published in the 1940s and early '50s, and constitute perhaps the single best example of what the science tried to do in order to get a handle on varietal names.

Alas, while they were able to get a grip on chemical varieties, things did not go so well with morphological and optical varieties. More often than not, the varietal names for these types of varieties did not impart scientific knowledge to begin with. For example, "tremolite v. byssolite" does not tell you the varietal name refers to a fibrous form of the mineral. You have to learn that this is what "byssolite" means. Similarly, "gypsum v. selenite" does not tell you what the "selenite" means - that it refers to water-clear crystals of gypsum (as opposed to other forms, such as "alabaster.") In the end, it is mostly the color names - "amethyst," "aquamarine," etc. - that are clear in meaning on their own. Most of the other names aren't. So they still had a problem.

Added to this, more and more hobby collectors and lapidary artisans were arriving on the scene - finding more and more things and tagging them with more and more nicknames - which they promptly decided were perfectly serviceable as "varietal names" without thinking about it from a scientific perspective.

Things were actually getting worse - not better...

Finally, throughout the early half of the 1900s there was a growing number of professionals who felt that the varietal concept had gotten so far afield from the science as to render it useless - that there were so many ambiguous terms and terms without scientific meaning in use, and still being coined, that it had become futile to try to do anything about it. They recommended simply abandoning the "variety" level of mineralogical classification. By the time the CNMMN was established in 1959 the number of professionals who felt this way were in the majority; so the commission simply didn't include "varieties" in their mission statement. In fact, they began a campaign to suppress the use of varietal names in scientific papers and books, strongly urging professionals to not use them, and to not coin new ones.

One of the first steps they took was to convert the chemical adjectives - "strontian," "manganapatite," etc... - back into simply being descriptive adjectives once again. "Fluorapatite v. manganapatite" became "manganapatite fluorapatite" - with it understood (by professionals, at least) that "manganapatite" was just a way of noting that the fluorapatite specimen in question had some unspecified amount of Mn^{2+} in it. It was not to be construed as indicating a "variety" existed. There was, unfortunately, some confusion generated by this move. There are names of species which have chemical adjectives incorporated in them (eg. "carbonate-fluorapatite"). While the CNMMN made it clear that if the chemical adjective was connected by a hyphen to the rest of the name it meant a species - while unconnected adjectives didn't - it didn't always work.

Cases of usages such as "carboante fluorapatite" occurred - the hyphen being omitted. There was even some debate about old species name in which the hyphen was not used: Some felt they should stay that way, some felt the hyphen needed to be added to make it clear. Also, the recommended adjectival modifiers were not really adequate for describing all possible valences - those elements with a single ionic valence state, and those with more than two, could not be accommodated. All-in-all, the measure helped some, but it didn't really solve the problem. - And there were still all those pesky morphological and optical varietal names "out there" (not to mention all the nicknames being used as varietal names) adding further confusion to the nomenclature of minerals...

More recently - just last year (2005) - the IMA changed to a new approach. Chemical adjectives are no longer recommended for use in scientific papers and books. The new recommendation is to use terms such as "Mn²⁺-bearing" fluorapatite, "Sr²⁺-rich" fluorapatite, and so on. Which certainly eliminates the problem of whether or not the terms are part of a valid species' name or not. No one should mistake "Co²⁺-rich" calcite as meaning there is a species called "cobaltoan-calcite." (There isn't...) It's pretty clear the phrase simply indicates a sample of the mineral calcite which happens to contain some cobalt. Also, any valence state can be clearly accommodated by simply stating it using the appropriate superscript with plus or minus sign. This approach may even stand a reasonably good chance of succeeding to clarify things so far as chemical variations go.

But there are still all those morphological and optical varietal names out there - not to mention all those nicknames that are routinely used as varietal names.

The issue certainly isn't resolved - even within the professional community, let alone outside of it.

By now more than a few of the people reading this are chaffing at the bit - they want to know if this means that they should not use varietal names any longer. The answer is NO! It doesn't mean that at all. - Not unless you feel some strong urge to be "politically correct." The fact is that what the IMA is doing is an internal thing - geared to help the professional community deal with things mineralogical in as rigorous a fashion as they can. The IMA has no control over - and probably doesn't want any control over - how the hobby sector uses mineral names. While members of the professional community might wistfully wish that non-scientists would learn scientific nomenclature concerns and adhere closer to scientific principles (and the few of the more militant people might try to get others to "toe the party line") the fact is we are welcome to do as we please.

