What's New in the Mineral World?

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In view of the fact that many major mineral shows have been forced by the Covid-19 pandemic to cancel their 2020 events (now including the Munich Show), I've resolved to up my game somewhat as concerns these online what's-new reports and make them somewhat longer. However, it's challenging to write more about *what's new*, since right now, and surely because of the virus, the mineral discovery-and-distribution networks are being seriously hampered: there's an evident dearth of truly *new* minerals from *new* discoveries on the online scene. In this report, therefore, I've interspersed notices of a few things which are actually *new* with short tours of other interesting minerals—old classics, rare species, locality suites, special deals—which are to be found right now on

some major dealerships' websites. As a result of this mixing of "what's new" with what's peculiar, historical, educational, or simply, straightforwardly beautiful, this report contains more specimen pictures than any of the 57 preceding reports (and it brings to your attention four websites that have never been noted in those earlier 57). The result should be good for plenty of shut-in browsing and ogling, and you won't even have to wear a mask—like the one on the Chinese spessartine specimen, above, which I've filched from Isaias Casanova's *IC Minerals* website (thanks, Isaias).

On the Web

Dave Bunk of *Dave Bunk Minerals* (davebunkminerals.com) posts a weekly update on Thursdays, and on Thursday October 1 he put up 31 hypnotic pages of "California and Nevada on the website"—almost entirely California, in fact, with a little bit of Nevada plus a whiff of Mexico too. There are many good things here from the famous Little Three mine, Ramona district, San Diego County, California, the star of the show (to my taste) being this lovely 6-cm blue **topaz**:

Topaz, 6 cm, from the Little Three mine, Ramona district, San Diego County, California. Ex Bryant Harris collection. Dave Bunk Minerals specimen and photo.

Also from the Little Three pegmatite, Dave has very good miniature to small-cabinet specimens of, let's see, smoky quartz, elbaite, morganite and aquamarine beryl, spessartine, albite, microcline…even axinite and hambergite, all from the collection of the late Bryant Harris. The **axinite**—probably of the species axinite-(Mn)—from this rare occurrence is especially impressive:

Axinite, 5 cm, from the Little Three mine, Ramona district, San Diego County, California. Ex Bryant Harris collection. Dave Bunk Minerals specimen and photo.

On the same Dave Bunk update there are many fine pieces from the Pala district, San Diego County, especially from the Stewart mine. And from the Himalaya mine, Mesa Grande district, San Diego County, Dave offers (besides plenty of elbaites) such rarities from that mine as cassiterite, hambergite, and a large, superb **stibiotantalite**:

Stibiotantalite, 4.5 cm, from the Himalaya mine, Mesa Grande district, San Diego County, California. Ex Bryant Harris collection. Dave Bunk Minerals specimen and photo.

In addition, some years ago Dave Bunk acquired part of the magnificent Jim and Dawn Minette collection of worldwide minerals, and from that transaction he still has a large selection of California borates—the late Mr. Minette having worked and collected for a long time in the huge mine at Boron. Thus, once past the pegmatite treats from San Diego County, you'll find lots of interesting California borates on Dave's update, including inyoite, tunellite, kurnakovite, meyerhofferite, probertite...and some old-timery, very attractive specimens of **colemanite on calcite** such as the wider market has not seen in any large numbers since the 1970s:

Colemanite on Calcite, 8 cm, from Extension 16, Boron open pit, Boron, Kern County, California. Ex Jim and Dawn Minette collection. Dave Bunk Minerals specimen and photo.

In my introduction to this report I hinted that numerous "special deals" are now being offered on dealers' websites for these pandemic-afflicted times. And few of those deals seem more "special" than what Bryan Lees and his comrades of *Collector's Edge* (collectorsedge.com) display in the section of their site called "Final Call—75% off—Insane Deals!"—with a picture of a man with a strong resemblance to Jack Nicholson in *The Shining* grimacing insanely as he sits up at a bar, followed by 16 pages of contemporary material with prices reduced by, yes, seventy-five percent. You can pick up a gorgeous Chinese fluorite or calcite, Idaho pyromorphite, Mexican amethyst, Colorado sphalerite, etc., by putting in some sane, careful browsing here. In another part of the site the Collector's Edge crew offers also some fine, large-miniature to small-cabinet-size specimens of the new, brightly caramel-colored **wulfenite** from the La Morita mine, Chihuahua, Mexico, and the prices on these beauties are also much reduced; for example, the 8.3-cm piece shown here, "normally" priced at $4,000, now goes for $2,400:

Wulfenite, 8.3 cm, from the La Moria mine, Ascención Municipality, Chihuahua, Mexico. Collector's Edge specimen and photo.

