

THE BULLETIN OF THE COLORADO SPRINGS MINERALOGICAL SOCIETY Published Since 1960

**Colorado Springs
Mineralogical Society**
Founded in 1936
Lazard Cahn
Honorary President
March 2020
PICK & PACK
Vol 60 Number 2

CSMS General Assembly

Thursday, March 19, 7:00 PM

Mt. Carmel Veterans Center

Canceled

**Please note: Members whose names begin with M-Z are
responsible for refreshments in March**

****In case of inclement weather please call Mt. Carmel
Veteran's Service Center 719 309-4714**

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Upcoming CSMS Events

Due to the Pandemic, and discussions with group leaders:

The following meetings are CANCELED

Pebble Pup Meeting	March
General Assembly Meeting	March
Crystal Club Meeting	March
Board Meeting	April
Fossil Club Meeting	April
Faceting Club Meeting	March
Pebble Pups Meeting	April

[check your assignment online](#)

[check your assignment online](#)

CSMS Calendar

February & March 2020

February March

03/03/20	04/07/20	Fossil Group	1st Tues.	7:00 p.m.	Pikes Peak United Methodist Church	Jerry Suchan	303-648-3410
03/05/20	04/02/20	Board Meeting	1st Thur.	7:00 p.m.	Pikes Peak United Methodist Church	John Massie	719-338-4276
03/19/20		See session online	3rd Thur.	5:30 p.m.	Mt. Carmel Center	Steve Veatch	719-213-1475
03/19/20	04/16/20	General Assly Meeting	3rd Thur.	7:00 p.m.	Mt. Carmel Center	John Massie	719-338-4276
03/26/20	04/22/20	Crystal Group	4th Thur.	7:00 p.m.	Mt. Carmel Center	Kevin Witte	719-638-7919
03/26/20	04/22/20	Faceting Group	4th Thur.	7:00 p.m.	Berta's House	John Massie	719-338-4276
		Lapidary Group	by appointment		Sharon's House	Sharon Holte	719-217-5683

For more information on any of the sub-groups, meetings, and other CSMS valuable information, go to our website: www.csms1936.com

Upcoming Events of Interest to CSMS Members Submitted by Pete Modreski

Fri., Mar. 13, **Canceled** North Jeffco Gem & Mineral Club Silent Auction, APEX Community Center, 6842 Wadsworth Blvd., Arvada, setup at 5:30 p.m., auction begins at 6:45 p.m. All are welcome. For more info, Bill Jones, 303-503-6288, email sidewindermin@comcast.net.

Fri.-Sat.-Sun., Mar. 13-15, **Canceled** Fort Collins Gem & Mineral Show; at Thomas M. McKee Building, at The Ranch/Larimer County Fairgrounds, 5280 Arena Circle, Loveland, CO (I-25 exit 259); hours 4-8 Fri., 9-6 Sat., 10-5 Sun.; adult admission \$4. Sponsored by the Fort Collins Rockhounds Club.

Sun, Mar. 15, **Canceled** noon, at the monthly FSS (Florissant Scientific Society) meeting, the planned talk by Hilary Dussing, "Energy: Fossil fuels, Nuclear, Renewables", has been cancelled for the time being due to a family illness. Instead, there will be a presentation by Tim Brown, "Greenstone Belts, Gold, and GFG Resources, Inc.": "Archean greenstone belts around the world are known to host a significant gold endowment with several individual deposits each producing over 10 million ounces of gold. The deposits occur primarily as quartz and quartz-carbonate veins along major fault zones that are hosted in metamorphosed volcanic, sedimentary and intrusive rocks. These rock packages were formed over 2.6 billion years ago and the volcanic rocks tend to be dark green, thus the name of the belts. "The Canadian Shield is an area of Precambrian rocks that covers approximately 40% of Canada and contains a large number of these greenstone belts and greenstone-hosted gold deposits. Gold exploration programs have focused on these deposit types for many years. GFG Resources currently has two large land packages located along major fault zones just west of Timmons, Ontario. The mines at Timmons have produced over 70 million ounces of gold since the first ounces were produced in 1909." Shared potluck lunch at 12:00, talk at 1:00, UCCS Osborne Center, Room B215. At UCCS Osborne Center, Colorado Springs. All are welcome to attend—the FSS has no formal membership, other than an email list of persons interested in geology. Contact Beth Simmons, cloverknoll@comcast.net, for details or to be put on the FSS mailing list.

Tues., Mar. 17, **Canceled** 10:30-11:30 a.m., USGS Rocky Mountain Science Seminar, The Late Holocene Teanaway River [Washington]: a complex history of climate, landslides, river capture, and human impacts; Dr. Sarah Schanz, Colorado College. Building 25 auditorium, Denver Federal Center, Lakewood CO. Visitors are welcome.

