



LEAVERITE NEWS

Grand Junction Gem and Mineral Club
2328 Monument Road
Grand Junction, CO 81507



★ PRESIDENTS MESSAGE BY MEL BERSCH ★

I would like to welcome the many new members who have joined our club. We are a club moving forward and we encourage new and old members alike to enjoy what the club has to offer. Our classes, field trips, socializing with friends, and promoting the study of geology are the main goals of our club. My thanks to all who have stepped up and volunteered in getting the club to move forward.

Our upcoming 70th annual Gem, Mineral, & Jewelry show “Mining for Gems” to be held at Two Rivers Convention Center Mother’s Day weekend is on track to be a great show. Remember this is our biggest event we put on for the club and the community. We need volunteered to help in all capacities, so help where you can. Putting on this show helps the cost of maintaining our club house and enables us to keep our dues as low as there are.

Our matching building fund donations are up to \$285.00. Thanks to all who have donated so far. We are looking to meet the goal of \$1000 by July 1, 2017.

Check out meetup.com or contact trip leaders to get signed up for our field trips. If you have any questions about meetup.com, contact Jim Schultz at 970-242-0428. This is a great way to stay up-to-date on what is happening in the club and trip updates, such as rain cancelation and re-scheduling.

March 2017 Volume 34 Number 3

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
 <p>Building Fund Match \$1000.00 Donation!</p>			<p>1 12-3 Open Shop</p>	<p>2 6-9 Beginning Lap</p>	<p>3</p>	<p>4 9-12 Open Shop 12-3 Filigree</p>
<p>5</p>	<p>6</p>	<p>7 6-9 Beg & Adv Lap</p>	<p>8 12-3 Open Shop 7:00 Board Meeting Bersch’s</p>	<p>9 Cookie Meeting 6:30pm</p>	<p>10</p>	<p>11 9-12 Open Shop 12-3 Filigree</p>
<p>12  Full Moon</p>	<p>13</p>	<p>14 Gold Mining Group 7:00 pm 9am Silver Smith 6-9 Beg & Adv Lap</p>	<p>15 12-3 Open Shop</p>	<p>16 6-9 Beginning Lap</p>	<p>17 </p>	<p>18 9-12 Open Shop Faceting 9:30</p>
<p>19</p>	<p>20</p>	<p>21 9am Silver Smithing 6-9 Beg & Adv Lap</p>	<p>22 12-3 Open Shop</p>	<p>23 Dinner Meeting 6:30pm</p>	<p>24 Mineral Group</p>	<p>25 9-12 Open Shop</p>
<p>26</p>	<p>27</p>	<p>28 9am Silver Smithing 6-9 Beg & Adv Lap</p>	<p>29 12-3 Open Shop</p>	<p>30</p>	<p>31</p>	<p>1 9-12 Open Shop</p>

The Grand Valley Gold Prospectors Group

The Grand Valley Gold Prospectors Group is now part of the Gem and Mineral club. They will meet each month at the clubhouse at 7:00 pm on the 2nd Tuesday. Everyone is welcome to attend the group. P.O. Box 1357 Grand Junction, CO 81501, 773-3132



Scholarship Awarded



This year the Club elected to award two \$500 scholarships to Colorado Mesa University geology students. The scholarship committee (Jana Burritt, Joyce Frost, John Mayerik and Bill Hood) selected the following two students as this year's winners:

Laura Moran is a single mother of twin boys, age 10. She is a junior with a GPA of 3.63. Laura comes by her interest in geology naturally, as her father was a geophysicist for part of his career and Laura was exposed to rocks and minerals for much of her early life. After several years in the working world, she decided to finally pursue her passion, moved to Grand Junction and enrolled in CMU. She plans to use the scholarship money to pay for part of the expenses to attend geology field camp this summer.

Anthony Seuga-Duncan is a senior at CMU with a GPA of 3.46. He is passionate about the outdoors and science and so selecting geology as a career was an easy choice for him. He is a local resident, having grown up here in Grand Junction. He, too, will be using the scholarship money to pay for part of the expenses of summer field camp. After graduation at the end of field camp, Anthony will be seeking a job in the energy industry. Congratulations!

2017 Gem and Mineral Show-- Mining for Gems

The Show will be held at Two Rivers Convention Center, May 13-14, 2017. Clean out your supplies and donate them to an appropriate area. Grab bags are always in need of small, interesting rocks and minerals as well as small toys and jewelry that would appeal to children. They will have a work meeting April 8th at 10:00 am. Kay Crawford would like small rocks and minerals that can be used as game pieces for games such as Mancala or Tic-Tac-Toe. The Silent Auction needs larger specimens, equipment, jewelry, etc. And, of course, very nice door prizes always make for an exciting show. Bambi Harmon, Vendor Chairman, noted vendor contracts are due March 15th. Signs which identify vendor tables need to be replaced. Jan McCollum needs a replacement to cook for the vendor dinner or make it a potluck with members providing the dishes. Bambi determined vendor table cost is a little higher than other rock shows. Scott Warren will take the lead in this effort. Nathan Trump will work on advertising our show on social media. Potential advertising sites for the Show include: The Career Center; CMU newspaper; Daily Sentinel Out and About; radio ads; and social media. A fluorescent rock cave will be built at the Math and Science Center

Education Opportunities--Heritage Days

The Gem and Mineral Club will again participate in the Heritage Days event at the Palisade Riverbend Park April 29, 2017 from 9:00 am - 3:00 pm. This free event offers a variety of outdoor activities that youth and their families can participate in including fishing, archery, rock climbing, shooting, nature hikes and a hunting simulator. Jim Schultz will make 300 flyers to hand out and Joe Jones (Chicken Jones' son) will donate rocks for the kids..