Another important, long-standing Colorado dealership is *Mineral Classics* (minclassics.com), run chiefly by Brian Kosnar, who handles the minerals while his brother Brett handles the gemstones and their mother, Theresa, quite good-humoredly—as I infer from chatting with her at shows—helps out both sons. The Kosnars have just introduced a new, wholly redesigned website whereon *we*, the mineral-smitten, might be seduced by a 33-page "Minerals" section full of old and new things from Bolivia—one of the family's specialties—and with goodies from many other places as well. From the Kosnars' home state, for example, there are nice thumbnail gold specimens from the Little Johnny (Ibex) mine near Leadville, old rhodochrosites from Silverton, and some large, very fine-looking goethites from the pegmatites of Pikes Peak. Then there's New

Jersey prehnite; Madagascar liddicoatite; many loose, gemmy red spinel octahedrons from the Mogok Stone Tract, Myanmar (Burma); Mexican "blood" hyalite; Italian andradite…and, from the recent finds in the Golconda area, Minas Gerais, Brazil, there are world-class **bertrandite** thumbnails and miniatures, these being clean, loose groups of bladed white crystals resembling stilbite, with some individual blades exceeding 3 cm:

Bertrandite, 3.7 cm, from the Golconda area, Minas Gerais, Brazil. Mineral Classics specimen and photo.

From Bolivia the Kosnars have vauxite, paravauxite and wavellite from the Siglo XX mine; zinkenite and andorite from the San José mine; cassiterite from Viloco; augelite and ferberite from Tasna…and, on page 32, three specimens showing something that's truly new: crystals of **hopeite** accompanying opaque pale green, splintery crystals of phosphophyllite on miniature-size matrix plates, from the Huayllani mine, Canutillos, Colavi district, Potosí Department. The milky white hopeite crystals are rather crude and do not exceed 5 mm, but, Brian points out, this is the first known occurrence of the zinc phosphate from any locality in Bolivia.

Hopeite with Phosphophyllite, 3.7 cm, from the Huayllani mine, Canutillos, Colavi district, Potosí Department, Bolivia. Mineral Classics specimen and photo.

Mineral Classics has also about a dozen splendid examples of **vivianite** such as first came to market in 2003 from the peculiar red sandstone-hosted occurrence near the Tomokoni mine, Canutillos, Saavedra, Potosí, Bolivia. The vivianite crystals are complete, super-sharp, and transparent sea-green, and the shards of red sandstone loosely attached to them oddly help to render all of these miniatures very pretty.

Vivianite, 4.1 cm, from the Tomokoni adit, Canutillos mine, Machacamarca, Potosí Department, Bolivia. Mineral Classics specimen and photo.

Finally, surprisingly, the *Mineral Classics* website serves up 12 clusters of long, lustrous **stibnite** crystals from a locality which was first heard from in the 1980s and which has long since gone silent: the La Salvadora mine in Oruro Department. Does your collection boast any stibnite this good from *Bolivia*?

Stibnite, 3.3 cm, from the La Salvadora mine, Leque, Oruro Department, Bolivia. Mineral Classics specimen and photo.

Time now for something *new*. In his very frequent updates, Dan Weinrich (weinrichmineralsinc.com) regularly purveys news of (and specimens from) contemporary finds, and in the "Latest Additions" section of his October 16 update we come upon two exciting specimen lots, presumably unearthed quite recently, from the Ojuela mine, Mapimí, Durango, Mexico. When I compiled the Minerals list for the Ojuela special issue ("Mexico II", September-October 2003), the word from the literature was that **scorodite** microcrystals had been seen in Ojuela material as early as 1927, but