Thurs., Mar. 19, **Canceled** 7:00 p.m., Colo. Sci. Soc. monthly meeting, Historic avalanches in Hinsdale County, Colorado: Impacts to Lake City, old mining dams, and new evidence for the

Continued pg 3

association of snow and-rock avalanches as a means of forming rock glaciers, by Jonathon Lovekin, Colorado Geological Survey. Berthoud Hall Room 241, CSM campus. All are welcome; social time & refreshments at 6:30, meeting at 7:00. See <https://coloscisoc.org/> .

Thurs., Apr. 2, **closed** 3:00 p.m., Denver Museum of Nature and Science, M. Ray Thomasson Earth Sciences Colloquium, Dating the K-Pg eruptions that made life miserable for dinosaurs, by Blair Schoene, Princeton Univ. TALK WILL BE IN 3rd FLOOR COMMUNITY ROOM Link to the series schedule for the whole year: <https://sites.google.com/view/dmnsdes2020colloquiumschedule/home>

Thurs., Apr. 2, 4:00 p.m., Van Tuyl Lecture Series, Colorado School of Mines, Iron Ores in North America – Past Importance, Future Promise, by Dr. Phil Brown, Univ. of Wisconsin. Berthoud Hall Room 241, CSM campus, Golden. All are welcome. See <https://geology.mines.edu/eventscalendar/lectures/> for the upcoming schedule.

Fri.-Sat.-Sun., Apr. 10-12, Colorado Mineral and Fossil Spring Show, Crown Plaza Hotel - Convention Center, 15500 E 40th Ave., Denver, Colorado, 10-6 Fri. & Sat., 10-5 Sun., free parking & admission.

Thurs., Apr. 16, 5:30 p.m., Rise of the Mammals: Exceptional Continental Record of Biotic Recovery after the Cretaceous–Paleogene Mass Extinction (about the Corral Bluffs fossil mammal discoveries), by Ian Miller and Tyler Lyson, Denver Museum of Nature and Science; at the CSS Annual Past Presidents’ Dinner, to be held at the Mount Vernon Canyon Club. Social time at 5:30, dinner at 6:00, program at 7:00. Reservations required for dinner, see <https://coloscisoc.org/>, but guests are also welcome to come at 7:00 just to hear the program.

Sat., May 4, 11 a.m. – 2:45 p.m., Colorado Mineral Society Silent + Verbal Auction, Holy Shepherd Lutheran Church, 920 Kipling St., Lakewood. All are welcome (non-CMS members are welcome to bring minerals to sell; limit, 3 flats of specimens); see <http://www.coloradomineralsociety.org/2019CMSAuctionFlyer.pdf> and http://www.coloradomineralsociety.org/Silent_Auction_Bid_Slip.pdf .

Sat., May 16, noon-4 p.m., Silent Auction, sponsored by Colorado Chapter, Friends of Mineralogy. All are welcome; setup at 11, auction begins at noon, live auction at 1 p.m. At a new location: Wheat Ridge United Methodist Church, 7530 W. 38th Ave., Wheat Ridge (38th Ave. at Wadsworth Blvd.).

Sat., May 16, 2020 Symposium on Water and Energy in Colorado, to be held in Ricketson Auditorium, Denver Museum of Nature and Science. Cosponsored by the Colorado Scientific Society, Denver Museum of Nature & Science, Center for the American West, and others. Details forthcoming!

Sun, May 17, noonish, for the monthly FSS (Florissant Scientific Society) meeting, Christine Siddoway (Colorado College) will give a talk on the Tava Sandstone (the geologically famous “sandstone injectite dikes of the Pikes Peak region”) followed by a short field trip. Osborne Center, University of Colorado at Colorado Springs. All are welcome to attend; contact Beth Simmons, cloverknoll@comcast.net, for details or to be put on the FSS mailing list.

Fri.-Sat.-Sun., June 12-14, Pikes Peak Gem & Mineral Show, Norris-Penrose Event Center, 1045 Lower Gold Camp Road, Colorado Springs, CO 80905. Sponsored by the Colorado Springs Mineralogical Society. Hours: noon-7 pm Fri., 10-5 Sat, 10-4 Sun. Adult (12 and older) admission \$5, multiple day \$8, children 11 and under, free.

Thurs.-Sun., July 23-26, Fairplay Contin-Tail Gem, Mineral, and Jewelry Show, Fairplay River Park.

The End

Cripple Creek District Museum Starts A New Lecture Series

By Steven Wade Veatch

The Cripple Creek District Museum launched its “Visit with History” lecture series on Sunday, February 9th at the Cripple Creek Heritage Center. No less than 40 people attended the inaugural session. Steven Plutt opened the lecture series with his riveting presentation on some of the Midland Railroad’s tragic mishaps.