Varietal names and nicknames are handy ways for us to describe the many nuances we see - or which tests reveal - in minerals. They provide us with a shorthand which makes discussion of minerals easier. And, quite frankly, many of us - most - could care less about the "scientific value" of mineral names. We just want to be able to talk about their differences in a way that we can understand - even if it is simply by mutual agreement about what terms mean. It works for us.

But at the same time we should be aware that our use of varietal names and nicknames is outside the ken of science. Varietal names no longer have the stamp of scientific value they once had - and nicknames never did.

It is as simple as that...

Suggested Reading:

- Bayliss, P., et.al., 2005, The use of chemical-element adjectival modifiers in mineral nomenclature, *The Canadian Mineralogist*, V. 43, pp. 1429-1433.
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- Gaines, R. V., et.al., 1997, *Dana's New Mineralogy*, 8th Edition, John Wiley & Sons, NY.
- Nickel, E. H., 1995, The definition of a mineral, *The Canadian Mineralogist*, V. 33, pp 689-690
- Nickel, E. H., & Grice, J. D., 1998, The IMA Commission on New Minerals and Mineral Names: Procedures and guidelines on mineral nomenclature, *The Canadian Mineralogist*, V. 36.
- Nickel, E. H., & Mandarino, J. A., 1987, Procedures involving the IMA Commission on New Minerals and Mineral Names, and guidelines on mineral nomenclature, *The Canadian Mineralogist*, V. 25, pp 353-377.
- Palache, C., et.al., 1944, *Dana's System of Mineralogy*, Vol. 1, 7th Edition, John Wiley & Sons, New York.
- Palache, C., et.al., 1951, *Dana's System of Mineralogy*, Vol. 2, 7th Edition, John Wiley & Sons, New York.

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Editor's Comment: To our very knowledgeable members... Is this still an accurate description of the IMA workings? I would very much like to print an update if one is required.

March Featured Mineral: **Tourmaline**

Formula: $A(D_3)G_6(T_6O_{18})(BO_3)_3X_3Z$

Crystal System: Trigonal

Name: From the Cingalese "tourmali," the name given to colored gem zircons on the island of Sri Lanka (Ceylon). In the early 1800s it was discovered that some of the "zircons" arriving in European gem centers from the far east were actually a previously un-described mineral

Tourmaline

Locality: Anjanabonoina pegmatites, Ambohimambola Commune, Betafo District, Vakinankaratra Region, Antananarivo Province, Madagascar
2.2 x 2.0 x 0.4 cm

Crystals with this internal pattern have often been called Liddicoatite.

This crystal may be Fluor-Liddicoatite, Liddicoatite, Elbaite or other species. Single xl XRD and WDS analysis would be needed to confirm which species are actually present in the slice



irocks.com photo



irocks.com photo

Tourmaline, Albite

Locality: Pamaró mine, Linópolis, Divino das Laranjeiras, Doce valley, Minas Gerais, Brazil
3.4 x 2.8 x 2.2 cm

The 48th Annual Pacific Micro-Mount Conference Report: by Bob Housley

The 48th Annual Pacific Micromount Conference, which in recent years has been sponsored and organized by MSSC, and hosted by the San Bernardino County Museum in Redlands came off on February 1-4 without a hitch. About forty enthusiastic attendees, many from out of state, and two from France participated.

The invited talks were outstanding. Joe Marty and Paul Adams were really able to convey the fun and excitement of looking for---and finding---new mineral species, along with showing fantastic images of the minerals themselves, and providing a lot information about the locations they came from. Jerry Baird explained in simple terms how to set up an affordable system to photograph exceedingly small crystals and showed some amazing pictures he had obtained with it.

In addition to the invited talks Tony Kampf gave a short contributed talk showing the crystal structures of some of the new minerals with a program that allowed them to be rotated and manipulated. Using that he was able to explain in simple terms why they are scientifically interesting.

The last contributed talk was by Wes Gannaway who showed and described the rare mineral collecting areas in the Golden Horn batholith exposed near Washington Pass WA.