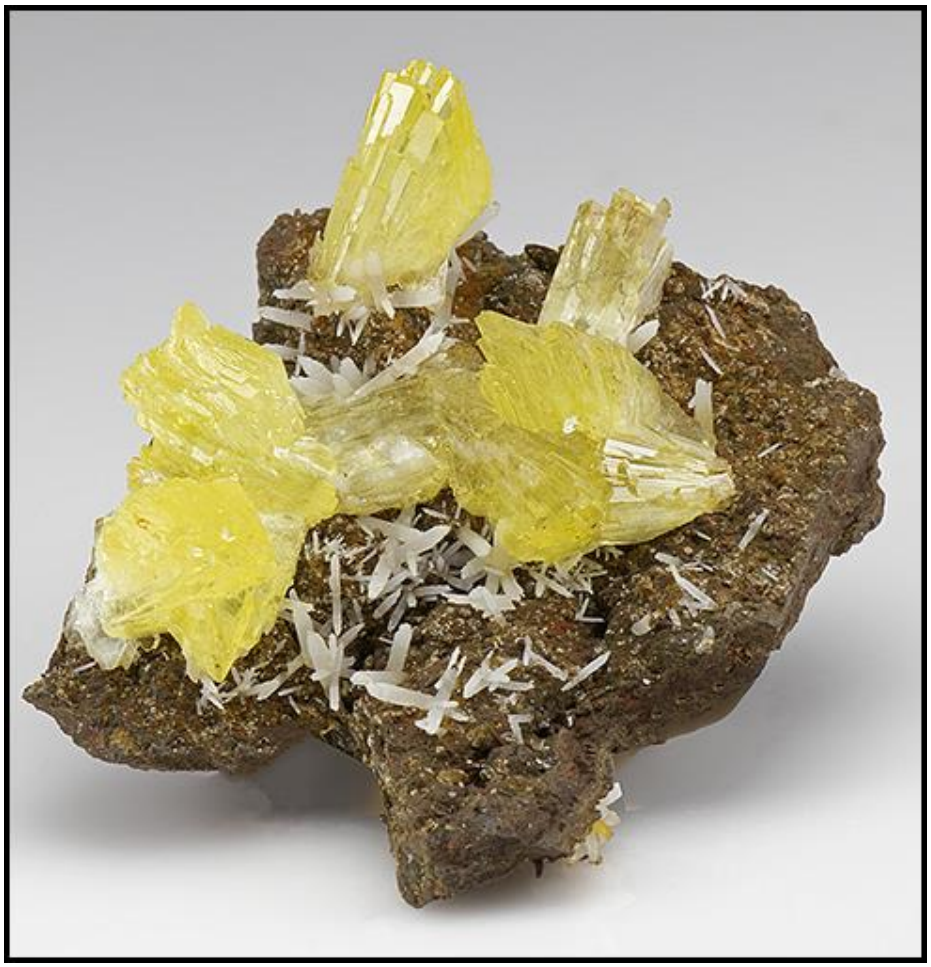
that the finest known Ojuela scorodite specimens had been found in 1981, these specimens showing, to quote from the article, "excellent clusters of blue scorodite crystals, with individuals to 2 cm, in small vugs in a compact goethite." The best of these specimens ended up in the Harvard collection.

The next significant scorodite find did not come until May 2013, when specimens showing crystals to 2 cm came from the Los Changos collecting area of the mine. First marketed at the 2013 Denver Show, these specimens have pyrite-spotted scorodite crystals which although sharp tend to be dark blue-black and opaque. But the pieces now with Dan Weinrich probably came from a third major find, this one in June 2019 in an unnamed area of the mine. I obtained that date from a French dealer at the 2019 Munich Show (see the Munich report in March-April 2020), who offered about 20 miniatures which are dead ringers for the current Weinrich pieces, as they show sharp, lustrous scorodite crystals, *not* pyrite-spotted but rather, refreshingly, glassy and clean and transparent, lining shallow vugs in a hard, dark brown goethite.

In Dan's best pieces the crystals do not exceed 1 cm; they are, however, lavishly piled on each other, their color contrasting well with that of the dark iron oxides around them. Dan doesn't mention it, but if these specimens indeed are from the same find as those seen in Munich, the scorodite crystals should show a strong color change, from bright blue to bright green, with varied incident light. These superb scorodite specimens range in matrix sizes from 4 to 6.7 cm and in price from $500 to $2500.

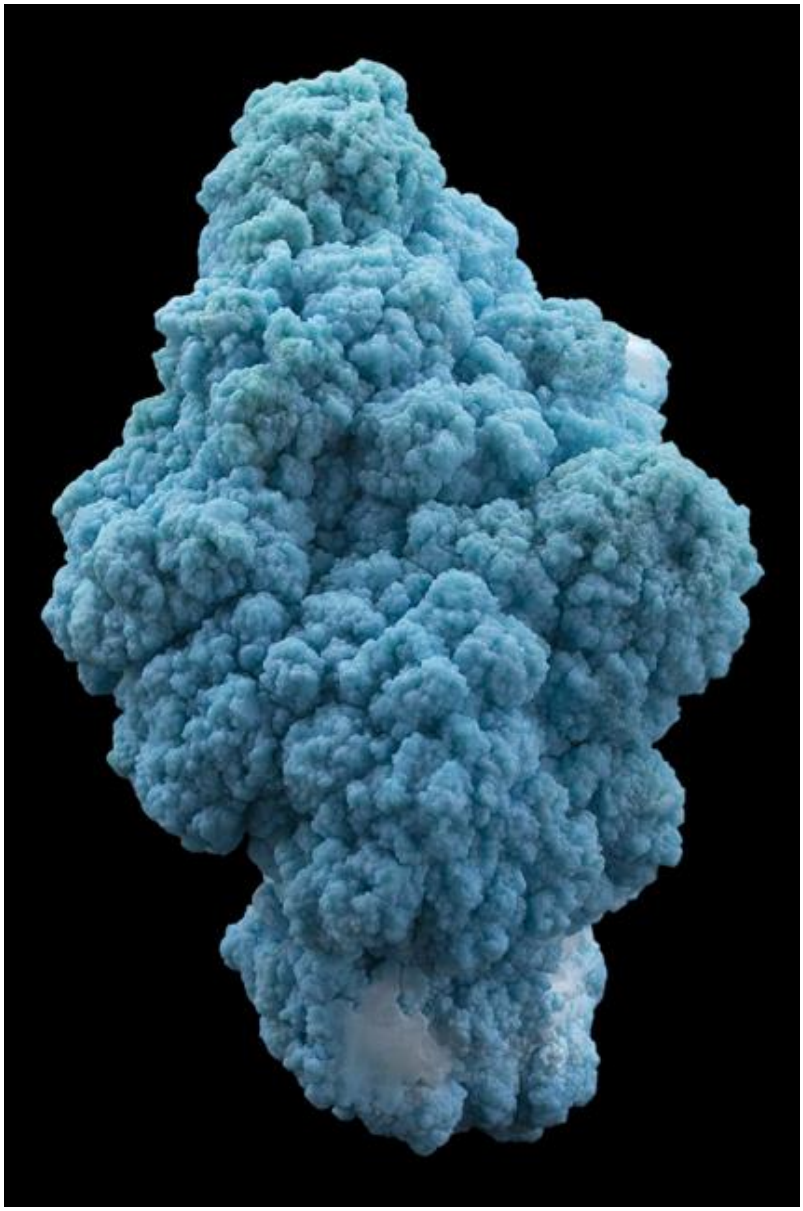
Scorodite, 4 cm, from the Ojuela mine, Mapimí, Durango, Mexico. Weinrich Minerals specimen and photo.