Wreck on the Midland Terminal Railroad near Anaconda, Colorado, Oct 7, 1900. Photo courtesy of the Cripple Creek District Museum.

This educational series brings exciting regional history to the public and will continue with these topics and dates: April 26, Railroad Chapel Cars with Ken Valles; May 17, History of Cripple Creek with Steve Antonucci; July 26, Labor Wars with Gary Horton; August 23, Untold Stories of the Cresson with Steven Veatch; September 20, Ol’ Miner (portrayal by Jay Ridge telling History of Mining in Colorado); and November 22, Tipis 101 with Ed Held. All lectures will start at 2 pm at the Cripple Creek Heritage Center in the lower level theater room. The Heritage Center is located on Hwy 67 outside of Cripple Creek.

The Cripple Creek District Museum, in partnership with the City of Cripple Creek, offers this lecture series as a public service. Admission is free and includes refreshments. Check the CCDM website or Facebook page for more information. Anyone interested in attending a “Visits with History” presentation may call 719-689-9540 to make reservations or send an email to ccdm1953@gmail.com.

The End

Pike's Peak Gem & Mineral Show

June 12 - 14 2020

**Norris Penrose Indoor Event Center, 1045 Lower Gold Camp Rd,
Colorado Springs, CO.**

Request for NON-COMPETITIVE Display Space

Name:

Society:

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Address:

--	--

Phone:

Email:

--	--

City:

.....

State:

.....

Zip:

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Exhibitors are urged to bring their own cases. A limited number of club cases are available upon request. Exhibitors using club cases will need to furnish any risers, linings, padlock or accessories as needed. EACH CASE WILL BE LIMITED TO 150 WATTS.

Describe Display or Displays:

--

	I will bring my own display	Your case length	#of cases
	I will need a case*	Case size desired	#of cases

* CSMS cases are approximately 36" by 24" outside measurements. A few 4-foot cases are generally available. There is a hasp on the case that accepts an exhibitor-supplied padlock.

Setup is from 12 PM to 6 PM (or by special arrangement until 8 PM) on Thursday June 11 or 8 AM to 12 PM on Friday before the show opens. Note new show hours for Friday. Tear down is 4 PM to 9 PM on Sunday.

Please note by checking for eligibility for case judging: (details next page):_____

This is a Pebble Pubs Case _____

Case eligible to be judged for the Chris Christensen Award _____

Signature of Non-Competitive Exhibitor: _____

With the signing of this request, email submission of this document or showing up with an exhibit, it is mutually agreed that the Colorado Springs Mineralogical Society and the Norris Penrose Indoor Event Center shall not be liable to any exhibitor for damage, loss or destruction of any exhibit or injury to his person for any cause and all claims for injury are expressly waived by the exhibitor.

Please return by mail or email by:

RETURN TO: Bob Landgraf

May 29 to reserve a case and exhibit space.

304 Palmer Trail

After May 29 exhibitors are still welcome

Manitou Springs, CO 80829

based upon availability of cases and space.

719-685-1364

rmlwp74@aol.com

Details on case judging

Three awards may be given for exhibits at the 2020 Show.