We need volunteers to help man our site as well as good samples of rocks and minerals to give to the kids. This is not only a teaching opportunity but helps advertise our club and show. Contact Pam Bersch for more information.



Rock Formation Presentation

Bambi Harmon and Pam Bersch went to Underwood Elementary School in Parachute to present a program on rock and minerals. They had a great sample of a rock that would float but pretended that it was heavy. The kids had fun holding it over their heads with one hand when they found out how light it was. Many of the students thought a mineral was a polished rock so they were able to help the kids distinguish between those two terms. They used a rock formation worksheet to help them understand the formation of igneous, metamorphic and sedimentary rocks.





Happy Birthday Virdie Savage!
101 years!
Congratulations!

A Lifetime Member!

Field Trips

All field trips are by pre-registration. You must be a member of Grand Junction Gem and Mineral Club or a first-time guest to participate in field trips with a signed release of liability.

Crystal Geyser in Utah

There will be two field trips to the Crystal Geyser, April 22nd or the 23rd.

Meet at the Fruita Visitor's Center at 8:00 am. Come see a cold-water geyser that at one time shot into the air 20 feet, but now only two feet. There are so many minerals in the water that it forms pools on the bank of the Green River before emptying into the river. Before the geyser there is a hillside of Travertine, aragonite. This was a mining operation at one time. It is a rare example of a cold-water carbon dioxide driven geyser; geothermal activity does not play a role in the activity of the geyser. The ground water near the geyser has significant quantities of dissolved carbon dioxide, along with substantial underground gas accumulations in the surrounding area. Saturation of the aquifer with CO2 creates enough pressure to force groundwater through the geyser and out on to the surface. Crystal Geyser is located on the east bank of the Green River approximately 4.5 miles (7.25 km) downstream from Green River, Utah. This is an easy one day trip, no four-wheeler or high clearance vehicle needed, bring water and lunch, small tools might be necessary. Field trip leader is Wayne Sims 970-314-2970.

Cisco, Utah

Sunday April 23rd. Meet at the Fruita Visitor's Center at 8:30 am

This is a day trip to a very neat place where you can find petrified wood, agates, look at dinosaur bones, and many other finds. It is a must go to for unique geography. Any vehicle can drive to location, need water, lunch, small tools, hiking boots. Harold Epple is the field trip leader phone 970-858-4804.

Proposed 2017 Field Trips

Date	Type	Location	Leader	Notes
April 22	Day	Cold Water Gyser	Wayne Sims	8:00 am, Fruita Visitor's Center
April 23	Day	Cisco		8:00 am, Fruita Visitor's Center
April 23	Day	Cold Water Gyser	Wayne Sims	8:30 am, Fruita Visitor's Center
April 29	Overnight	Blue Forest	Mike Burritt	
May 6	Overnight	Henry Mountains	Mel Bersch	
May 21	Day	Floy Wash		
June 10	Day	Grape Agate	Brad and Bambi Harmon	
June 17	Rain Date			
June 24	Day	Gold Claims	Chris Henderson	
July 29-Aug 5	Overnight	Wiggin Fork, WY	Sue Smith	
July 22	Day	Portland Mine	Wayne Sims	
August 2-13	Overnight	Buena Vista Show	See you there!	
August 14	Overnight	Hartsville	Mike Burritt	
September 23	Overnight	Lake George	Chris Henderson	
September 16	Day	State Bridge	Wayne Sims	
October 21	Day	West Water	Mike Burritt	
November 4	Day	Sand Flats	Jim Schultz	





March Program

Bill Hood will present the program for the March meeting about the Volcanic history of the Grand Mesa. This should be a very interesting and informative presentation.

Facetors Meeting

February 18, 2017 Connie Duncan

This month we had most of our members attending: Thom & Kathy Ericson, Casey Trump, Dale Breckenridge, Mike Ryan, Ralph Stuart, Howard Whipple, Connie Duncan, and guest, Missy Palmer.

Our Project of the Month, "Easy Does It" was cut by Howard - Blue Spinel and Connie Duncan - Yellow CZ. Howard also had cut the "Key Star" in red glass.

Dale, having just returned from points South, showed some of the material he purchased at the Tucson Show, some Nano Gem, Yag and others. Dale also told us about some of the information he learned from the well-known cutters. Ernie Haas gave some tips on transferring stones, as well as ways to eliminate use of the cheater dial. Dale had some Lightning Laps that now come with a more sturdy backing in 3,000 thru 50,000 diamond grits. He also had a new Ceramic Lap from rusgems.com that is ceramic bonded to a steel backing plate.