The other exciting Ojuela item that Dan Weinrich is showing in his October 16 update is something of which fine macrospecimens are known only from Tsumeb (third oxidation zone, extremely rare) and from, of course, the Ojuela mine: the zinc arsenate **paradamite**, dimorphous with the ever-popular adamite which it closely resembles, but about a zillion times rarer. Some fine paradamite specimens, mostly thumbnails, were marketed at the 2018 Tucson Show (see May-June 2018), and the four pieces currently with *Weinrich Minerals* look to have come from the same September 2017 find, in the San Diego collecting area of the mine, as the Tucson specimens did; I have not seen this material elsewhere since 2018, so (if your finances are in good shape) this may be the time to pounce. In Dan's three miniatures and one thumbnail, vibrantly bright yellow, translucent paradamite crystals form isolated sprays and bundles on pale brown goethite, accompanied thereon by little swarms of small, prismatic, opaque white smithsonite crystals. Shown here is the single thumbnail, which is in my opinion the most aesthetic of the four pieces—it would set you back $1800.



Paradamite, 2.5 cm, from the Ojuela mine, Mapimí, Durango, Mexico. Weinrich Minerals specimen and photo.

The latest update on the site of *Andy Seibel Fine Minerals* (andyseibel.com) features six **turquoise** specimens, measuring from 5 to 12 cm, from the Big Nugget mine, Candelaria, Mineral County, Nevada. Turquoise mining in this place began in 1864 and is now long over; Candelaria is a ghost town haunted as such by day-tripping tourists. Andy doesn't say whether his specimens are from an old hoard or have been unearthed recently, but certainly they are newcomers to the specimen market, and they represent excellent "specimen" (as opposed to "lapidary") turquoise, being rounded masses of cauliflower-head globules, as bright baby-blue as one could wish. The 6.5-cm example shown here is marked "sold," but the others range in price from $200 to $3000.