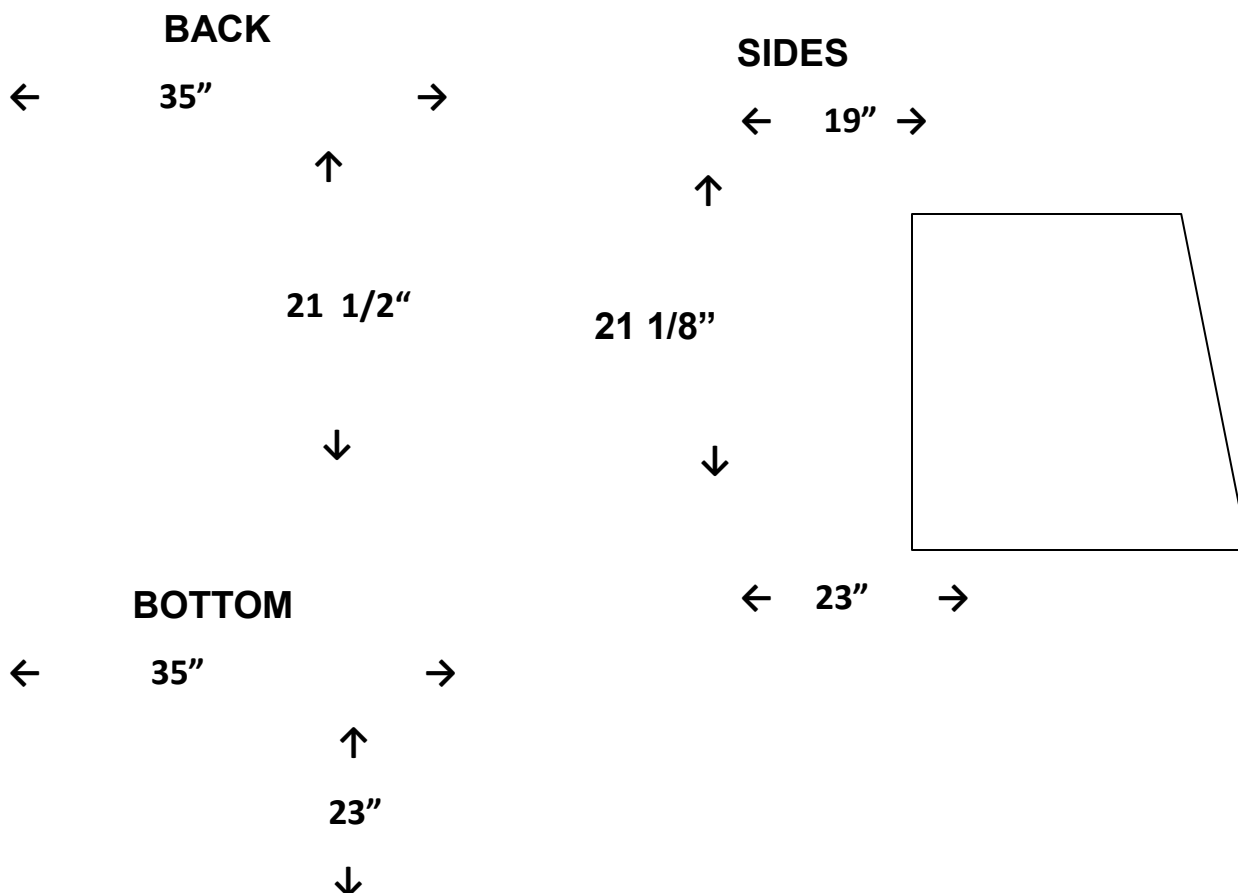
The People's Choice award based upon a tally of the public entering their votes for the case they liked best.

The Pebble Pup's award for best judged Pebble Pups Case. There must have two or more individuals with entries for Pebble Pups entries to be judged.

Chris Christensen Award for the best-case containing specimens that were either field collected by the exhibitor or self-made by the exhibitor. Exhibit must not have been used as a prior competitive exhibit. There must have two or more individuals with qualifying entries for this category to be judged.

The Colorado Springs Mineralogical Society Case.

All measurements are inside measurements. However, since all cases are handmade there may be some slight variations in the cases. Be sure to bring any necessary tools required to make adjustments to your liners.



PEBBLE PUPS CORNER



CSMS Pebble Pups & Earth Science Scholars

Normal Meetings Canceled until September 2020

Find your assignments at: <http://pebblepups.blogspot.com/p/merit-badge-assignments.html?m=1>

Special announcements and field trips are noted on our blog:

<http://pebblepups.blogspot.com>

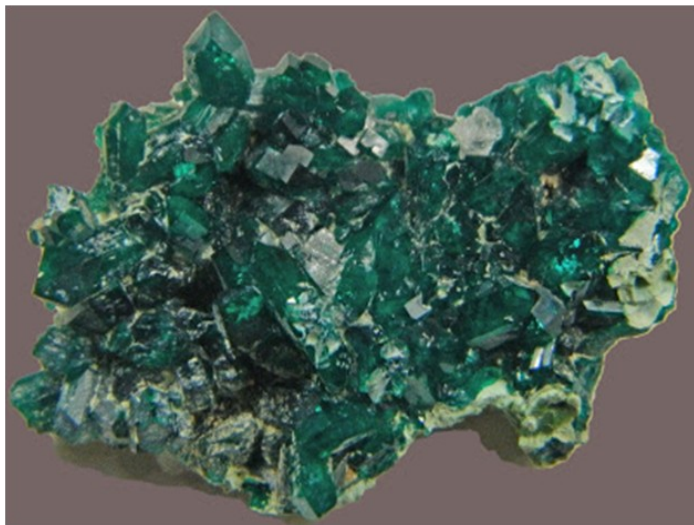
and through the CSMS website: <http://www.csms1936.com>

DENVER SHOW: DIOPTASE BEST \$2 MINERAL

Mike Nelson csrockguy@yahoo.com



In the December *Pick & Pack* I reported on the Denver Area Mineral Dealers fall 2019 Gem and Mineral Show held at the Jefferson County Fairgrounds on November 15-17. I picked up some nifty minerals (see the Newsletter) but thought I ought to mention the *Best \$2 Mineral Added To My Collection!* In fact, I thought it was a real find—a gemmy green cluster of diopside crystals, a hydrated copper silicate [$\text{CuSiO}_3 \cdot \text{H}_2\text{O}$].



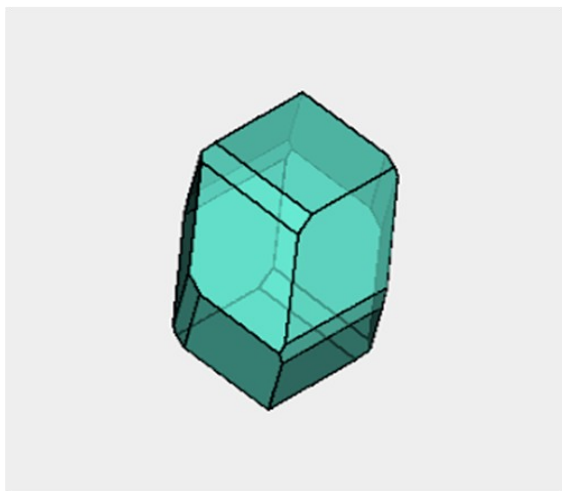
A cluster of gemmy green diopside crystals
Width of specimen ~3 cm.

The crystals are vitreous, emerald green in color and have a hardness of around 5.0 (Mohs) with a green streak. Crystals are quite brittle, easily cleave, are fragile, and usually have a conchoidal to uneven fracture when broken (not along the cleavage planes). Crystals are translucent to transparent, belong to the Hexagonal (Trigonal) Crystal System, and generally are 6-sided (hexagonal) with a rhombohedral termination. It appears to me that once rockhounds see the emerald green variety of diopside crystals, the sight will appear in their mind forever!

Continued pg 8



Diopside crystals. Width FOV ~1.8 cm.



Drawing of diopside, modified rhombohedral crystal. Courtesy of smorf.nl with original from Goldschmidt, Atlas de Krystallformen, 1913-1923.



Nice modified rhombohedral crystals of diopside. Width FOV ~ 4 mm.

The Fossil Dig

By Adelaide Bahr, Scribe

March 3, 2020

Jerry Sechuan showed slides of fossils found by him or given to him during a 1998 trip to the Mazon Creek Fossil Beds. Club members Ernie Hanlon and Jack Null went with Jerry.

The fossil beds date to the mid Pennsylvanian (Carboniferous) Period about 300 million years ago. The site is located south of Chicago in an abandoned open pit coal mine. In Pennsylvanian times, the region was located close to the equator and the warm, oxygen rich climate (28% O₂) favored luxuriant vegetation, which turned to coal in a shallow brackish river delta. The ground waters were rich in iron, which precipitated as siderite (iron carbonate), coated the organic specimens and preserved them inside round, rock hard concretions.

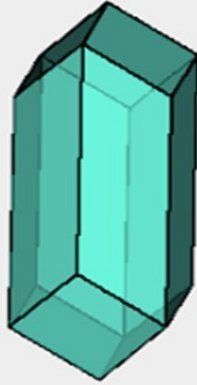
The site is now a state park, the coal pits are shallow ponds and the specimens can be collected on the spoil heaps. The rocky concretions do not break well with a hammer in the field so they have to be collected not knowing what is inside. It is best to take them home and expose them to cycles of freezing and thawing. They will crack open to reveal the mineralized shape inside.

Jerry showed us specimens from seed bearing, palm like ferns. Fossils of giant *Lycopods* included bark from the trunks as well as leaves and pinnules. There were specimens of *Cyperitis* whose grass-like leaves have a distinct mid vein. The bushy *Calamites* are jointed, like horsetails, an *Annularia* fossil showed the joints and radically arranged leaves.

Mazon Creek is classified as a lagerstatte, which means a site with fossils of extraordinary preservation including soft tissue. Animal specimens with hard parts consisted of shark parts, a tick shaped creature called *Cyclus*, and shrimp like crustaceans. Early bivalves are found in groups of two or three inside the accretions. Soft tissue animals are unusually well preserved, jellyfish are so common here that locals ignore them, Jerry had many. There were also casts of a variety of worms, many with legs, sea cucumbers and leaches.

Continued pg 9

The End



Drawing of diopside, modified rhombohedral crystal. Courtesy of smorf.nl with original from Goldschmidt, Atlas de Krystallformen, 1913-1923.

The “softness” of diopside (5.0 Mohs) easily distinguishes them from hard emeralds (8.0 Mohs)—for those of you who identify minerals for treasure hunters. In fact, in the late 1700s copper miners working at the Altyn-Tyube Mine in the Ural Mountains of Kazakhstan thought they had discovered a giant emerald deposit when suddenly beautiful green crystals started showing up. I presume many of the green crystals were taken out via lunch bucket by the Russian and Kazakh miners before the mineralogists/chemists working in Moscow said, “sorry boys, too soft for emeralds.” Even today the Altyn-Tyube is the premier collecting locality for diopside and the source of my specimen.

Diopside forms in the oxidized zone as a secondary mineral where copper sulfides are the primary minerals. However, the formation of diopside is restricted to dry climates where circulating ground water has an alkaline pH (acidic solutions buffered by carbonates) and dissolved copper. Diopside is closely related to another copper silicate, chrysocolla.

And finally, diopside may be, and has been, used as a pigment for painting.

The thought for today: : Green is the prime color of the world, and that from which its loveliness arises.

Pedro Calderon de la Barca.

The End

The Crystal Vug

By Sharon Holte, Scribe

Meet the 4th Thursday, except June, July, August, November, and

On Thursday, February 27, 2020, the Crystal Satellite Group met for a presentation by group leader Kevin Witte on Rhodochrosite.

Rhodochrosite has a bright red color and gemmy interior which makes it among the most desirable. The chemical composition is MnCO_3 , which makes it a manganese ore.

The Sweet Home Mine was located in Mosquito Gulch/ Buckskin Gulch on the southern slope of Mount Bross, in the Alma Mining District, Park County, Colorado, USA and was one of the very best collecting sites in the world. It has since been closed. The Collector's Edge Minerals, Inc. has opened a new audit about 300 feet above the Sweet Home called the Detroit City Mine. The mine is located about 90 miles southwest of Denver, Co and about 93 miles west of Colorado Springs, Co.

The Sweet Home Mine was originally a silver mine that did not produce well. However, the Dolly Varden Mine on the north side of Mt. Bross produced very well. It was thought at the time the two mines were on the same ore vein.



Current View of the building at the Detroit City Mine, Mindat.org

For detailed information see the Mineralogical Record, July-August, 1998, Volume 29, Number 4. Additional information can be found at <https://www.mindat.org/loc-3690.html>.

The End

<p>2019 CSMS OFFICE</p> <p>John Massie, , President</p>	<p>SECRETARY'S SPOT</p> <p>by Lisa Kinder, Secretary</p>	<p>General Meeting Minutes for the Colorado Springs Mineralogical Society -</p>
<p>Vacant, Vice-President</p>	<p>No General Assembly meeting was held in February.</p>	
<p>Lisa Cooper, Secretary</p> <p>Ann Proctor, Treasurer</p> <p>Adelaide Bahr, Membership Secretary</p>	<p>Constitution Changes</p> <p>Third publishing: (due to canceled meeting)</p> <p>The Amendment to Article IX p5, pg 17 - Annual Show. As published in the November 2019 Pick & Pack Page 5. <i>"Vendors will be charged booth fees based on the size of the booths and the cost of the Venue. The fees will be determined by the Show Chairman."</i></p> <p>This change will allow the Show Chairman to determine the fees without each time having to change the constitution.</p>	
<p>Sharon Holte, Acting Editor</p>		
<p>Chris Burris, Member-at-Large</p> <p>Renee Swanson, Member-at-Large</p> <p>Sharon Holte, Past President</p>		
<p>2019 CSMS CHAIRPERSONS</p> <p>John Massie, Program Coordinator</p> <p>John Massie, Show Volunteer Coordinator</p> <p>Mike Webb, Field Trip Coordinator</p> <p>Steven Veatch, Science Fair Chair</p> <p>Frank & Ellie Rosenberg, Librarians</p> <p>Mark Schultz, Social Committee Chair</p> <p>Ann Proctor, Store Keeper</p> <p>Lisa Kinder, Show Chairman</p> <p>Lisa Kinder, Webmaster</p> <p>Lisa Kinder, Facebook Keeper</p> <p>Mike Nelson, Federation Representative</p> <p>TBD, Federation Representative</p>	<p>Third publishing: (due to canceled meeting)</p> <p>The Amendment to Article X, pg 17 – Annual Picnic. As published in the November 2019 Pick & Pack, Page 5. <i>"The annual picnic will be held on a Saturday in August"</i>. The reason for the change is that people tend to be away in July.</p> <p>Second Publishing:</p> <p>The Amendment to Article V, p1, pg 12 Dues change "New Members joining after May 30th shall pay one-half (1/2) the applicable dues" and delete paragraph 5. This will allow those joining at the Show to receive the half a year discounted.</p>	

Hey!!!

We still need to nominate and elect a 2020 CSMS Adult Rockhound of the Year!

Please refer to the November 2019 issue of the Pick & Pack, page 3

If you do not have a copy, you can access www.CSMS1936.com and go to the Newsletters.

Print off a form or two and nominate your best rockhound!!

Thanks!!!