Connie said she had ordered some Yag for the group thanks to Casy for his generous donation to the Facetors' in December.

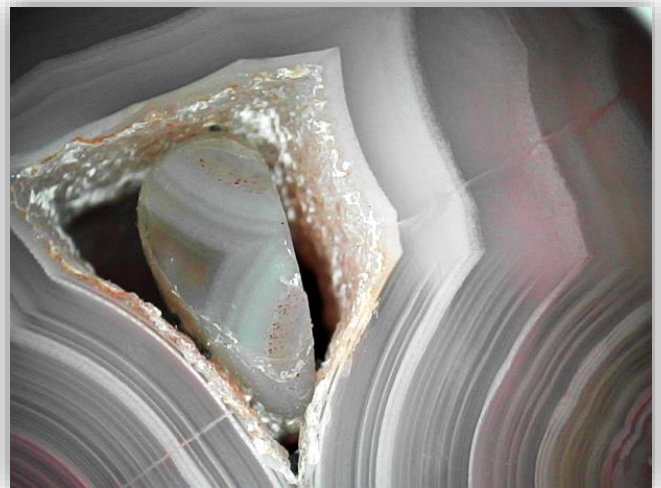
Connie also indicated that she had contacted Pam Johnson about a display case for faceted stones at the show. Pam will begin working on the case distribution in March. Connie also contacted Wayne McMacken, Show Chairman, asking if there will be demonstrators at the show this year and if so how much space will the Facetors' have. She also inquired about being able to have the Facetors' competition case and the "Peoples Choice" case in the main building as in past years. Our next meeting will be March 18th, the project is a round brilliant with a modified pavilion.

Mineral Group

We had a nice group of 18 people to enjoy the evening. Theme was MEXICAN AGATES; Mel gave a talk on how they form, pseudomorphs, and oddities. Agates are enormously complicated—even beyond what most agate collectors can appreciate. The next meeting will at the Bersch's house at 6:30pm on March 24, 2017. All club members and their guest are welcome. Bring 5 specimens to look at and to discuss from your collection or specimens you need identified. We will try to help. Here are some pictures from our February meeting. Mel Bersch



Coyamito pseudomorph agate



An agate in an agate

Brag Rocks



Ruby Sapphire Spinel 094

Copyright 2016 Thomas Hunn

Grand Junction Gem and Mineral Club

Officers

President	Mel Bersch	242-3134
Vice President	Mike Burritt	260-3897
Co-Secretary	Anita Martinez	434-9270
Co-Secretary	Chris Henderson	719-244-3192
Treasurer	Pam Bersch	242-3134

Directors

Pat Martinez	434-9270
Cindy Teare	462-6806
Teri Drost	256-0983
Jim Schultz	242-0428
Betty Jo (BJ Brown)	241-3051

Committee Chairpersons

Audit	Kathy Erickson	623-2522
Building and Ground	Sylvester Spaeth	846-5716
	Judy Nason	250-9128
Compliance	Jim Schultz	242-0428
Correspondence	Bambi Harmon	216-4540
Decorating	Linda Dunham	623-3610
	Val Meduros	773-4244
Display Cases	Carmen Bruno	773-4247
Education	Cindy Teare	462-6806
Field Trips	Wayne Sims	314-2970
Funding/Constr.	Mike Cosby	589-0687
Historian		
Hospitality	Judy Nason	250-9128
Inventory		

Leaverite Editors

Librarian

Meet-Up

Membership/Badges

Nominating

Publicity

Scholarships

Shop Foremen

Show

Show Assistant

Supplies

Vests

Website

Lorrie Wallace	250-1122
JoAnn Whalen	424-2007
Evita Schultz	242-0428
Jim Schultz	242-0428
Dave McCollough	523-5443
Teri Drost	260-2478
Wayne McMacken	208-2534
Bill Hood	241-8020
Thom Ericson	623-2522
Scott Pugsley	972-953-7735
Wayne McMacken	208-2534
Bambi Harmon	216-4540
Linda Sims	314-2970
Linda Sims	314-2970
John Mayerik	243-8589

Board Meeting

The board will meet at Mel Bersch's house, 248 Little Park Road, at 7:00 pm on the Wednesday before the 2nd Thursday Cookie Meeting each month. All club members are welcome to attend. Hope to see you there.

Club Information

The Grand Junction Gem & Mineral Club, Inc. is affiliated with the American Federation of Mineralogical Societies, and the Rocky Mountain Federation of Mineralogical Societies. The club is located at 2328 Monument Road Grand Junction, CO. The Club is a nonprofit, 501(c)3 tax-exempt, educational organization. Our purpose shall be exclusively educational and social: To increase and disseminate knowledge of the earth sciences pertaining to minerals, gems, rocks, artifacts, fossils and similar subjects; To promote and perpetuate knowledge of the lapidary arts; To encourage field trips; To encourage greater public interest and education in gems, fossils and minerals, cooperating with established institutions in such matters. The Grand Junction Gem and Mineral Club meets on the second and fourth Thursday of each month at 6:30 pm in our club building. June, July, and August meetings will be on the fourth Thursday only. November and December meetings will be on the second Thursday only. Our Annual Show is Mother's Day Weekend and is held at Two Rivers Convention Center at 159 Main St, Grand Junction, CO 81501. Classes and workshops are offered throughout the year and are announced in the newsletter.