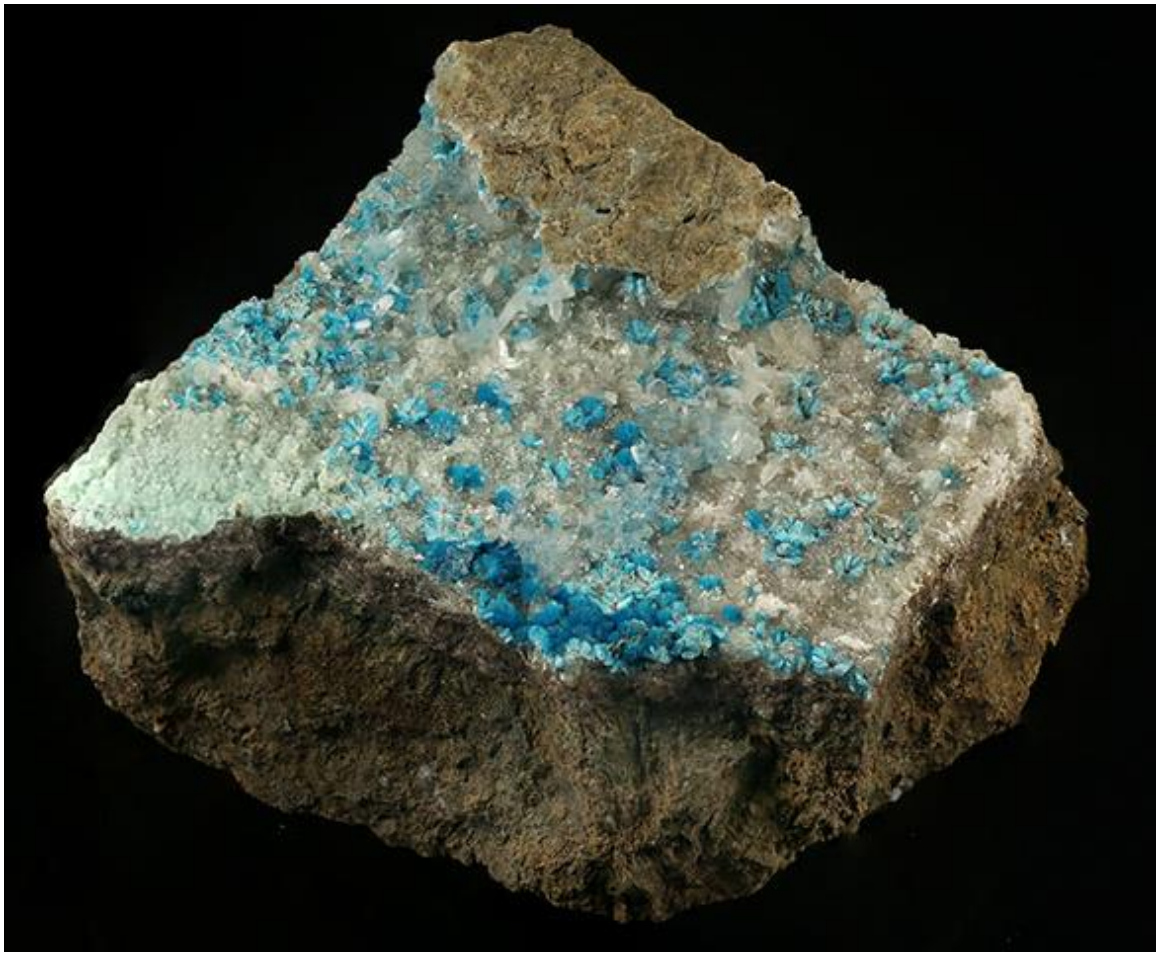


Turquoise, 6.5 cm, from the Big Nugget mine, Candelaria, Mineral County, Nevada. Andy Seibel Fine Minerals specimen and photo.

Marcus Origlieri's *Mineral Species* website (mineralspecies.com), has an October 1 update offering 20 one-of-a-kind U.S. specimens, mostly of the old-classic persuasion. For Arizona old-classicists there can be few things more desirable than specimens from the Mammoth-St. Anthony mine, Tiger, Pinal County, an exceptionally well mineralized polymetallic deposit where commercial extraction of lead, zinc and copper ores ceased in 1953 (see Richard Bideaux's definitive article, "Tiger," in the May-June 1980 *Mineralogical Record*—our "Arizona I" issue). For a very reasonable $350 Marcus will sell you a fine **vanadinite** miniature from Tiger which, he writes, W. George Griffin sold (or traded?) into the Ralph Merrill collection in 1951. There are no big, deep red, Moroccan-style vanadinite crystals here, but in compensation the piece has a brilliant luster and flamingly bright red-orange color:

Vanadinite, 5.5 cm, from the Mammoth-St. Anthony mine, Tiger, Pinal County, Arizona. Mineral Species specimen and photo.

Did you know that the type locality for **cavansite** is *not* the Wagholi quarry complex in India but the Owyhee Dam, Malheur County, Oregon, from which the type specimens came in the 1960s? Certainly, even the best of the Oregon cavansite specimens can't compete even with average-quality Indian ones such as began to appear in great numbers in the mid-1970s, but the same brilliant blue color is there, and Oregon cavansites are almost never seen on the contemporary market. For this nice-looking miniature shown on his *Mineral Species* website, Marcus Origlieri asks just $75:



Cavansite, 4.1 cm, from the Owyhee Dam, Malheur County, Oregon. Mineral Species specimen and photo.

Rudolf Watzl posts frequent updates on his *Saphira Minerals* (saphiraminerals.com) website, about half of them devoted entirely to his specialty, Alpine minerals. Of course, these Alpine postings consistently offer fine specimens of smoky quartz, adularia, titanite, hematite roses, etc., but Rudolf always throws in at least one example of something Alpine but much less familiar. On his latest—September 30—update, he shows something beautiful from an occurrence I'd never heard of before: sharp, lustrous,

orange-red **grossular** (“hessonite”) crystals all over a 3.2-cm matrix, with smears of green clinochlore, from Schwarze Wand (“black wall”), Hollersbachtal, Salzburg, Austria. Mindat tells us that this locality offers typical minerals from rodingite veins in serpentinite (calling to mind the mineral suite from the Jeffrey mine in Quebec), and Rudolf writes that Schwarze Wand specimens are “highly coveted.” This one is priced at 600 Euros (≈ $720).

Grossular (“hessonite”), 3.2 cm, from Schwarze Wand, Hollersbachtal, Pinzgau region, Salzburg, Austria. Saphira Minerals specimen and photo.

Meanwhile, Rudolf’s brother Anton of *Anton Watzl Minerals* (awminerals.com) has his own “Alpine Minerals #11” update, posted on September 23. The update is full of quartz specimens of exceptional quality, most particularly Swiss gwindels, and, maybe most remarkably, a monster specimen of very dark **smoky quartz** (Europeans call this almost-black quartz “morion”), consisting of two crystals attached near their bases, the whole measuring 17 × 28 × 32 cm, from the Tiefengletscher near Furka, Canton Uri, Switzerland. The photo shows a young collector holding the piece in his lap—if you’re interested in this specimen, well, Anton writes, “please feel free to ask for the price.”

Smoky Quartz, 32 cm, from the Tiefengletscher near Furka, Canton Uri, Switzerland. Anton Watzl Minerals specimen and photo.

Rob Lavinsky's *The Arkenstone* (irocks.com) has a recent, 25-page "shop by video" update with miscellaneous specimens which also are posted as videos on Instagram—as this web posting indicates with a link above each description—as well as on Facebook (The Arkenstone Gallery of Fine Minerals). In general the specimens shown in these 25 pages are excellent, and here I'll show you two of them, one "old" and one "new," which particularly impressed me, albeit in different ways. First there's the calcite twin, sharp, lustrous and limpidly transparent, from the Leiping mine, Guiyang County, Chenzhou Prefecture, Hunan Province, China. (Rob incorrectly places the Leiping mine in Guangxi Province, and how do I know he's wrong? Why, by consulting not only the books on China by Ottens and Liu, but also by checking out old show reports in *50 Years of What's*

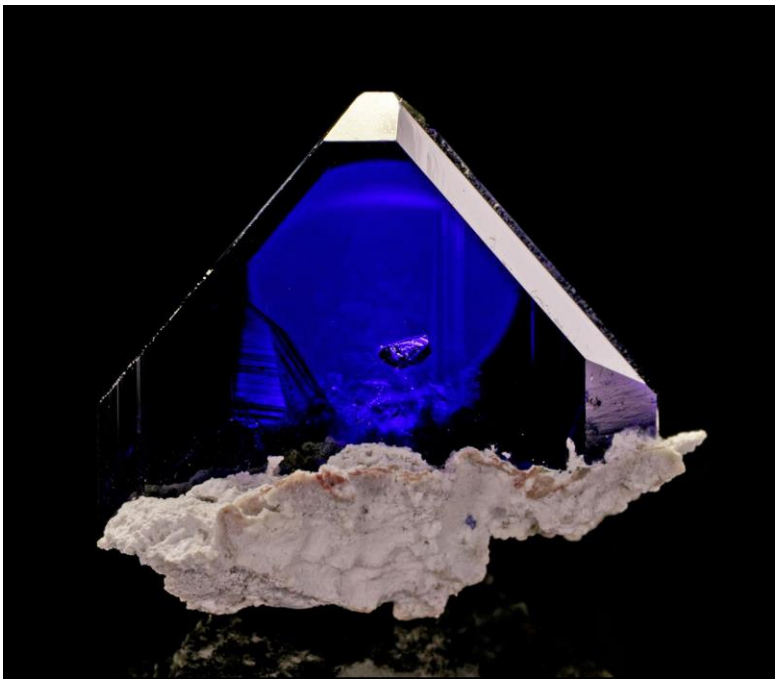
New in Minerals (2019), still for sale from the *Mineralogical Record*—contact Tom Gressman if you still need a copy).

Calcite, 4.8 cm, from the 884 mine, Leiping, Chenzhou, Hunan, China. The Arkenstone specimen and photo.

Also to be seen in Rob Lavinsky's "Shop by Video" update is a rich specimen, at least two centuries old, of **clinoclase** from Wheal Gorland, St. Day, Cornwall, England—a mine which produced the world's finest liroconite and at least some of the world's finest clinoclase during its active life between the 1790s and ca. 1820. This lovely item, Rob tells us, was once in the Joseph Neeld collection and dates to about 1800.

Clinoclase, 4.9 cm, from Wheal Gorland, St. Day, Cornwall, England. Ex Joseph Neeld collection. The Arkenstone specimen and photo.

In a September 17 posting on *The Arkenstone*, Rob Lavinsky offers us 38 "competition quality" thumbnails which until very lately reposed in the Irv Brown collection. When I checked again on October 1, six of these thumbnails were marked "sold" and one was marked "on hold," but that still leaves plenty of beauty for us to aspire to, since Irv, withal an expert in specimen mineralogy, has consistently favored "aesthetics" while building his several collections over the years. Consider, for instance, the Milpillas mine, Sonora, Mexico **azurite** shown below: yes, we've seen plenty of Milpillas azurites lately, and they can get very large while remaining dramatic, but I have never seen a thumbnail as dazzling as this one (price: $2,000):



Azurite, 2 cm, from the Milpillas mine, Cuitaca, Sonora, Mexico. Ex Irv Brown collection. The Arkenstone specimen and photo.

Another thumbnail which came to Rob from Irv Brown is this Himalaya mine, California **elbaite**, with a crystal which is reproachlessly gemmy throughout (unlike almost all of its kin from that mine) and which is beautifully harmonized with its belt of white albite crystals. Price: $1,250.

Elbaite, 2 cm, from the Himalaya mine, Mesa Grande district, San Diego County, California. Ex Irv Broan collection. The Arkenstone specimen and photo.

But not all of the Irv Brown thumbnails bear four-figure prices; many, while just as fine and harmonious as the ones shown above, are examples of HQLP (High Quality Low Price)—such as this quite perky-looking **marcasite on calcite** from somewhere in the Santa Eulalia, Chihuahua, Mexico mining district. Price: $125.

Marcasite on Calcite, 2.9 cm, from Santa Eulalia, Chihuahua, Mexico. Ex Irv Brown collection. The Arkenstone specimen and photo.

Ian and Diana Bruce of *Crystal Classics* (crystalclassics.co.uk) run a huge website, with lovely photos, which does a fine job of displaying the dealership's specialties, namely old European classics and the rich mineral suites of Tsumeb, Namibia and Broken Hill, New South Wales, Australia. But that's hardly all: put the cursor on "Gallery" and you can choose from among a miscellany of arrays including, for example, *Latest Additions*, *Classic Minerals*, *Native Elements*, *Exceptional Specimens*, *Tourmaline*, *The Book Shop*, and—where I hung out a long while this time—*Pseudomorphs*.

Ian, being English, has written especially celebratory texts about two great English classics on offer now in this category. One is perhaps the best example I've ever seen on the market of the famous **cassiterite after orthoclase** once found, mostly as loose single crystals, in the mine called Wheal Coates, near St. Agnes, Cornwall, England: see Michael P. Cooper's and Wendell Wilson's article in the March-April 2015 *Mineralogical Record*. The distinctive black pseudomorphs, which are perfect cassiterite copies of euhedral, Carlsbad-twinned, "floater" crystals and groups of orthoclase, were collected in 1828, though a second discovery may have occurred around 1840; the mine then closed for good, to become a picturesque ruin by 1889. Rarely will you see a Wheal Coates cassiterite pseudomorph as fine as this one with *Crystal Classics*; its price is $2,000.

Cassiterite after Orthoclase, 3.5 cm, from Wheal Coates, St. Agnes, Cornwall, England. Crystal Classics specimen and photo.

Another antique English pseudomorph seen in the form of a lone specimen on the Pseudomorphs page of *Crystal Classics* is a **"Lady's Slipper" siderite** from the Virtuous Lady mine, near the village of Buckland Monachorum, Devon, England. These slipper-shaped siderite epimorphs after former crystals of barite (or perhaps gypsum) were found in the 1830s; they acquired their nickname in homage to "Gloriana," the much revered Queen Elizabeth I (1533-1603), and they remain among the most cherished of English classics, notwithstanding that they are, let's say, not aesthetic paragons, with a dull brown color and a sort of reptilian scaliness to their surfaces. Ian Bruce prices this fine large example at $5,000.

Siderite ("Lady's Slipper" paramorph), 11.4 cm, from the Virtuous Lady mine, Buckland Monachorum, Devon, England. Crystal Classics specimen and photo.

Again it's time to look at something actually *new* on the market—as new anyway as June 23, when 15 mostly small-cabinet-size specimens of **scolecite** from a recent find in (of all unforeseeable places) Vietnam were posted by Ibrahim Jameel on the website of his *Khyber Mineral Company* (khyberminerals.com). Grayish lumps of vesicular basalt, clearly having been sculpted into round forms (some are turned into "Chinese-style decorator pieces," Ibrahim writes), have very deep, calcite-lined vugs bearing sprays of acicular scolecite crystals, some specimens showing lone, discrete sprays, others with little families of interlocked sprays. The occurrence is given as Dray Sap Xa, Krong Ana district, Dak Lak Province, in the Central Highlands region of the former South Vietnam. Ibrahim prices these surprising specimens between $100 and $600; now, in mid-October, four of the original 15 are marked "sold."