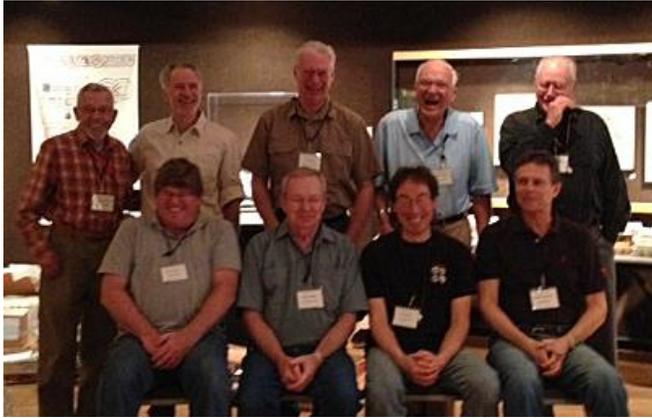
Near the end of the Conference a couple of people told me that they thought this was the best one ever, which is a nice tribute to our speakers.

Because of the large interest expressed we ran two field trips after the Conference instead of the usual one. On Sunday 13 of us went to Lead Mountain where we generally had a good day. At the main mine everybody found nice micros of barite, hemimorphite, and calcite, and probably most people got some coronadite, cinnabar, and pyromorphite. About 1 pm we returned to the cars for lunch. At the parking area Bert Vogler found a nice larger specimen of chalcophanite that did not appear to have come from the mine, so some more looking around there appears warranted.

After lunch we went to the wulfenite area where everybody found micro smithsonite and at least one larger piece was found. Also at least one nice wulfenite cluster was found.

On Monday 6 of us including Georges Favreau and Robert Pellecori from France went to the Blue Bell mine. At the A site we found fornacite, wulfenite, and cerussite, and a little murdochite, diopside, and tsumebite. At the C site one of the Frenchmen found a nice spray of the recent new mineral plumbophyllite.

Attendees With New Minerals Named After Them



Back row, left to right: Eckhard Stewart (Edkhardite), Tony Kamph (Kampfite), Joe Marty (Martyite), Bob Housley (Housleyite) and Dick Thomssen (Dickthomssenite).

Front Row, left to right: Ted Hadley (Tedhadleyite), Jerry Baird (Bairdite), Tim Rose (Timroseite & Paratimroseite) and Brent Thorne (Thorneite)

A View Of The Room.



Attendees are very busy visiting, and at their microscopes viewing specimen from either the "give away" table or the sales table.

West Coast GEM & MINERAL SHOW

Holiday Inn - Orange County Airport
2726 S. Grand Ave., Santa Ana, CA 92705
(Take 55 Fwy exit 8 for Dyer Rd. to S. Grand Ave.)

MAY 17-19, 2013

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*Tourmaline
Jeff Scovil Photo©*

MSSC Advertisement Policy:	
Mineral-related ads are allowable in the MSSC bulletin. Below is the price per month	
Business Card	\$5.00
1/3 page	\$10.00
1/2 page	\$20.00
Full Page	\$35.00
In addition, any advertiser who purchases 12 months of space in advance will receive a discount of 12 months for the price of 10 months. The copy for the ads should be mailed to the editor at bulletin@mineralsocal.org and the payment should be sent to the MSSC Treasurer 1855 Idlewood Road, Glendale, CA 91202	

Calendar of Events:

Only local area shows are listed here. Other CFMS Club shows can be found at: <http://www.cfmsinc.org/>

March 2 - 3: ARCADIA, CA
 Monrovia Rockhounds
 The Arboretum & Botanic Gardens
 301 Baldwin Avenue (Ayers Hall)
 Hours: 9:00 - 4:30 daily
 Website: www.Moroks.com

March 2 - 3: VENTURA, CA
 Ventura Gem & Mineral Society
 Ventura County Fairgrounds
 10 W. Harbor Blvd.
 Hours: Sat 10 - 5; Sun 10 - 4
 Website: www.vgms.org

March 8 - 10: VICTORVILLE, CA
 Victorville Valley Gem & Mineral Society
 Stoddard Wells Road & Tailgate•
 12 miles East of I-15; last 7 miles
 graded dirt road
 Hours: 9 - 5 daily
 Website: www.vvgmc.org

March 9 - 10: SAN MARINO, CA
 Pasadena Lapidary Society
 San Marino Masonic Center
 3130 Huntington Drive
 Hours: Sat 10 - 6, Sun 10 - 5
 Email: joenmar1@verizon.net

March 16 - 17: VISTA, CA
 Palomar Gem & Mineral Club
 Antique Gas & Steam Engine Museum
 2040 North Santa Fe Avenue
 Hours: Sat 9 - 5; Sun 9 - 4
 Website: www.palomargem.org