2020 SATELLITE GROUP

CHAIRPERSONS

Crystal, Kevin Witte / Bob Germano

Faceting, John Massie / Bertha Medina

Fossil, Jerry Suchan / Joyce Price

Jewelry, vacant

Lapidary, Sharon Holte

Micromount, vacant

Pebble Pups, Steven Veatch / Betty Marchant

Photography, vacant



President' Corner

By: *John Massie*

March 2020

I I want to apologize for mix up with the mix up Mount Carmel Veteran's Center, which caused us to have a meeting cancelled on short notice. We did not find out about the scheduling change until 3 PM that afternoon. The use and scheduling of the Mount Carmel facility has been solved with the new management at the facility.

Summer is coming which means field trips to various locations for collecting. When planning the field trips do not forget our show on June 12, 13, and 14. We will need all the help we can get to have a successful show. The field trip locations and the dates will be posted shortly.

2020 Liaisons

Florissant Fossil Beds

National Monument, Steven Veatch

Western Museum of

Mining & Industry, Steven Veatch

The Facetor's Cut

By: *John Massie, Scribe*

Canceled / March 2020

The Faceting group will meet March 26 at 7 PM. The meeting will be at Bertha Medina's.

We will be discussing various faceting cuts and how to



Potassium Feldspar

wghns.wisc.edu

**2020 COLORADO SPRINGS MINERALOGICAL SOCIETY
UNDERGRADUATE STUDENT RESEARCH GRANTS**

Committee Chair: Dr. Michael Nelson
Csrockguy at yahoo dot com

The primary goal of the Colorado Springs Mineralogical Society (CSMS)) Student Research Grant Program is to promote and support original research on Colorado geology by **undergraduate students**. The grant program does not seek to cover all of the researcher's expenses but instead should be viewed as a professional endorsement of the research endeavor. Requests for grants are judged on how well the proposed research will advance the science of geology and its related branches **within the State of Colorado**. Since the grant program budget is not anticipated to be large enough to fund every research proposal, the grants will be awarded on a competitive basis. The policy for applying for and awarding grants is outlined below.

Eligibility

Undergraduate students who are undertaking **original research projects on Colorado geology** are eligible to apply for CSMS student research grants. CSMS research grant applicants need not be members of the Colorado Springs Mineralogical Society. Undergraduate students must be currently enrolled in degree-granting institutions and their research must be part of a degree program (an academic course granting credit and a grade). Institutions may not request that overhead costs be added to budgets. **The Colorado Springs Mineralogical Society strongly encourages women, minorities, and people with disabilities to participate fully in this research grant program.** The research proposals will be evaluated on the basis of the feasibility and scientific merit of the project, the abilities of the researcher, and the reasonableness of the budget. Students are eligible for only one CSMS Student Research Grant per degree pursued.

Research Grant Guidelines

Individual grants will be awarded based on merit and number of grant applications received. One confidential letter of recommendation from the student's research advisor is required for each grant applicant. This letter should be sent directly to the Committee Chair via Email (csrockguy at yahoo dot com) to preserve confidentiality .

Due to different schedules at different institutions, research should be scheduled to begin within 4 months of the grant award (anticipated by early May). For 2020, CSMS anticipates that research will begin during summer 2020.

Rules for the Use of CSMS Research Grant Funds

Grants are to be used for expenses directly associated with the research proposed. For example, research funds may be used for field expenses (travel, some meals, lodging), materials and supplies (sample bags, base maps, air photos, film and developing costs, etc.). Travel to professional meetings will not be funded. CSMS will not fund research by undergraduate students that relates directly to a thesis or dissertation by a graduate student.

Funds requested for equipment, computer time and software, thin-sections, chemical and isotopic analyses, and the purchase of services must be fully justified. Research grants may not be used for salaries or tuition. Upon completion of the research, equipment and materials purchased with a CSMS research grant become the property of the department in which the student is enrolled and are expected to be available to help additional students with their research.

Responsibilities of Recipients

Grant recipients are encouraged to present their results at professional meetings as well as to publish them. In both cases, support by the CSMS should be acknowledged. Recipients who cannot undertake or complete their project must return any unused funds along with a written explanation of expenses incurred. Grants may be subject to tax by the IRS and the grant recipient is responsible for determining this point. **When receiving their grant, all CSMS research grant recipients are expected to 1) submit a written article documenting results of their research; however, a more formal report such as a senior thesis may be submitted (and is encouraged). The committee chair will abstract the report and submit such for publication in the CSMS Pick & Pack. At any rate, recipients should keep in contact with the Committee Chair and provide periodic progress reports.**

Applications

A research grant application follows. The Research Grant Committee of the CSMS will review each application. The decisions of this committee are final.

See page 14 for the application

Continued pg 14



[Peridot](#) : $\{Ca_2\}\{Al_2Fe^{3+}\}(Si_2O_7)(SiO_4)O(OH)$, [Quartz](#) : SiO_2
Calumet Mine, Turret Mining District, Chaffee Co,
Colorado, USA from Mindat.org



[Quartz](#) : (var: [Smoky Quartz](#)) SiO_2
Pikes Peak, El Paso Co,
Colorado, USA from Mindat.org



[Almandine Garnet](#), [Sedalia Mine](#), [Sedalia Mining District](#),
[Chaffee Co., Colorado, USA](#) from Mindat.org



[Amazonite on Cleavelandite](#) - UNIVAZ-106 - Key-Hole Vug -
USA ...from Mindat.org

COLORADO SPRINGS MINERALOGICAL SOCIETY

Student Research Grant Program Application

Please follow the format below and submit a signed application *postmarked* (**email attachment**) by the 2020 deadline: **APRIL 20 (or earlier if possible)**. Please note the two critical areas that often distinguish the application!

1. Name of Applicant:
Temporary Address:
Permanent Address:
E-mail:
Telephone numbers and hours that are best to reach you:
2. College/University enrolled:
Expected degree completion date:
Project supervisor and address:
Email:
3. Project title:
4. Statement of problem. Please include in your statement how this work will further our understanding of Colorado Geology. **CRITICAL AREA**
5. Concisely state how you plan to accomplish your investigation. **CRITICAL AREA**
6. Give a brief bibliography of the most important papers related to your proposed research (no more than five).
7. Duration of investigation (dates):
8. Budget: **CRITICAL AREA**
9. Budget justification:
10. Other support for this project, both applied for and received. For support applied for, include dates you expect to know outcome:
11. Sign (electronic signature is valid) and date the submittal:

Signature

Date

Please send completed application, via Email attachment to:

csrockguy at yahoo dot com

Our Staff...

Sharon Holte—Editor

We encourage everyone to submit articles, photos, illustrations or observations!!!

Share your experiences, your new finds, or simply your enjoyment of our last field trip.

Handwrite it, type it, or email it. Format does not matter. All submissions are welcomed. The DEADLINE for items to be included in the next Pick & Pack is the **25th** of the month.

To submit an item:
 For hardcopy photos or articles, mail to the address below or bring them to the General Meeting. All hardcopy photos remain the property of the submitter and will be returned. Electronic photos can be submitted at resolutions above 200 dpi in ANY format.

Articles are preferred in MS Word, preferably NOT pdf, but the editor will correct font.

E-Mail to: **SharonRocksCo@gmail.com**

Mail to:
 Pick & Pack Editor
 PO Box 2
 Colorado Springs, CO 80901

The PICK & PACK is published ten (10) times per year (no issues in January or August). Unless otherwise marked, materials from this publication may be reprinted. Please give credit to the author and CSMS PICK & PACK.

CSMS

T-Shirts, Badges, and Pins are available for sale.

If you celebrated a CSMS anniversary in 2017 or 2018, you are eligible for your one year pin award!

Please see Storekeeper,
Ann Proctor



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PICK & PACK

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CSMS is an incorporated nonprofit organization with these goals:

To promote and disseminate knowledge of the earth sciences, especially as they relate to mineralogy, lapidary, and fossils.

To encourage study, collection, and fashioning of minerals.

To accomplish the same through social meetings, lectures, programs, displays, shows, and field trips.

The Pick & Pack is published 10 times each year to assist and promote the above.

Joining the Colorado Springs Mineralogical Society (CSMS): Meetings are held the **third (3rd) Thursday of each month**, except January & August, **7:00 p.m.**, at Mt. Carmel Veterans Service Center; 530 Communication Circle, Colorado Springs, CO 80905. **Visitors are always welcome.**

CSMS also offers Satellite Group meetings that allow more focused attention in specific areas of our members' interests. Our current Satellite Groups consist of the following: Crystal Study Group, Faceting Group, Fossil Group, Lapidary Group, and Pebble Pups/Juniors. For details on Satellite Group meetings, check out the calendars on page 2 and the web site.

Yearly dues include 10 issues of the *PICK & PACK*, all field trips (additional fees may be required on some field trips, and members are responsible for all transportation to and from), participation in all Satellite Groups (some groups may request additional fees to help cover resource costs), free admission to the *Western Museum of Mining & Industry* (carry your card), a year of learning and enjoyment, plus a lifetime of memories.

Individuals—\$30, Family—\$40, Juniors—\$15, Corporate—\$100, *****Application is on the web site.

If you are interested in joining CSMS or would like more information, we encourage you to attend our next General Meeting or visit our web site: www.csms1936.com

Colorado Springs Mineralogical Society is a Member of the following organizations:

American Federation of Mineralogical Societies (AFMS)

www.amfed.org

Rocky Mountain Federation of Mineralogical Societies (RMFMS)

www.rmfmts.org