What’s New in the Mineral World?

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Just recently back from two weeks in France, where, besides vacationing, I took notes for a report on the Ste.-Marie-aux-Mines Show, I’m pleased to find that the web is richer in new mineral finds and in selections from older ones than it usually is in midsummer. In fact, some of these new items had their real-world (i.e. non-cybernetic) debuts at Ste.-Marie, but in what follows below I will minimize any possible overlaps with my show report as it will appear in the print magazine (September-October 2013). Indeed the first five items, all new finds from Morocco, appeared at the Ste.-Marie Show, where Jordi Fabre, that tireless Catalan Conquistador of the mineral world, scooped them up from their original, native Moroccan, importers. At the same show Jordi also scored something interesting from Mexico and something else from Brazil, and now all of these goodies grace his website, and thus I can tell you about them in this venue:

What’s New Online

Jordi’s Fabre Minerals site (fabreminerals.com) had a “Ste-Marie update” in mid-July, and a little while later, in the first week of August, a “Post-Ste-Marie update,” both featuring evidence that, as things have developed, the Ste.-Marie-aux-Mines Show has become the main conduit through which newly found minerals from Morocco make their debuts in Europe. Appearing in the mid-July update are, first, six miniatures from a new find of vanadinite on siderite from the old locality of Taouz, Morocco.
Vanadinite on siderite, 4.6 cm, from Taouz, Tafilalt district near Erfoud, Morocco. Fabre Minerals specimen and photo.

These specimens are very different from the old Taouz ones which show single, sharp, cherry-red vanadinite crystals perched on black stalactiform coronadite; rather, the new pieces are masses of dull brown siderite with open cavities lined by sharp rhombohedral siderite crystals, and, resting on the cavity linings, bright orange spherical groups, to 1.5 cm or so, of little vanadinite crystals. Admittedly the new Taouz pieces are not as spectacular as the old ones, but the color-contrast in these new specimens is very pleasant—and who could find fault with any new kind of Moroccan vanadinite?

Also shown in mid-July on Jordi’s site are six excellent prehnite specimens, 4.8 to 11.1 cm, from the Imilchil, Morocco area. These are “wheels” of pale green, blocky prehnite crystals in subparallel growth, each crystal being fairly well individualized and showing lustrous, translucent faces. These specimens were collected in April 2013.

Prehnite, 11.1 cm, from Imilchil, High Atlas Mountains, Morocco. Fabre Minerals specimen and photo.
Co-rich calcite, 7.8 cm, from the Oumlil mine, Bou Azzer, Ouarzazate, Morocco. Fabre Minerals specimen and photo.

Early 2013 also saw a discovery of a new style of **Co-rich calcite** in the famous Bou Azzer, Ouarzazate cobalt-mining district, and Jordi has six of these specimens, 6.4 to 13.2 cm, on his “Post-Ste.-Marie” update. Translucent to transparent, pale purplish pink, steep scalenohedral calcite crystals to 1.2 cm individually form thick blankets on matrix: these specimens are not quite as dramatic as earlier-found ones which have **hot**-pink, more equant crystals, but they are very attractive nevertheless.

Silver on actinolite, 5.4 cm, from the Bouismsas mine, Bou Azzer, Ouarzazate, Morocco. Fabre Minerals specimen and photo.
About three years ago the Bouismas mine at Bou Azzer surprised the collecting world by producing a few hundred specimens showing spiky, silvery-metallic crystals embedded in white calcite; the crystals were said at first to be dyscrasite (Ag₃Sb), then were found by several studies to be mostly mixtures of the intermetallic compounds schachnerite and allargentum, with the latter species (allargentum: Ag₁₋ₓSbₓ) dominant in most cases. In some of these peculiar specimens the silvery crystals are not embedded in calcite but rather rest on masses of finely fibrous gray-green actinolite. Well, the four miniatures now visible on Jordi’s site, “from an exceptional find in 2010” in the Bouismas mine, show much stouter, withal a little elongated, metallic crystals to around 1.5 cm individually forming branching clusters on actinolite—and Jordi says that the crystals are simply silver, not anything fancier; and indeed, except for the actinolite, they resemble old silver specimens from the Michigan “copper country.”

Speaking of silver minerals from Bou Azzer, check out this very new (May 2013) discovery of proustite in the Bouismas mine. A glance at the Minerals listing in our special Bou Azzer issue (September-October 2007) will tell you that earlier Bou Azzer proustite specimens have been strictly for micromounters, with crystals not exceeding 4 mm in little vugs in pink dolomite. But Jordi’s three thumbnail-size proustite clusters, 1.6, 2.3 and 2.4 cm, and his matrix miniature with proustite crystals on a druse of white calcite, are something else again, as they show lustrous, translucent red, well terminated proustite crystals reaching 1.5 cm individually. The thumbnail shown here costs $181, and as of August 6 it is “reserved.” But will there be more…??

Proustite, 2.4 cm, from the Bouismas mine, Bou Azzer, Ouarzazate, Morocco. Fabre Minerals specimen and photo.
Very pretty new floater crystals of **amethyst** from Bou Oudi, Tata Province, Morocco were sprinkled among the dealerships at the Ste.-Marie-aux-Mines Show. No single dealer seemed to have the main stash (though *Spirifer Minerals*, spiriferminerals.com, had a few dozen), but on the web it’s Chris Wright of *Wright’s Rock Shop* (wrightsrockshop.com) who rules the field: he writes that “I have the best of the 109 specimens that were found. There will not be more available until after October” (we’ll see about that at the Munich Show, Chris). He goes on to say that the crystals are found loose in a cracked, friable mudstone unit along a fault zone; hence all are floaters, and in Chris’s lot they range in size between 3 and 4 cm (I saw some specimens smaller than this, but none larger, at Ste.-Marie). The crystals vary in their degrees of luster but all are sharp and transparent, and all display deep purple “hourglass” patterns of color zoning. There are a very few clusters comprised of two or three of the crystals.

Brazilian dealer Luis Menezes came to Ste.-Marie-aux-Mines with a few thumbnails of **almeidaite**, a new species approved by the IMA this year—formula $\text{PbZn}_2(\text{Mn,Y})(\text{Ti,Fe})_{18}\text{O}_{37}(\text{OH,O})$. Luis collected the crystals himself at Novo Horizonte, Bahia, Brazil, and had thought that they were hematite—this, with his gramaccioliite-(Y)
from the same locality (see the 2012 Tucson Show report, May-June 2012) is the second new species that Luis, seasoned and sharp-eyed mineralogist that he is, has exposed in its sneaky posing as low-end hematite. Almeidaite comes as loose, lustrous, submetallic black, flattened crystals. The one on Jordi’s site (shown here) is probably the best of the lot, but John Veevaert (another expert show-prowler) bought the other six crystals that Luis had, so I would not be surprised to see them appearing soon on John’s Trinity Minerals website (trinityminerals.com).

Smithsonite pseudomorph after calcite, 5.2 cm, from Level 8, San Antonio mine, Santa Eulalia, Chihuahua, Mexico. Fabre Minerals specimen and photo.

And Jordi’s site—as well as the sites of Dennis Beals’ Xtal (xtal-dbeals.com) and Ibrahim Jameel’s Khyber Mineral Company (khyberminerals.com)—offers some brand-new specimens showing smithsonite pseudomorphs after calcite, found sometime in May 2013 on Level 8 of the San Antonio mine, Santa Eulalia, Chihuahua, Mexico. These apparently represent gradual replacement, one layer after another, of scalenohedral calcite crystals by satiny-looking yellow-green smithsonite; the pseudocrystal “points” reach about 2 cm individually, and the mounded to platy groups range from miniature through small-cabinet size. These are far more attractive than pseudomorph specimens generally are, and we may well see more of them, but to be on the safe side you could, of course, secure one now from Jordi or Dennis or Ibrahim.

A July 10 update on Mike Keim’s Marin Mineral Company site (marinmineral.com) shows ten beautiful specimens of gemmy, Dauphiné law-twinned smoky quartz specimens from a new locality in Malawi called Mount Mulanje, a granite inselberg in the southern part of the little country, almost on the border with Mozambique. I had heard of this locality from South African dealer Paul Botha, who brought a few specimens from it to the 2012 Tucson Show, telling me at that time that the Mount Mulanje deposit is an
alkaline pegmatite very similar to the famous one at Mt. Malosa, Zomba district, Malawi, and, like Mt. Malosa, produces well-crystallized microcline, aegirine and parisite. Most of Mike Keim’s smoky quartz crystals are loose singles, but there is one lovely cluster and one matrix piece; the quartz crystals range from 5 to 14.5 cm, and they are lustrous, transparent and largely flawless (of the best “Alpine” quality, in other words). One specimen (shown here) has a sharp, black, 3-cm prismatic crystal of aegirine rising from a quartz face.
Quartz (iridescent), 4.6 cm, from the Burhanpur district, Madhya Pradesh, India.
Key’s Minerals specimen and photo.

Speaking of quartz, Kiyoshi Kiikuni’s *Key’s Minerals* site (keysminerals.com) offers about a dozen specimens of an unusual *iridescent quartz* from the Burhanpur district, Madhya Pradesh, India, these ranging in size from 2 to almost 10 cm. They are plates and rounded groups of transparent, colorless quartz “points,” and would be conventional-looking enough *except* that on each piece a goodly number of random crystal faces show strong iridescent color-play: little rainbows of light winking evanescently on and off all over the specimen as it is turned in strong sunlight. (This property can show up only weakly in Kiyoshi’s pictures, but at the 2013 Tucson Show Alfredo Petrov was showing a specimen from this occurrence around, and, yes, the iridescent effect *is* striking when seen in strong sunlight.) For illustration here I have picked the one of Kiyoshi’s photos which shows the iridescent spots best, but bear in mind that the specimen surely is, as the web lingo goes, “better in person.”
Isaias Casanova of *IC Minerals* (icminerals.com) and Geoff Krasnov of *Geokrazy Minerals* (geokrazy.com) are partners in marketing colorful small specimens from a couple of new discoveries in classic Mexican places. By far the more plentiful of the finds is **mimetite** in yet another new style from the Ojuela mine, Mapimí, Durango: these bright, sparkly, yellow-orange aggregates, all of them free of matrix and all thumbnail-size, are aesthetic winners, and a few of them have tiny red-orange wulfenite crystals attached to their sides. And from the Milpillas mine in Sonora—now secure in its reputation as one of the greatest azurite and pseudomorphous malachite localities in the world—have lately come some vivacious-looking thumbnails and small miniatures of **cuprite**, these showing bright red, lustrous crystals to 1 or 2 mm blanketing flat matrix plates. Isaias also has recently come into some specimens of intensely green reniform **malachite** from Milpillas, and oh yes, there are his brilliant blue miniatures showing intergrown spheres of **azurite** from the Los Olivos mine, Chihuahua (Dennis Beals brought some of these to the 2013 Tucson Show—see the report in May-June 2013).

Cuprite, 3 cm, from the Milpillas mine, Sonora, Mexico. Geokrazy Minerals specimen and photo.
Azurite, 5 cm, from the Los Olivos mine, Los Olivos, Chihuahua, Mexico. IC Minerals specimen; Isaias Casanova photo.

David K. Joyce (davidkjoyceminerals.com) has some loose cubic crystals and penetration-twinned crystals of thorianite, to 6 mm on edge, from Bentota, Galle, Sri Lanka. The radioactive thorium-uranium oxide has heretofore been known in good crystals only from the uraniferous pegmatite areas of southern Madagascar, and so the Sri Lanka locality could be quite new...although David says that he obtained his specimens “from a museum.” According to Wikipedia, Bentota is a beach-resort town on the southwestern coast of Sri Lanka; it would be interesting to know something about the geology of this occurrence, but David can’t furnish enlightenment—can anyone else do so? The thorianite crystals are dull black, of course, but they are very sharply formed.

Thorianite penetration-twinned crystal, 6 mm, from Bentota, Galle, Sri Lanka. David K. Joyce Minerals specimen and photo.
At Ste.-Marie I noted some new Iranian things offered by Kristalle/Crystal Classics (kristalle/com; crystalclassics.co.uk), and here are some more, as shown on a July 12 update on the site of Ian Bruce’s Crystal Classics. New, bright orange botryoidal mimetite specimens (seen also at the 2013 Tucson Show) from the Chah Milah mine, in the Anarak mining district, Esfahan Province, resemble the famous old mimetite specimens found in the late 1960s at San Pedro Corralitos, Chihuahua, Mexico, except that their color is more orange than yellow and their luster is brighter (however, the specimens seen at the Ste.-Marie Show were attributed to the Nakhlak mine, not the Chah Milah; both mines lie in the Anarak district). Not seen at Tucson or Ste.-Marie but beautifully present on the July 12 Crystal Classics update are a fine 9.5-cm hydromagnesite specimen (only one) from a new occurrence in the Dandy district, Zanjan Province, and miniatures of velvety green malachite, with little white bladed crystals of cerussite spotting their surfaces, from an unspecified locality in South Khorasan Province. Finally there’s wulfenite from two different localities in Iran: pale orange transparent crystals on mimetite from the Chah Milah mine and, more dramatically, brilliant red-orange tabular crystals on white matrix from the Nakhlak mine.
One very alluring item that has been coming—actually “trickling” is a better term—out of Iran since about 2001 is deep green, chromium-rich andradite from Soghan, near Jiroft, Kirman Province: these “demantoid” crystals are never gemmy but they are sharp dodecahedral and dodecahedral-trapezohedral crystals from less than 1 cm to more than 3 cm. Their color is a lush, spectacular dark green, and in general their prices have run very high for specimens of a garnet species. But the new Iranian demantoid crystals which may now be seen on the site of E-Rocks (e-rocks.com) are said to have come from a different locality, namely Takab, West Azerbaijan Province. They are lustrous trapezohedral crystals to 3.5 cm, either loose or resting on bits of pale yellow, sintery-looking matrix; miniatures to 7 cm showing very sharp demantoid crystals to 4 cm, some translucent grass-green on thin edges, are offered. E-Rocks is a web clearinghouse through which various sellers advertise specimens, either for auction or at set prices. The seller in this case is a British dealership, Thames Valley Minerals, Ltd., which, on the day I visited the site, was offering the Iranian demantoid specimens as “fixed price” items, although no prices were specified. A couple of days later I went again to E-Rocks and found small-thumbail-size specimens of the same material being offered at auction: the bidding was up to $185 for a sumptuous 1.2-cm specimen with a rich green, razor-sharp demantoid crystal on a matrix of pale green subhedral diopside crystals. The lesson is that these new green Iranian garnets bear watching, as, to judge from their pictures, they are at least as impressive as the old Soghan specimens, with more lustrous crystals which possibly reach larger sizes and are set on matrix, at that.
Andradite variety demantoid, 4.5 cm, from Takab, West Azerbaijan Province, Iran. Thames Valley Minerals specimen and photo (shown on E-rocks).

The father-and-daughter team of Cyril and Katherine Kovacic run the newly remodeled, attractive website of CK Minerals (ckminerals.com.au), offering worldwide minerals but with a strong emphasis on Australian specimens. Right now there are many pages of classics from Broken Hill and other older Australian localities—but especially from Broken Hill, the enormous polymetallic deposit in New South Wales where mining is now at an end but the mineralogical glory is “not of an age but for all time” (as Ben Jonson wrote of Shakespeare—how’s that for a celebratory comparison?). The CK Minerals site now offers, for instance, several Broken Hill specimens, miniature to small-cabinet-size, which are clusters of large cerussite crystals, many V-twinved, uniformly covered by sparkly white druses of anglesite; these specimens are from the former Mike Newnham collection. And there’s a great rarity from “old gossan material recovered from the BHP Open Cut” at Broken Hill: a mass, 5.4 cm across, of sharp chlorargyrite crystals.
Cerussite coated with anglesite, 7 cm, from Broken Hill, New South Wales, Australia. CK Minerals specimen and photo.

Chlorargyrite, 5.4 cm, from Broken Hill, New South Wales, Australia. CK Minerals specimen and photo.
The Kosnar family of Mineral Classics (minclassic.com) have a similarly impressive spread of fine specimens of the “contemporary” sort: gem species from the pegmatites of Pakistan and Afghanistan. This large June 20 update features many pages of gemmy crystals, the most generously represented being Stak Nala, Pakistan elbaite, Pakistan aquamarine, and pale pink and green elbaite from Paprok, Nuristan, Afghanistan. I show here, however, two of the more unusual specimens in the Kosnar array: a miniature-size, bristling cluster of lustrous black, trigonally terminated schorl crystals, with albite, from a prospect in Pakistan’s Braldu Valley; and, from Paprok, a fine “combination” piece showing a big kunzite spodumene crystal and a green elbaite crystal on very well crystallized albite and microcline (and on the back of this specimen, the Kosnars say, lurks a small but sharp octahedron of fluornatromicrolite).
Another site always worth checking is that of Wolfgang Wendel’s *Wendel Minerals* (www.wendel-minerals.com), specializing in European, and especially German, classics. One example of the latter type (shown here) was first posted in Herr Wendel’s “pre-Ste.-Marie” update, and if he didn’t sell it at that show it could be yours for 5800 Euros (about $7611): it’s an outrageously large and fine specimen of **native bismuth** from the extensive dumps around Schacht (Shaft) 38, Schlema, Saxony (in the famous Erzgebirge, i.e. “Ore Mountains,” of the former East Germany). There are more such goodies where that one came from—for example a 6.7-cm **crocoite** specimen from Callenberg, in the eastern Erzgebirge. A contact between a Pb-Ni orebody and a deeply weathered serpentine unit in the northern part of this small mining district near Zwickau produced respectable crocoite specimens in 1977 and a few years thereafter; in 1987 the site became a trash dump, and the workings are now inaccessible.

![Bismuth, 5.6 cm, from Shaft 38, Schlema, Saxony, Germany. Wendel Minerals specimen and photo.](image1)

![Crocoite, 6.7 cm, from Callenberg, Saxony, Germany. Wendel Minerals specimen and photo.](image2)
And then there’s Andy Seibel (andyseibel.com), who, in a series of updates, has been offering superlative specimens, mostly thumbnails and miniatures, from some recently acquired collections. A mid-July update, for instance, features this delicious **mimetite/wulfenite** from the Rowley mine, Theba, Maricopa County, Arizona—the only old Rowley mine specimen I’ve ever seen for sale where red mimetite is the dominant species and wulfenite the subordinate one ($500).

Nor is Andy oblivious to the merits of **really old** European classics: the same mid-July update offers this wonderful thumbnail-size **bornite** from one of the mid-19th-century copper mines at Carn Brae, Redruth, Cornwall, England ($3,250):
Bornite, 2.1 cm, from Carn Brae, Redruth, Cornwall, England. Andy Seibel
Minerals specimen and photo.

Then there are a couple of pages, shown in an early August update by Andy, with top-of-the-line examples of out-of-the-way occurrences, many quite new to me until now. “Educational” one-of-a-kinders like these are sufficient reason for time-consuming but lots-of-fun sessions of surfing good dealers’ websites. For example, among the specimens from the former Bill McBride collection which Andy is marketing there is a splendid, gemmy green floater crystal of diopside from Ibity, Vakinankaratra region, Antananarivo Province, Madagascar; Andy says he suspects that it came out in the early 1970s, though he does not say why he suspects this. It looks to me like a peer, for beauty, of the old gem diopside crystals from DeKalb, New York, and even of the contemporary ones from the Merelani mines, Tanzania. On the same page of the same update, after some fine elbaite from classic localities, there are three gorgeous thumbnails of yellow-green chrysoberyl from Madagascar: tabular floater sixlings with much gemminess. The locality given is “Lac Alaotra, Alaotra-Mangoro region, Taomasina Province”; Mindat clarifies that chrysoberyls of exactly this description were found in 1997 in the Andreba pegmatite, Ambatondrazaka district, Alaotra-Mangoro region, Taomasina Province—near Lac Alaotra, Madagascar’s largest lake. Of Andy’s three specimens, the one shown here is the best (to judge from the pictures), and costs $650.
Diopside, 2 cm, from Ibity, Vakinankaratra region, Antananarivo Province, Madagascar. Andy Seibel Minerals specimen and photo.

Chrysoberyl, 2 cm, from the Andreba pegmatite, Ambatondrazaka district, Alaotra-Mangoro region, Taomasina Province, Madagascar. Andy Seibel Minerals specimen and photo.
If you’re not yet too tired of looking at Andy Seibel’s exotic thumbnails, consider the second page of his most recent update, this one also featuring specimens from the Bill McBride collection, nearly all, this time, old classics from Japan. The little Japanese spherical aggregates composed entirely of rough rhombohedral arsenic crystals from Akatani (or Akadani), Fukui Prefecture, Honshu, have been around for at least a century, but (according to Alfredo Petrov) were still collectable as of the early 1970s, especially after heavy rains had exposed fresh surfaces of the outcrop, where the arsenic spheres occur as floaters in a clay layer derived from hydrothermal alteration of rhyolite. Japanese Arsenic Balls (this is fun to say) like Andy’s 1.5-cm example, shown here, are not exactly aesthetic and never attain diameters of more than about 2 cm, but hey, show respect: they represent the world’s finest occurrence of macroscopic crystals of native arsenic.

![Arsenic, 1.5 cm, from Akatani, Fukui Prefecture, Chubu region, Honshu, Japan. Andy Seibel Minerals specimen and photo.](image)

The rest of the web page displays several gemmy, loose, singly terminated crystals of topaz and of danburite from defunct localities in Japan, and some fascinating oddballs such as a specimen (shown below) from the old Oppu mine (best known for its rich rose-red botryoidal rhodochrosite) with curved “petals,” mostly of marcasite, rising in parallel from pyrite/rhodochrosite/quartz matrix:
Marcasite with pyrite, rhodochrosite and quartz, 2.4 cm, from the Oppu mine, Aomori Prefecture, Tohoku region, Honshu, Japan. Andy Seibel Minerals specimen and photo.

Vicarious Field Trips Online

If you like seeing good, professional, well-illustrated field trip stories online, you should make it a habit to visit the site of Spirifer Minerals (spiriferminerals.com), the Polish dealership and specimen-exploration concern which also publishes some of its activities on old-fashioned paper, i.e. in Minerals: The Collector’s Newspaper, copies of which are available free at most major mineral shows. These Spirifer people really know how to travel. They do so constantly, and have already done very productive work in Morocco, Madagascar, Bulgaria, Greece and other countries, usually with Tomasz (“Tomek”) Praszkier in the lead (see his article on Mibladen, Morocco in our May-June 2013 issue). Being Polish, the team was naturally drawn to go digging and dealing at the complex of 28 or so active granite quarries at Strzegom (still sometimes called by its German name, Striegau), in Dolnośląskie (Lower Silesia) Province—one of the world’s best localities of its kind, although its finest specimens seldom escape to the international market. Currently on the Spirifer site you’ll find a series of short accounts of new pocket discoveries in various quarries at Strzegom. The first two of the stories, written by Andrzej Korzekwa and Tomasz Praszkier, describe respectively a fluorite-bearing pocket
opened in April 2009 in the Wekom II quarry, and a topaz-bearing pocket opened in April 2010 in the Zółkiewka I quarry. The latter was a 1-meter-wide cavity in an aplitic pegmatite which gave up large smoky quartz crystals, including ten with associated topaz crystals to 2.5 cm: totally gemmy and color-zoned in pale brown to “champagne” to pale blue, these are far and away the best topaz crystals ever found anywhere in Poland. Almost all of the best of the quartz/topaz specimens went to a private collector in Krakow, but the very best one went into the Spirifer collection, and here is its picture. The fluorite specimen from the 2009 Wekom II pocket is no slouch either, I’m sure we can agree: note the big white microcline and small orange stilbite crystals in association.

Topaz/Quartz, 4.3 cm (topaz crystal 2.2 cm), from the Zółkiewka I quarry, Strzegom, Lower Silesia, Poland. Spirifer Minerals specimen and photo.
Fluorite/Microcline/Stilbite, 7.2 cm, from the Wekom II quarry, Strzegom, Lower Silesia, Poland. Spirifer Minerals specimen and photo.

Have a good rest-of-the-summer.