

th ANNUA

Franklin-Sterling

2015

SATURDAY, SEPTEMBER 26th • 9-5 SUNDAY, SEPTEMBER 27th • 10-4

Sponsored By

The Franklin Mineral Museum, Celebrating Its 50th Anniversary

FRANKLIN, NEW JERSEY The Fluorescent Mineral Capital Of The World

The Franklin Mineral Museum Celebrates Its 50th Anniversary

On October 9, 1965, the Franklin Mineral Museum opened its doors. The museum was a project of the local chapter of Kiwanis International, who wanted to preserve the rich mining and mineral legacy of Franklin, N.J. In 2015, the museum celebrates 50 years of operation as the heart of the district's mineral heritage. Through these many years of growth and change, the museum's success has been due to the interest and energies of those who love Franklin minerals, geology, history, and science. We are deeply indebted to their foresight and contributions.

If you haven't visited the museum in awhile, please make an effort to experience our ever-improving exhibits, family activities, well-stocked gift shop, and rock-collecting opportunities. And thanks to all of you who have supported this museum over the years.

Scenes From the Grand Opening of the Franklin Mineral Museum, October 9, 1965



Left to right: Frederick Kraissl, Jr., President, FOMS; Walter Warren, President, Franklin Kiwanis Club; David Ackerman, Lieutenant Governor, 17th District, Kiwanis; Edward Selems, President, Franklin Mineral Museum; Jack Baum, Resident Geologist, New Jersey Zinc Company; Mervyn Haines, Governor, New Jersey District, Kiwanis; Alfred Littell, Secretary, Franklin Kiwanis and Franklin Mineral Museum.



Photographs by Gardiner Gregory.

Admiring the mineral exhibit, left to right: Richard Burham, President, American Federation of Mineralogical Societies Scholarship Foundation; Perry Armagnac, Editor, *Popular Science Magazine* and FOMS Historian; Jack Baum, Resident Geologist, New Jersey Zinc Company; Ann Gregory, coowner of the Gregory Museum.

MINERAL SPECIES FOUND AT FRANKLIN-STERLING HILL, NJ

Revised by the Mineral List Committee, August 2015 (fmm1954@earthlink.net)

Acanthite - F.O Actinolite - F.O Adamite - F.O Adelite - F.O Aegirine - F,O Aegirine-augite - F Akrochordite – O Albite -F.OAllactite - F.O Allanite-(Ce) - F Alleghanyite - F,O Almandine - F Analcime - F Anandite -0Anatase - F Andradite - F.O Anglesite - F.O Anhydrite - F,O Annabergite - F Annite - O Anorthite - F.O Anorthoclase - F Antigorite - F Antlerite - F Aragonite - F.O Arakiite - F Arsenic - O Arseniosiderite - O Arsenolite – O Arsenopyrite - F,O Atacamite - F Augite - F.O Aurichalcite - F,O Aurorite - O Austinite - F.O Axinite-(Fe) - F Axinite-(Mn) - F (TL), O Azurite - F,O Bakerite - F

Barter He – F Bannisterite – F (TL) Bariopharmacosiderite – O Barite (IMA = baryte) – F,O Barylite – F Barysilite – F Bassanite – O Baumhauerite – O Bementite – F (TL), O Berthierite - O Bianchite - O Birnessite - O Bornite – F.O Bostwickite - F (TL) Brandtite - O Breithauptite - F Brochantite - F.O Brookite – F Brucite - F.O Bultfonteinite - F Bustamite - F (TL), O Cahnite – F (TL) Calcite - F.O Canavesite -0Carrollite-F Caryopilite - F,O Celestine – F.O Celsian - F Cerussite - F.O Chabazite-Ca-F.O Chalcocite - F.O Chalcophanite-F,O (TL) Chalcopyrite - F.O Chamosite - F Charlesite – F (TL) Chloritoid - F Chlorophoenicite-F (TL) Chondrodite - F Chrysocolla - F,O Chrysotile - F.O Cianciulliite – F (TL) Clinochlore - F.O Clinoclase - O Clinohedrite – F (TL) Clinohumite - O Clinozoisite - O Clintonite - F Conichalcite - O Connellite - O Copper – F.O Corundum - F.O Covellite - O Cryptomelane - O Cummingtonite - O Cuprite - F,O