March 23 - 24: TORRANCE, CA
 South Bay Lapidary & Mineral Society
 Ken Miller Recreation Center
 3341 Torrance Blvd.
 Hours: Sat 10 - 5; Sun 10 - 4
 Website: www.palosverdes.com/sblap

April 20 - 21: THOUSAND OAKS, CA
 Conejo Gem & Mineral Club
 Borchard Park Community Center
 190 Reino Road (at Borchard Rd.)
 Hours: 10 - 5 daily
 Website: www.cgamc.org

April 27-28: LANCASTER, CA
 Antelope Gem & Mineral Society
 Lancaster High School
 44701 - 32nd Street West
 Hours: 10 - 5 daily
 Website: www.avgem.weebly.com

May 31 - June 2: VENTURA, CA
Annual CFMS SHOW & CONVENTION, "California Rocks"
 Sponsored by: Conejo, Oxnard, & Ventura Gem & Mineral Societies
 Ventura County Fairgrounds,
 10 W. Harbor Boulevard
 Hours: Fri & Sat 10 - 5; Sun 10 - 4
 Website: www.cfms2013.com

2013 MSSC Officers:

OFFICERS		
President	Ann Meister	president@mineralsocal.org
Vice President	George Rossman	
Secretary	Angie Guzman	secretary@mineralsocal.org
Treasurer*	Jim Kusely *	treasurer@mineralsocal.org
CFMS Director	Jo Anna Ritchey	
Past Pres.	Geoffrey Caplette	
DIRECTORS		
2013	Geoffrey Caplette	
2013	Leslie Ogg	
2013	Pat Caplette	
2013	Bruce Carter	
2013	Pat Stevens	
2013	Bob Housley	
COMMITTEE CHAIRS		
Publicity	Linda Elsna	bulletin@mineralsocal.org
Membership	Jim Kusely	treasurer@mineralsocal.org
Program and Education	Bruce Carter	programs@mineralsocal.org
Webmaster	Leslie Ogg	webmaster@mineralsocal.org
Bulletin Editor	Linda Elsna	bulletin@mineralsocal.org
Micro Mount Conf. Chairman	Al Wilkins	
* Treasurer	Jim Kusely –proviso due to surgery, mid 2013, Ahni Dodge and Laura Davis to assist while Jim convalesces	

About the Mineralogical Society of Southern California

Organized in 1931, the Mineralogical Society of Southern California, Inc. is the oldest mineralogical society in the western United States. The MSSC is a member of the California Federation of Mineralogical Societies, and is dedicated to the dissemination of general knowledge of the mineralogical and related earth sciences through the study of mineral specimens. The MSSC is a scientific non-profit organization that actively supports the geology department at Pasadena City College, Pasadena, California. Support is also given to the Los Angeles and San Bernardino County Museums of Natural History. The Bulletin of the Mineralogical Society of Southern California is the official publication of the Mineralogical Society of Southern California, Inc.

The MSSC meetings are usually held the second Friday of each month, January, February and August excepted, at 7:30 p.m. in Building E, Room 220, Pasadena City College, 1570 E Colorado Boulevard, Pasadena, California. The annual Installation Banquet is held in January, and the annual Picnic and Swap Meeting is held in August. Due to PCC holidays, meetings may vary. Check the Society website for details.

The Society also sponsors the annual Pacific Micro mount Symposium held at the San Bernardino County Natural History Museum during the last weekend of January.

Annual Membership dues for the MSSC are \$20.00 for an individual membership, \$30.00 for a family membership. The Society's contact information:

Mineralogical Society of Southern California

1855 Idlewood Rd.,

Glendale, CA 91202-1053

E-mail: treasurer@mineralsocal.org

Web: <http://www.mineralsocal.org> The Mineralogical Society of California, Inc.

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irocks.com photo

Tourmaline

Locality: Himalaya Mine (Himalaya dikes; Himalaya pegmatite), Gem Hill, Mesa Grande District, San Diego Co., California, USA

4.5 x 2.5 x 2.3 cm

Tourmaline

Locality: Himalaya Mine (Himalaya dikes; Himalaya pegmatite), Gem Hill, Mesa Grande District, San Diego Co., California, USA

2.9 x 2.6 x 2.6 cm



irocks.com photo

MSSC Bulletin Editor

3630 Encinal Ave.
Glendale, CA 91214-2415

To: