



UPCOMING SHOWS

& Events

October 27

Ultraviolation- Fairless Hill, Pa
23rd Annual Fluorescent –only mineral Show
“If your rocks don’t glow, you’re at the wrong show!”
Rock & Mineral Club of Lower Bucks County

October 27

South Penn Rock Swap
Central Pa Rock & Mineral Club & Franklin County Rock & Mineral Club

November 3-4

Gemarama- Exton, Pa
43rd Annual Gem Show
Tuscarora Lapidary Society

November 10-11

Fall NYC Gem & Mineral Show
Holiday Inn, Midtown Manhattan
57th St & 10th Avenue

December 1-2

Suffolk Gem & Mineral Club
Our Lady of Mt. Carmel, Patchogue, NY

For other Gem and Mineral shows:

<http://www.amfed.org/EFMLS/calendar.htm>

www.suffolkgem.com

**P. O. Box 302
Bohemia, L.I., NY
11716**



To promote cultural, educational, and scientific interest in mineralogy, and develop member's skills in lapidary arts and jewelry crafts

October 2012

THE CONGLOMERATE

The Monthly Newsletter of the Suffolk Gem & Mineral Club, Inc.

Monthly Club meetings held at the Bay Shore-Brightwaters Library, Montauk Highway, Brightwaters starting at 8:00pm.

Refreshments served at 7:30 pm.

CLUB OFFICERS

*The Conglomerate Editor - Cheryl Neary
Club Webmaster - Kerry Dicker*

President –	Kerry Dicker	631-277-0994	Director - Elaine Casani	631-567-3342
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Treasurer -	Roberta Besso	631-666-8023	Director – Dorothy Scott	631-281-8555
Secretary –	Kerry Ann Hilliard	631-277-0994	Director –Cheryl Neary (cell)	516-449-5341
Liaison -	Charles Runko (cell)	631-486-4549	<i>Historian - Kerry Ann Hilliard</i>	631-277-0994

Cell phones are to be turned off during all Club meetings.

More importantly, there should be no disturbances during any guest presentations.



Happy
Birthday
Wishes!
May Your Year
Be Filled
with Hugs &
Kisses!

Josephine Buttacy

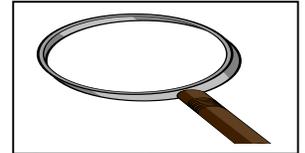
2012-2013 UPCOMING MEETINGS

Save the Dates!

October 15th - Hands-On

November 19th

December 17th -



*Annual Gem, Mineral, Fossil & Jewelry Show
Our Lady of Mt. Carmel RC Church
North Ocean Avenue, Patchogue*

January 6th

February 4th (Note: 1st Monday due to Holidays)

March 18th

April 15th

May 20th

May 31st - June 2nd -

EFMLS Joint Convention Show

June 17th

No meetings July-Aug

Picnic-date to announced

Presentation Sponsored by

The Nassau Mineral Club and The Friends of Garvies Point
Museum

“Geology and Mineralogy of the Inwood Marble,
Northern Manhattan, NY”

By Dr. Charles Merquerian, Hofstra University and Dukelabs

Location: Garvies Point Museum and Preserve
50 Barry Drive, Glen Cove, NY 11542

Date & Time: Sat. December 8, 2012 1:00 P.M. - 2:30 P.M.

Arrive at 12:30 PM to greet and mingle. Refreshments.

\$3.00 admission: includes lecture and museum

Children 5-12 years: \$2.00- All ages welcome.

Samples for the youngsters will be available.

Field Trip:

October 12-13th : LIMAGS is

Planning a car-pool trip to
Margaret Hastings



Island Rock Hounds is planning
a trip to Big Brook, New Jersey
interested see Cheryl.

LIMAGS is planning Spring/Summer 2013 a trip to
Poland Mines, Maine

This Month's Meeting: 10/15/12

Join us for a spid-acular fun
hands-on activity!

Beaded spider sun-catcher (or large
necklace, just in time for Halloween!



Please bring your tools and a towel to the meeting.

Kerry Ann will be instructing us on how to make
these cute spiders! Check out the website for a
picture!

Check out the website!

Kerry Dicker has been busy updating the
webpage. If you have any suggestions, please
see Kerry!

Let the Adventures Begin! The Story of Quartz

One of my favorite forms of silica is **chalcedony**. It can be found in a multitude of varieties and colors and is represented in the birthstones of many of the months.

Chalcedony has a waxy luster and may be semitransparent or translucent. It is found world-wide in almost every color including white, gray, black, brown, brownish-red, orange, yellow, green, blue, lavender and combinations of colors. It is a cryptocrystalline form of silica, composed of very fine intergrowths of the minerals quartz and moganite.

Moganite was discovered in 1984 and is considered a polymorph of quartz and has the same chemical composition as quartz, but a different crystal structure. It has been reported in various locations throughout Europe, India and the United States. It was named for the municipality of Mogan on Gran Canaria (Canary Islands). It has a hardness of about 6, a dull luster and appears gray in color but transparent.