The Facetors Group

The Facetors Group meets at the clubhouse on the 3rd Saturday of each month at 9:30 am. They have a Project of the Month and a Peoples Choice. They also have teachers available for one-on-one classes. Contact Connie Duncan at 244-2984 for information about the group or classes.

The Grand Valley Gold Prospectors Group

The Grand Valley Gold Prospectors Group is now part of the Gem and Mineral club. They will meet each month at the clubhouse at 7:00 pm on the 2nd Tuesday. Everyone is welcome to attend the group. P.O. Box 1357 Grand Junction, CO 81501 970-773-3132

The Mineral Group

The Mineral Group meets at the Bersch's, 248 Little Park Rd, on the Friday after the 4th Thursday's Club Meeting and is open to all club members and guests. A potluck will be followed by discussion and microscopic images of various minerals. Please bring up to 5 specimens, and/or other minerals you wish to look at for the discussion.

New Members

Welcome to the Grand Junction Gem and Mineral Club. Include your email address when you register to receive newsletters and updates. Check out the website for past newsletters and general information. Order a vest made to your size from Connie Lynch for \$20.00 and a name Tag from Dave McCullough for \$8.00. Be sure to sign up for some classes to learn how to use the machines in our shop so you can participate in open shop.

Dues

Our calendar year is January 1 - December 31. Dues are due by December 31 but must be in by January 30 for names to be included in the Club Directory. Please pay your dues at the meeting or send to: Dave McCollough 3032 Milburn Court Grand Junction, CO 81504; 970-523-5443. Prospective members should attend one general meeting to obtain a membership application. Annual dues will be prorated after July 1st. Adult Member - \$30.00 (18 and over 2nd Adult, same household - \$10.00 Children under 18 years, same household - No Cost

Club Rules and Regulations

The notebook of rules and regulations is available on the front table at all meetings for members to read.

Gem and Mineral Classes

Most classes are 6 weeks. Member's cost \$30.00. Non-member's cost is \$60.00. The cost of the classes is based on 6 weeks and prorated when the class is shorter. Please contact instructors to sign up for classes.

Class	Instructor	Phone	Open Shop
Beading	Tiny Blasdal	858-7975	Shop Chairman: Thom Erickson 623-2522
Chain Making	Cindy Teare	462-6806	Shop Supervisors:
Faceting	Connie Duncan	244-2984	Wednesday: 12-3 Thom Erickson 623-2522
Filigree	Jana Burritt	260-9471	Saturday: 9-12 Scott Pugsley 972-953-7735
Intarsia	Jim Lynch	361-2123	Previous instruction in use of equipment is required
Lapidary	Jim Schultz	242-0428	before using any tools or machines in the shop.
Lapidary	Mike Burritt	260-3897	Sign in each time you use the shop.
Silversmith	JoAnn Piburn	245-1669	Help with the clean-up before leaving.
Silversmith	Wayne McMacken	208-2534	Shop fee is \$5.00/session.
Wire Weaving	JoAnn Piburn	245-1669	Slab saw \$.26 per square inch.
Wire Wrap			Always—Safety First

The Leaverite News

The Leaverite News is your newsletter. Articles, ideas and news should come from the club members. If you are an officer, director, or committee chair person you should plan to submit monthly updates by the 15th of each month. News should be emailed to leaveriteneews@gmail.com or contact Lorrie Wallace (250-1122 or JoAnn Whalen (424-2007, 554 Casa Rio Ct., Grand Junction, CO, 81507. *Leaverite News is published nine months of the year (Sept-May by the Grand Junction Gem and Mineral Club, Inc. Articles printed in this newsletter are the experiences and/or opinions of the individuals submitting them. They do not necessarily reflect the views or opinions of the Grand Junction Gem and Mineral Club, nor of the editors. Articles written without a byline are written by the editor. We are not responsible for authenticity, safety, or reliability of publications. All articles/photos are included in accordance to fair use for research and education. Caution and safety should always be practiced when trying out any new idea, venture or exploration in the field. We request corrections and/or additions to articles.*

Grand Junction Gem and Mineral Website

Our website, www.grandjunctionrockclub.org, has meeting information, Leaverite Newsletter, Classes, Field Trips, & Photo Gallery. Send information to John Mayerik; 243-8589; email Grandjunctionrockclub@gmail.com

Meetup

Meetups are neighbors getting together to learn something, do something, share something. The Club is registered at the Grand Junction Meetup. Go to http://www.meetup.com/cities/us/co/grand_junction/ to register or for information or call Jim Schultz at 242-0428.