Cuprostibite - F Cuspidine – F Cyanotrichite - O Datolite - F Descloizite - O Devilline - O Digenite - O Diopside - F,O Diurleite - F.O Dolomite - F.O Domeykite - F Dravite - F.O Duftite - O Dundasite - O Dypingite – F.O Edenite - F.O Epidote – F,O

Epsomite – O Erythrite – F,O Esperite – F (TL) Euchroite – O Eveite – O

Fayalite - F,O Feitknechtite – F (TL) Ferrimolybdite - O Ferro-actinolite - F Ferrohornblende – O Flinkite - F Fluckite - O Fluoborite - F.O Fluorapatite – F.O Fluorapophyllite-(K) - F,OFluorapophyllite-(Na) - F Fluorite – F.O Fluorophlogopite – F,O Fluor-uvite – F (TL), O Forsterite - O Fraipontite - O Franklinfurnaceite-(TL) Franklinite – F (TL), O Franklinphilite – F (TL) Friedelite – F.O

Gageite – F (TL) Gahnite – F,O Galena - F.O Ganomalite - F Ganophyllite - F Genthelvite - F.O Gersdorffite - F Gerstmannite - O (TL) Glaucochroite – F (TL) Glaucodot - F Goethite - F.O Gold – O Goldmanite - O Graeserite - O Graphite - F,O Greenockite - F.O Grossular - F.O Groutite - F Grunerite - F Guérinite - O Gypsum - F,O Haidingerite – O Halotrichite - O Hancockite-F(TL) Hardystonite – F (TL) Hastingsite - F,O Hauckite - O (TL), F Hausmannite - F Hawleyite - F.O Hedenbergite - F Hedyphane - F Hellandite-(Y) - FHematite - F.O Hemimorphite - F,O Hendricksite – F (TL), O Hercynite - F,O Hetaerolite - O (TL), F Heulandite-Na - O Hexahydrite - O Hodgkinsonite -F(TL), O Holdenite – F (TL), O Hübnerite - F Humite - F.O Hydrohetaerolite – O (TL) Hydrotalcite - F.O Hydroxyapophyllite-(K)-F Hydrozincite - F.O

Ilmenite - F

Jacobsite – F Jarosewichite – F (TL) Jarosite – F Jerrygibbsite – F (TL) Johannsenite – F (TL) Johnbaumite – F (TL), O Junitoite – F

- Kaolinite O Kentrolite – F **Kittatinnyite** – F (TL) **Kolicite** – F,O (TL) Köttigite – O **Kraisslite** – O (TL) Kutnohorite – F,O
- Larsenite F (TL) Laumontite – O Lavendulan – O Lawsonbauerite – O (TL) Lead – F Legrandite – O Lennilenapeite – F (TL) Leucophoenicite – F (TL) Linarite – O Liroconite – O Lizardite – F Löllingite – F,O Loseyite – F (TL)

Magnesiochlorophoenicite F(TL) Magnesio-hornblende - F,O Magnesio-riebeckite - F Magnetite - F,O Magnussonite – O Malachite - F.O Manganberzeliite - F Manganhumite - F Manganite - F Manganocummingtonite - F.O Manganohörnesite - O Manganosite - F Manjiroite - O Marcasite - F Margarite - F,O Margarosanite – F (TL) Marialite - F Marsturite – F (TL) Mcallisterite - O Mcgovernite – O (TL) Meionite - F.O Meta-ankoleite - O Metalodèvite - O Metazeunerite – O Microcline - F.O Miguelromeroite - O (TL)

Mimetite – F,O **Minehillite** – F (TL) Molybdenite – F,O Monazite-(Ce) – F Monohydrocalcite – O Mooreite – O (TL) Muscovite – F,O

Nasonite – F (TL) Natrolite – O Nelenite – F (TL) Neotocite – F,O Newberyite – O Niahite – O Nickeline – F Nontronite – O Norbergite – F,O

Ogdensburgite – O (TL) Ojuelaite – O Opal – F,O Orthoclase – F Orthoserpierite – O Otavite – O

Parabrandtite – O (TL) Paragonite - O Pararammelsbergite - F Pararealgar - O Parasymplesite - O Pargasite - F Pectolite - F Pennantite - F Petedunnite – F (TL) Pharmacolite - O Pharmacosiderite - O Phlogopite - O Picropharmacolite - O Piemontite - O Pimelite – F Powellite - F.O Prehnite - F Pumpellyite-(Mg) - F Pyrite - F,O Pyroaurite - O Pyrobelonite - F Pyrochroite-F,O Pyromorphite – O Pyrophanite - O Pyrosmalite-(Mn) - O(TL)Pyroxferroite - F Pyroxmangite - F,O Pyrrhotite - F,O

Quartz – F,O

Rammelsbergite – F Realgar – O Retzian-(La) – O (TL) Retzian-(Nd) – O (TL) Rhodochrosite – F,O Rhodonite – F,O Ribbeite – F Richterite – F Roeblingite – F (TL) Roméite¹ – F Rosasite – F,O Rouaite – O (TL) Roweite – F (TL) Rutile – F,O

Safflorite - F **Samfowlerite** – F (TL) Sarkinite - F,O Sauconite – O Schallerite – F (TL) Scheelite - F,O Schorl - O Sclarite – F (TL) Scorodite - O Seligmannite - O Sepiolite - F Serpierite - O Siderite - F,O Sillimannite - O Silver - F,O Skutterudite – F Smithsonite - F,O Sonolite – O Spangolite - O Spessartine - F,O Sphalerite - F.O

Spinel – F,O Starkeyite – O Sterlinghillite – O (TL) Stibnite – O Stilbite – O Stilpnomelane – F Strontianite – F Sulfur (IMA = sulphur) – O Sussexite – F (TL), O Synadelphite – O Synchysite-(Ce) – F Szaibélyite – O

Talc – F.O Tennantite - F.O Tenorite - F Tephroite - O (TL), F Tetrahedrite - O Thomsonite-Ca-F.O Thorite – F Thortveitite - O Thorutite - F Tilasite – O Titanite - F,O Todorokite - F,O **Torreyite** – O (TL) Tremolite - F,O Turneaureite – F (TL) Uraninite - F.O Uranophane – O Uranospinite - O

Vesuvianite - F,O

Wallkilldellite – O (TL) Wawayandaite – F (TL) Wendwilsonite (TL) – O Willemite – F,O Wollastonite – F,O Woodruffite – O (TL) Wulfenite – O Wurtzite – O

Xonotlite- F

Yeatmanite – F (TL), O Yukonite – O

Zincite – F (TL), O Zinkenite – O Zircon – F,O Znucalite – O



In this list F = Franklin, O = Ogdensburg, (TL) = type locality, **bold type** = mineral unique to the Franklin-Ogdensburg area.

Total Mineral Species Identified = 366

Total Unique Minerals = 19 (**bold**)



Booth #	Dealer's Name	Booth #	Dealer's Name
1	AYS International, Inc.	14	Amazon Imports
2	Alan's Quality Minerals	15	Gary's Gem Garden
3	Exotic Minerals	16	Gem Art Studio
4	Geosand	17	Multi-Faceted Minerals
5	Lamont Rock Pile	18	Momminia
6	Florida Fossil Minerals	19	Raj Minerals Inc.
7	Argentum Sales	20	Crystal Dawn Gems
7B	The Kyanite King	21	Momma Wamma Jewelry
8	Goldnik, Inc.	22	SilverRocks Inc.
9	Fowlers Wire Wrapping	23	Jessie's Gems
10	The Mineral Cabinet	24	くをI International, Inc.
11	Stonetrust	25	China & South Seas, Inc.
12	Eccentricities	26	Fluoresence
13	Land of Crystals	27	Gorginak

Franklin – Sterling Show Fluorescent Exhibits

Richard Bostwick - Exhibit Coordinator

- 1. Franklin Mineral Museum, *Coming Into The Dark*
- 2. Sterling Hill Mining Museum, Wacky Wollastonites From Sterling Hill
- 3. Steven & Daniel Kuitems, Franklin Delights
- 4. Denis DeAngelis, Shortwave Sunshine
- 5. Richard Keller, A Mixed Bag
- 6. Andrew K. Mackey, Willemite
- 7. Phillip LaPorta, Parker Shaft Minerals

Daylight Exhibits

Steven Phillips—Exhibit Coordinator

- 1. Earl and Lois Verbeek, A Few Things From Our Basement
- 2. Dick and Elna Hauck, Miners Art
- 3. Franklin Mineral Museum, Colorful Franklin
- 4. Mark Mayfield, Found on the Dumps
- 5. Steven Kuitems, Franklin Classics
- 6. Phamily Minerals LLC, Rhodonite

If you are interested in displaying in our 2016 show, please email pesolutions.minerals@gmail.com

Fluorescent Minerals of Franklin and Sterling Hill, N.J. A 2015 CHECK-LIST BASED ON OBSERVATIONS OF CONFIRMED SPECIMENS By Richard Bostwick, with the assistance of

Earl Verbeek, Mark Boyer, Paul Shizume, Steven Kuitems, Richard Keller, Paul Carr and others.

FL = fluoresces; PH = phosphoresces; SW=shortwave ultraviolet radiation (UVC); MW=midwave ultraviolet radiation (UVB); LW=longwave ultraviolet radiation (UVA).

The Franklin-Sterling Hill area has more fluorescent minerals than anywhere else on earth, and nothing is simple at this locality. This check-list is not a treatise, so the descriptions are condensed and simplified. The most common fluorescent response is listed first. The UV wavelength or wavelengths listed for a mineral are those under which its fluorescence is brightest; "FL red SW" means that the mineral typically fluoresces red in shortwave UV, but may fluoresce less brightly under MW and/or LW. (Uncommon but significant fluorescences are in parentheses.) Subtleties such as fluorescent hue, saturation, and intensity are usually not mentioned.

For assistance in idenfication, the minerals are listed by assemblage, in brackets: [FM] = FranklinMarble. [W] = weathering minerals. [O] = ore minerals. [V] = vein minerals. [C] = calcsilicates. [AC] = altered calcsilicates. Not all local minerals fit neatly into this scheme. $\{FO\} =$ Franklin only; $\{SHO\} =$ Sterling Hill only.

CAVEAT: while mineral fluorescence can be a powerful tool for mineral identification, it should be used in conjunction with other identification techniques. Misidentifications based on fluorescence alone are common.

Albite: FL red SW [C] Anorthite: FL pale yellow SW; rare, associated with corundum [FM] Aragonite: FL, PH white/"cream" LW (FL green SW); [W] Axinite-(Mn): FL orange-red to red SW, PH very weak [AC, V] Barite: FL bright "cream" SW (FL yellow SW, MW, LW, can also PH) [O,C,V] **Barylite:** FL violet SW, best seen under iron arc; rare [AC] {FO} Bassanite: FL, PH violet SW; rare. [V] {SHO} Bianchite: FL blue-white SW, weak PH Bustamite: FL cherry red LW. [C, AC] Cahnite: FL, PH "cream" SW. [V] {FO} Calcite: typically FL bright orange-red SW with brief red-orange PH (also FL white, "cream," yellow, orange, green, red, cherry red, blue, violet; can change FL with UV wavelength; often PH). [all assemblages] Canavesite: FL, PH violet LW; rare [V] {SHO} Celestine: FL, PH "cream" LW (FL violet SW) [V] Cerussite: FL yellow LW [W] Chabazite: FL green SW [V] Charlesite: FL pale blue SW, usually coated with cream-FL gypsum [AC] {FO} Chondrodite: FL yellow to orange-yellow to yellow-orange SW [FM] Chrysotile: FL "tan" (orange-yellow) SW [V] {FO} Clinohedrite: FL, PH bright orange SW [V] {FO} Corundum: FL cherry-red LW [FM] Cuspidine: FL bright orange-yellow SW with brief orange-red PH; MW FL has violet tint. [AC] {FO} Datolite: FL "cream" SW [AC,V] {FO} Diopside: FL blue SW, FL pale yellow MW, LW [FM] Dolomite: FL, PH red SW (in "crazy calcite") [O] Dundasite: FL pale yellow SW, MW, W; rare [W] {SHO} Dypingite: FL, PH blue SW, MW, LW [V] Esperite: FL bright lemon-yellow SW, weak PH [C] {FO} Fluoborite: FL "cream" SW [FM, V] Fluorapatite: FL bright to weak orange, "peach" SW [O,C], FL blue MW [FM] Fluorapophyllite-(K): FL, PH weak white SW [V] Fluorite: typically FL, PH blue-green SW, MW, LW (can FL, PH white, pale yellow, greenish-yellow, green, violet-blue, blue-violet). [most assemblages] Fluor-uvite: FL orange-yellow SW [FM] Genthelvite: FL green LW, SW, MW, (rarely FL yellow to orange MW), [C, V] Gerstmannite: FL weak olive green BL (SHO) Greenockite: FL cherry-red LW; rare [W] {FO} Grossular: FL cherry-red LW; very rare [C] {FO}

Guerinite: FL, PH pale vellow SW, MW, LW; rare [W] {SHO} Gypsum: FL, PH white, pale yellow, blue SW, MW, LW [V,W] Hardystonite: FL violet to violet-blue SW, MW, LW [C] {FO} Hedyphane: FL "tan," "cream" SW, rarely bright orange SW [V] {FO} Hemimorphite: FL, PH white to pale yellow SW, MW, LW, rarely FL green , blue [W] Hexahydrite: FL, PH white SW, MW, LW [W] {SH} Hodgkinsonite: FL cherry-red MW/LW [V] Humite: FL pale yellow SW; rare [FM] Hydrotalcite: FL "cream" LW; rare [V] {FO} Hydroxyapophyllite-(K): FL, PH weak white SW; rare [V] {FO} Hydrozincite: FL bright blue SW (can PH pale yellow, also FL yellow MW, LW) [W] Johannsenite: FL orange BL [O] Johnbaumite: FL bright to weak orange SW [C, V] Junitoite: FL pale yellow LW; rare [V] {FO} Magnesiohornblende: FL greenish-blue SW [FM] Margarite: FL weak white("gray") SW, MW, LW [FM] Margarosanite: FL bright blue, red SW; red, orange MW; weak red, orange LW [AC] {FO} Marialite: FL orange SW, pink LW; rare [FM] Mcallisterite: FL "cream" SW [W] {SHO} Meionite: FL pinkish red, orange-yellow SW, MW; FL orange-yellow LW [FM,C] Meta-ankoleite: FL green SW; rare [V] {SHO} Metalodèvite: FL green SW, rare [V] {SHO} Microcline: FL blue, red SW [C] Minehillite: FL violet-blue MW, weak violet SW, weak pale yellow LW [AC] {FO} Monohydrocalcite: FL green SW, PH white [W] {SHO} Nasonite: FL pale yellow SW, MW [AC] {FO} Newberyite: FL "cream" SW, rare [W] {SHO} Norbergite: FL bright to weak yellow SW, less bright MW [FM] Opal : FL green SW [FM,O,C] Pargasite: FL greenish-blue SW [FM] Pectolite: FL, PH orange SW, less bright MW [AC] {FO} Pharmacolite: FL, PH white SW, MW, LW; rare [W] {SHO} Phlogopite: FL yellow SW [FM] Picropharmacolite: FL, PH white LW, rare [W] {SHO} Powellite: FL yellow SW, MW [C,W] Prehnite: FL variable orangeish pink SW [AC] {FO} Pyromorphite: FL weak orange MW [W] Ouartz: FL yellow, pale orange SW, MW; FL green SW [V] Rhodonite: FL weak deep red SW, very rare [V] {FO} Roeblingite: FL red SW with brief red-orange PH [AC] {FO} Samfowlerite: FL weak red SW; rare [V] {FO} Scheelite: FL orange-yellow, pale yellow SW, MW, (blue SW) [C,V,FM] Smithsonite: FL, PH pale yellow SW, MW, LW; rare [V,W] Sphalerite: FL, PH orange, blue, orange-yellow, yellow-orange, green LW, MW, SW [O, C, V] Spinel: FL cherry red LW [FM] Starkevite: FL, PH white SW, MW, LW, rare [W] {SHO} Strontianite: FL violet SW; rare [V] {FO} Talc: FL yellow SW, MW, LW [V,O] Thomsonite: FL pale yellow SW; rare [AC] {FO} Tilasite: FL yellow SW; rare [V] {SHO} Titanite: FL yellow-orange SW [FM] Tremolite: FL blue SW (yellow LW) [FM] Turneaureite: FL bright orange SW [C] {FO} Uranospinite: FL green SW; rare [W] {SHO} Willemite: typically FL bright yellowish green SW, with occasional vivid PH; also can FL green MW, LW. More rarely FL, PH yellow, greenish yellow, orange-yellow, and (!) pale blue. [O, C, AC, V, W] Wollastonite: FL bright to moderate orange, yellow-orange, orange-yellow, yellow, best under SW; PH is often "redder" than FL [C] [AC] Xonotlite: FL, PH violet SW, MW, LW [AC] {FO} Zincite: FL yellow LW, MW, SW [O,V] Zircon: FL orange SW, MW [C, FM] Znucalite: FL green SW, MW [W] {SHO}

Mineral nomenclature in this fluorescent mineral check-list conforms to the 2015 list of local mineral species, compiled by the Mineral List Committee and included in this program. Comments about the fluorescent mineral check-list can be e-mailed to rbostwick@att.net.

The Franklin Mineral Museum board of trustees would like to thank everyone who helped produce this show for the 59th year. This is our once-ayear fundraiser that helps support the museum and continue our work.



Special Thanks to our 2015 Volunteers

> Anne Wronka Steven Phillips Stephen Sanford

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Steven Phillips, Sales





Franklin Mineral Museum Membership

Please join us. The museum was established in 1964, dedicating itself to preserving and maintaining the mineralogy and mining heritage of the local area. In providing educational and scientific research, the museum continues this today. With your help, the museum will continue for future generations.

You can make a difference

Individual	\$15.00
Family	\$25.00
Patron	\$50.00
Supporting	\$100.00
Life	\$500.00

Memberships renew on March 31 ever year.

Yearly memberships include the following: 1.Personalized membership card

2.Museum newsletter

3.10% discount in the gift shop, excluding consignment and monographs 4.Discounts on children's birthday parties

5.A special week of holiday shopping discounts, last week of November

Exhibit/collecting and guest passes vary with each membership type as do membership benefits.

Collecting passes are not valid for special collecting events.

To become a member, please send your name, address, phone number and type of membership to mineralinfo@earthlink.net or mail information along with payment to: Franklin Mineral Museum 32 Evans Street Franklin, NJ 07415

Questions? Call 973-827-3481

Coming soon ...



Mineralogy of Franklin and Ogdensburg, New Jersey: A Photographic Celebration

An illustrated mineralogy book of as many of the Franklin District's minerals in full-color as could be recorded. The book will be hardcover, 8.5 x 11 inches, 500+ pages containing over 1200 images to include cabinet-sized specimens, micromounts, gems, fluorescent minerals and rare species. Numerous well-known collections locally as well as from across the USA and Europe will be represented by individual photographs. The chapters will chronicle mine locations, history of mining, history of the Franklin Mineral Museum, history of "The Fluorescent Mineral Capital of the World", a much detailed Franklin District mineral list and description of rock types, Parker Shaft Assemblage, detailed District fluorescent mineral list, A-Z gallery of fluorescent minerals. featured institutional collections, featured private collections, and the largest chapter will be the gallery of A-Z specimens.

Something of interest for every collector! *A "color book" you will enjoy to own*,

browse and display.

Books will be available for sale by The Franklin Mineral Museum.

Projected retail price will be \$125.00.

Web: www.franklinmineralmuseum.com • Email: mineralinfo@earthlink.net



The museum features rare and unusual minerals, worldfamous fluorescent minerals, fossils, artifacts, a mine replica and hands-on rock collecting on a 3.5 acre mine dump.

> Our Gift Shop is stocked with hundreds of unique souvenirs and gift ideas for all occasions.



Please check out our website: www.franklinmineralmuseum.com Group Rates (Class trips etc.) Book Early!!!

Museum Hours:

March*- November Sat: 10:00 am - 5:00 pm Sun: 11:00 am - 5:00 pm Mon - Fri: 10:00 am - 4:00 pm (March * weekdays by appointment only)

The Franklin Mineral Museum 32 Evans Street Franklin, New Jersey 07416 973-827-3481



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