The notable varieties of chalcedony are as follows:

Agate
Aventurine
Carnelian
Chrysoprase
Heliotrope
Moss agate
Mtorolite
Onyx
Flint
Jasper

The term chalcedony is derived from the ancient Greek town of Chalkedon in Asia Minor, today the Kadikoy district of Istanbul.

In the 19th century Idar-Oberstein became the largest chalcedony-processing center, particular in agates. The mining of local deposits in the 15th century, as well as ships offloading South American agate nodules as ballast also fueled the agate carving industry. This region provided cheap labor and had a superior knowledge of chemistry allowing them to dye the agates in a variety of colors.



Outside
the
Box!
A synopsis of last
month's meeting

Last month, we enjoyed Chris Visco's presentation on the "End of the World". Chris's unique presentation spoke about the various predictions to the end of our world, as we know it! Kerry had suggested this topic due to this year, December 21st is suppose to be the end of the Mayan calendar and the end of the world! (Editors Note: my daughter was invited to Mexico in December for an "End of the World" party. She was complaining about the price of the airfare roundtrip. I casually remarked she should only buy one way if it's the end of the world. She stood quietly for an instance and remarked- "you can't be serious!"

Chris spoke about the prediction of the world ending due to volcanism. He explained the mantle plume with the Hot Spots, located presently in the Hawaiian Islands, Yellowstone in the continental US and Iceland on the Mid Atlantic Ridge.

He spoke about an asteroid (Greek for star-like) impact to the earth. He reminded us that the sun is a star, which has a life cycle. He touched the theory of dinosaur extinction due to asteroid impact.

Coronal Mass Ejections (CME), or solar flares for us lay people, will cause GPS signals to fail, disrupt radio communications and power failures. The sun's system is cyclic approximately 11 years.

Bottom line- the end of the world will probably not be a geologically reason, but due to human errors, such as nuclear war.

"Don't worry about the world coming to an end today. It is already tomorrow in Australia"
Charles M. Schulz (cartoonist)

Please see the following pages for more information on the topics briefly addressed above.

Suffolk Gem & Mineral Show

When: December

**Where: Our Lady of Mt. Carmel
North Ocean Avenue, Patchogue**

There will be a signup sheet at the meeting for the different positions volunteers are required. You must be available for at least four (4) hours. Everyone is expected to participate. If you would prefer, we will gladly assign you to a position!

The theory of **Hot Spots** was presented in 1963 by the Canadian geophysicist J. Tuzo Wilson, who also discovered transform faults. He noted that in certain locations around the world, such as Hawaii, volcanism was active for long periods of time. He theorized that the hot regions existed below the plates, providing localized sources of high heat energy (thermal plumes) to sustain volcanism. He also presented his theory that the linear shape of the Hawaiian Island-Emperor Seamounts chain was the result of the Pacific Plate moving over a deep, stationary hotspot in the mantle. The island of Hawaii (the Big Island) is the site of the present day hot spot. As the plate moves, the islands are carried beyond the hot spot. As one island volcano becomes extinct another develops over the hotspot, and the cycle is repeated. He theorized that the older islands were to the northwest (Kauai) with the Big Island the youngest.

Ancient Hawaiians noted the differences in erosion, soil formation and the vegetation recognizing that the island to the northwest were older. The legends of Pele, the fiery Goddess of Volcanoes have been handed down generation to generation. Pele originally lived on Kauai, when her older sister Namakaokahai, the Goddess of the Sea, attacked her, Pele fled to the Island of Oahu, and flee again to Maui and finally to Hawaii where she now lives in the Halemaumau Crater at the summit of Kilauea Volcano. The mythical flight of Pele from Kauai to Hawaii is consistent with geologic evidence of the growth of volcanic islands and coastal erosion by the waves obtained centuries later, which indicates that the islands become younger from northwest to southeast.

CME is the name given to million of tons of charged particles being ejected from the Sun's outer atmosphere. The ejections can travel the 93-million mile journey from the Sun to Earth in 3-4 days, averaging a hourly speed of one million miles!

There are different qualities of a CME which can determine its "geo-effectiveness", which includes the amount of material ejected, the speed of the ejection and the strength and direction of the magnetic field carried by the cloud of charged particles.

CMEs can affect various systems in multitude ways. Extreme cases is where electrical currents can be induced in long metal structures, such as oil/gas pipelines and power lines, or the build-up of electrical charge in metal structures such as satellites, which could cause damage to some electronic systems. During severe periods of CMEs, satellites can turn off their high voltages to avoid loss of data. On March 13, 1989, CMEs caused a massive failure with Hydro- Quebec, Canada's largest electricity generator. The geomagnetic storm caused variations in the Earth's magnetic field, tripping a circuit breaker on the transmission network, causing one of the networks to go off-line for 90 seconds causing a blackout. The power failure lasted 9 hours.

The *aurora borealis* and *aurora australis* – the Northern and Southern Lights - are also caused by the influence of CMEs with the magnetic field surrounding the Earth. The word Aurora is from the Latin word meaning "dawn". The aurora is a natural light display caused by the collision of energetic charged particles with atoms in the high altitude atmosphere.