Summary of Minutes of the Gem and Mineral Club Board Meetings

Board Meeting

Old Business:

Audit done by Kathy Ericson 2-\$500 scholarships

New Business:

Membership: Missy Palmer, co-chair of Membership Committee is resigning and needs a replacement. GJGMC class teachers and their spouses need free membership cards.

Show: *See Newsletter body.*

Fund Raising: Member matching donations of \$235 have been raised so far toward the \$1000. Budget: Jim Schultz presented the 2017 budget which was accepted by the Board. He noted it is difficult to prepare a budget because the finances of the club and the annual show are on separate accounts. As noted in the Blue Book, the Show and Finance managers must work together on a budget which is then taken to the Board for approval. Because this procedure is not currently being followed Jim proposes that the Board meet this summer to evaluate the 2017 show expenses/proceeds and establish the 2018 budget.

Outdoor Heritage Days *See Newsletter body.* CPW wants donations for event expenses and in return, they will put our logo on their fliers. The Board agreed to give CPW a \$100 donation.

Other Business

Someone is needed to maintain MeetUp.com.

Post field trips on MeetUp.com.

Mel will not be president in 2018.

The June Board meeting will be dedicated to planning, budgeting, and establishing goals for the 2018 Show and Club activities.

Next meeting of board we'll talk about and update the Blue Book, with emphasis on the show.

General Meetings

February 23, 2017

72 Attendees

Old Business:

Building Fund Challenge: Donations are tax deductible. Donations can be given to Pam Bersch. Currently, members have raised \$265 toward the Challenge.

Education: Bambi Harmon and Pam Bersch taught 170 third graders at Bea Underwood Elementary School in Parachute. The kids learned about the difference between minerals and rocks. All kids received rocks/minerals to take home. More rocks are needed to hand out to kids at future educational events.

Colorado Division of Parks and Wildlife will host the Outdoor Heritage Day on April 29th from 9:00am to 3:00pm at Palisade River Bend Park. Our club will set up a booth to educate kids. Help is needed to hand out rocks to kids and distribute fliers that describe our upcoming show.

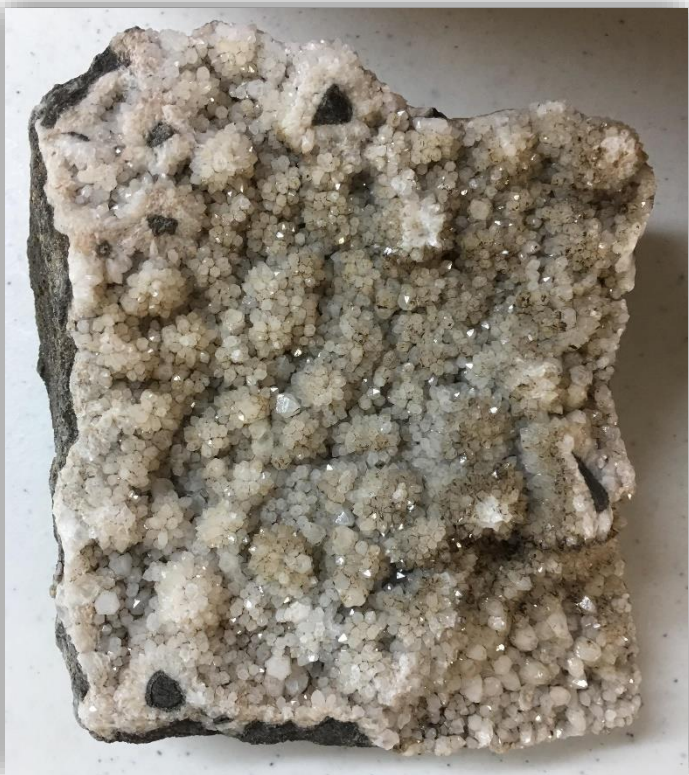
Classes organized by Cindy Tier: *See Calendar.*

Annual Show Update: Committee chaired by Wayne McMacken. The theme of the show is "Mining for Gems". An advertising meeting was held February 22, 2017. Scott Warren will take the lead in this effort. Nathan Trump will work on advertising our show on social media. A model of the Math and Science Center's fluorescent display will be at our show. Show informational fliers will be available in about four weeks. Chairs of various activities (such as admission, grab bags, class demonstrations, and silent auction) need to organize volunteers. Thom Ericson will identify a work day to organize silent auction items. Grab bags work day will be April 9th. Donations are needed for door prizes. Pam Johnson, has a signup sheet to get volunteers to set up the glass cases. She'd like to have a case that highlights the 70 year history our club. She needs someone to assist with small chores concerning the cases. If you can help call her at 523-5443. Kay Crawford is working on board games for sale at the silent auction. She needs small stones for these games.

Field trips: *See Newsletter body.*

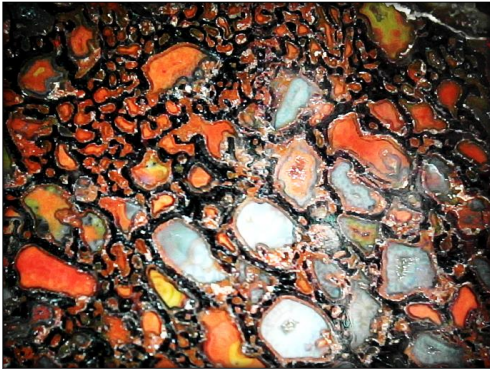
Gold Mining Group will meet second Tuesdays of every month starting March 14th.

Brag Rocks ...continued



Mineral Group...continued

Dinosaur bone with each bone cell forming individual agate nodules.



Rock Formation Presentation... continued





Facetors Group ... continued

Facetors group minutes had a couple words that I wondered about and thought I would look up. It is a new and interesting field of gems.

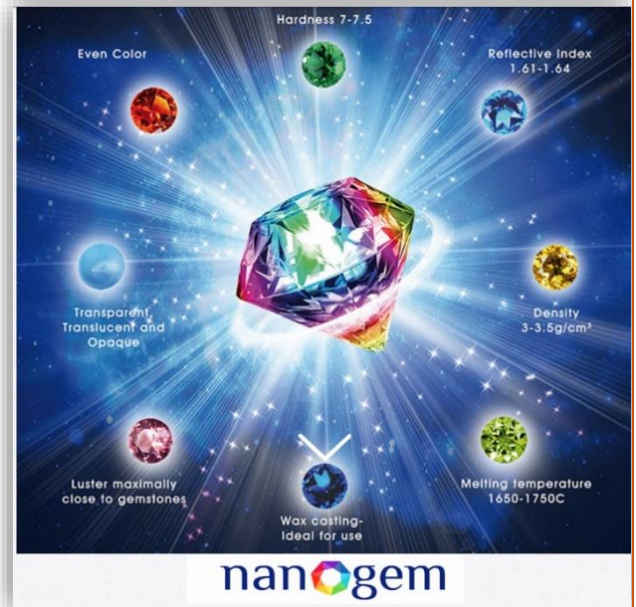
Yag-- a synthetic crystal of yttrium aluminum garnet, used in certain lasers and as an imitation diamond in jewelry.

Spinel--a hard glassy mineral occurring as octahedral crystals of variable color and consisting chiefly of magnesium and aluminum oxides.

Nanogem

<http://www.nano-gem.com/>

We are creators and manufacturers of Nanogem & Nanocrystal®, the best imitation of the color gemstones. We are the first company in the world that has developed and patented in 2011 the production technology of new colored material for the jewelry industry, which we call Nanogem & Nanocrystal®. Nanogem - is the glass-ceramic material with nano sized (10^{-9}m) crystals of Spinel in an aluminosilicate glass matrix, which is not special glass and it is not synthetic crystal or mineral - it is their hybrid. This composite material has unique physical and optical properties: Color



(homogeneous and even), Density ($3-3.3\text{g/cm}^3$), Luster ($\text{RI}=1.61-1.64$); Melting temperature (more than 1650 C°) and high thermal shock resistance make this material ideally compatible with the wax-casting technology.

Nanogem is the best imitation gemstones

Colored glass usually has low hardness and insufficient luster. If compared with CZ, Hydrothermal quartz, Synthetic corundum, Spinel etc. our material is more uniform in color and is very close to the natural gems in hardness, refractive index, and luster. Moreover, unlike glass and many synthetic stones, Nanogem does not change color or destroyed during casting with stones.

Recently, a lot of color materials with the prefix "nano" appeared in the market. Some of them claim that their material is also a glass-ceramic, but in fact, almost all of these materials are just conventional colored glass, sometimes zirconium or yttrium, but still Glass. No

nanocrystals in these materials can be traced. Accordingly, there are no comparable properties with our Nanogem.

At present, our production capacity is over 80 tons of rough nanogem materials a year. The major part of this rough we process into cut stones and deliver to jewelry factories all around the world, including the

world's most leading and famous brands. Big size stones we cut ourselves at our own cutting facility in Thailand, and small stones of all standard shapes and sizes - together with our partners in Europe and China.

In September 2013, Formica Group received the Awards for the best innovation in the category "Manufacturing and Technology" for Developing and Manufacturing of Nanogem. Getting this highly prestigious award was a confirmation of the importance of our new product for the entire jewelry industry.

Formica Group's birth date - November 1992, place of birth - Moscow, Russia. The founders of the Formica Ltd. were Mr. Karen Avakyan (PhD) and his colleagues - scientists of the Geological Institute of the Russian Academy of Sciences. In the beginning, production of hydrothermal emerald rough, and the trade of such rough materials as Hydrothermal quartz, Synthetic Corundum, Garnet (YAG) and Cubic Zirconia (CZ) were the main business of the company.

Ten years later - in May 2002, a subsidiary company - Rough Synthetic Stones Co Ltd. (it is now renamed as Formica (Th) Co Ltd) has been registered in Bangkok, Thailand. This has led to an increase in sales of rough synthetic stones and allowed expand the company's business by means of adding to the trade portfolio - Cut stones, both synthetic and natural.

In 2005, Formica-Phianite Co., Ltd - our factory for the production of special colors CZ (brown, green, blue, with alexandrite effect ...) started operation in Chonburi, Thailand.

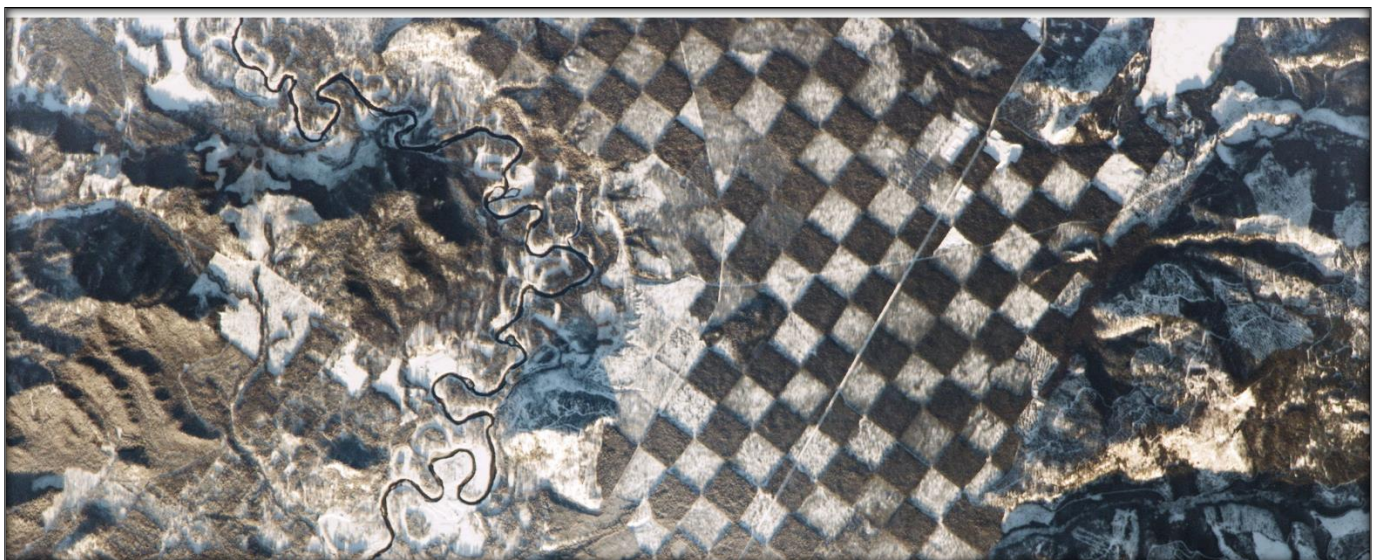
Again, 10 years later, in 2014, we opened another new factory - Formica Crystal Systems Co Ltd. It is this factory that produces Nanogem - product that we are proud of and consider as our best achievement in all the years of company existence.

In the same 2014, we opened our office and shop in Wuzhou China. It allowed us to gradually reduce the sale of rough materials and shift to the trade of finished cut stones.

Check out their website for more information.

Chess, Anyone? Giant Checkerboard Spied from Space

<http://www.livescience.com/57753-giant-checkerboard-seen-from-space.html?utm>



For astronauts aboard the International Space Station, any glance out the window could inspire wonder and awe. One spaceflyer was recently treated to a special sight: a giant checkerboard stretching across part of the planet's surface. The astronaut did not actually spy a giant board for playing checkers or chess, of course. Rather, patches of deforestation in Idaho created the checked pattern, according to NASA. The white squares show where snow had fallen on deforested ground, while the alternate dark areas show dense forest, the agency said.

Dividing parcels of land in a checkerboard pattern was first agreed upon in in the 1800s, when the U.S. government granted alternate 1-square-mile (2.6 square kilometers) parcels of land to the Northern Pacific Railway according to NASA.

It's not every day that a new continent is discovered.

By JURICA DUJMOVIC COLUMNIST

But it just happened. Lewis D. Ashwal, a geoscientist at the University of the Witwatersrand in South Africa, published a paper about it in Nature Communications.

He unearthed 13 grains of zircon on the small island of Mauritius. Using uranium-lead dating techniques, the scientist estimated that the minerals were 3 billion years old. Mauritius, however, is only 8 million years old, which means that the grains didn't form alongside the island, but were expelled by underwater volcanic activity.

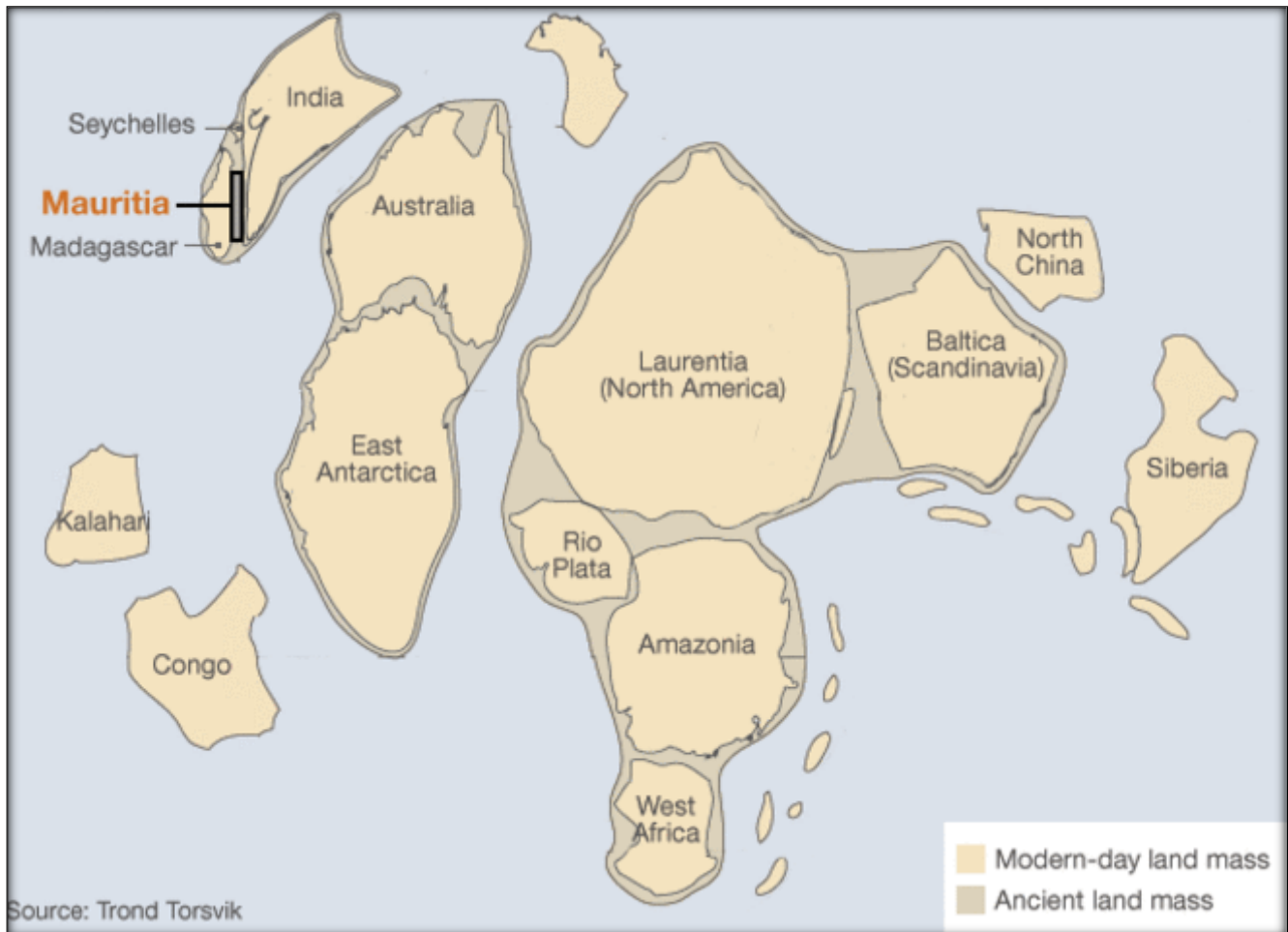
So how does this explain the existence of another continent?

Well, Ashwal explains that the Earth consists of two parts: continents, which are old, and young oceans. This means that although ancient rocks and minerals can be found on continents, nothing billions of years old exists in the oceans. In that case, the very ancient zircons must have originated from a continent. The professor also claims that these findings suggest the existence of other lost fragments of that same continent, collectively called Mauritia, spread over the Indian Ocean's crust. What do we know about Mauritia?

Mauritia was a small continent, also known as a microcontinent, roughly one-quarter the size of Madagascar. During the late Paleozoic and early Mesozoic era, the Earth's continental mass consisted of one gigantic continent called Pangea. Eventually, it broke apart into supercontinents, which over the course of hundreds of millions of years separated into even smaller structures and formed the continents we know today.



The Mauritia microcontinent was part of Gondwana, an ancient supercontinent that existed 200 million years ago, and before breaking apart, contained the landmass of today's Antarctica, South America, Africa,



Madagascar and Australia, as well as the Arabian Peninsula and the Indian Subcontinent.

The first hints of Mauritius's existence date to 2013, when scientists uncovered variations in the gravitational pull within the Indian Ocean. Mauritius sits on one such area with a strong gravitational pull called a mass concentration, or "mascon." These variations were attributed to the varying levels of thickness and density of the ocean floor crust, caused by the chunks of sunken land. Scientists concluded that these differences point to the existence of an ancient continent, lost deep beneath the ocean waves.

After Gondwana broke apart, the tectonic movement caused Mauritius to fracture and sink 84 million years ago. Underwater volcanic eruptions from the sunken continent created Mauritius, also spewing forth the ancient zircons that Ashwal collected for his paper.

We're spending billions of dollars each year to reach the stars and understand the secrets of the universe, while we still haven't solved all the mysteries here at home. What other secrets are hidden beneath the waves? I'm sure science will let us know soon enough.

<http://www.marketwatch.com/story/what-we-know-about-mauritia-the-lost-and-now-found-continent-2017-02-22>