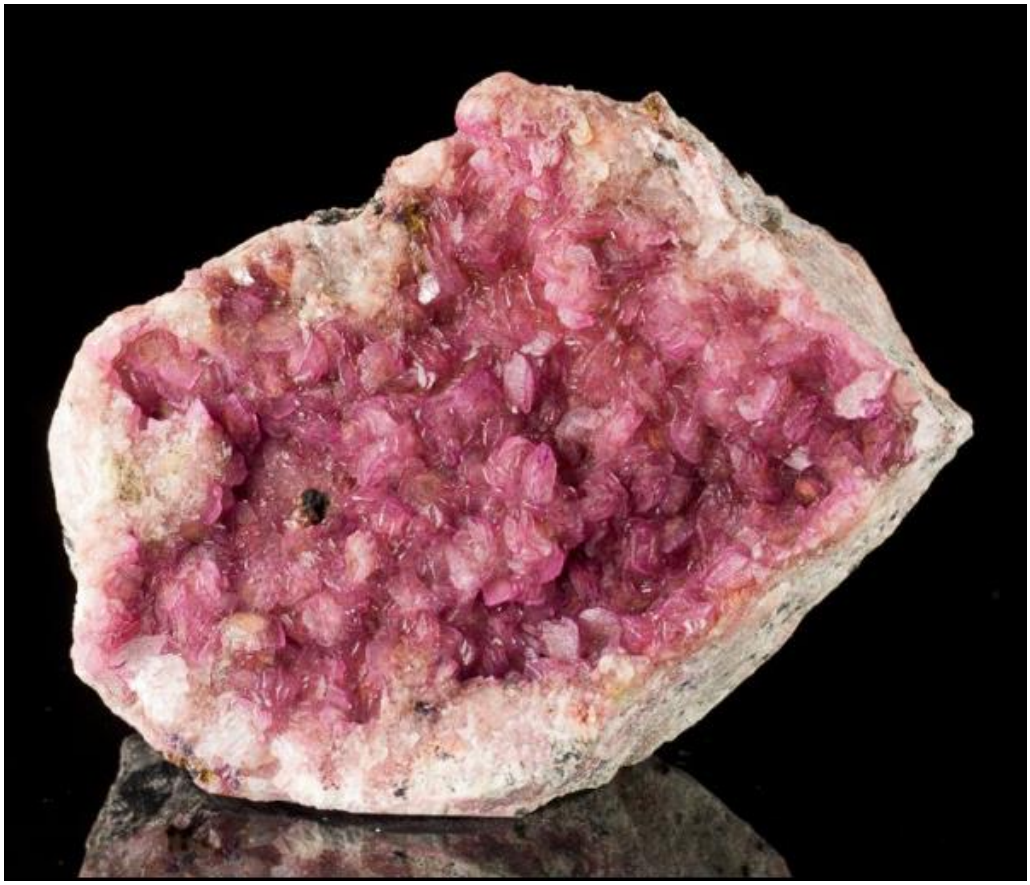
Scolecite, 7.5 cm, from Dray Sap Xa, Krong Ana district, Dak Lak Province, Vietnam. Khyber Minerals specimen and photo.

In the "What's New in Minerals" column ruefully subtitled "Shows—None!" in the September-October 2020 issue of the *Mineralogical Record*, Wendell Wilson mentioned Daniel Virgadaula's *Exotic Crystals LLC* (shopexoticcrystals.com) as a source of good specimens of the distinctive "sandwich" wulfenite which appears now and then from the Ojuela mine. This website, besides sections offering spheres, slabs, cabochons, pendants, etc., has a "Museum Quality Specimens" section, and although that section contained no sandwich wulfenites when I looked in on it in early October, it grabbed me anyway with

its dozen or so specimens, small-miniature to small-cabinet size, of **vanadinite** from Mibladen, Morocco. Yes, okay, we've seen many thousands of "new" Moroccan vanadinites over the years, in wide variations of habits, colors and styles, but such is the built-in beauty of all of them that any new, distinctive occurrences are still more than worthy of notice. Besides, I fixed on the *Exotic Crystals* vanadinites because they clearly come from the same find as those that I saw in a Moroccan dealer's tent just before the 2019 Tucson Show, and proceeded to describe in that report (in May-June 2019); the dealer said the find had happened in summer 2018. The specimens are crowded masses of dark red-brown, super-sharp, short-hexagonal crystals; some of the masses are piled on pale brown gossany matrix and some are loose; all of the specimens are highly lustrous and look, somehow, strong, vivacious, and *alert*. The miniature shown here costs just $84.

Vanadinite, 3.7 cm, from Mibladen, Morocco. Exotic Crystals LLC specimen and photo.

Another colorful Moroccan item, known to collectors since the early 2000s, is the **cobalt-rich calcite** of the Bou Azzer district—much less common than Mibladen vanadinite and, at its best, quite as dramatic-looking, with squat, pale pink to vivid rose-pink calcite crystals forming seam and vug linings on which little crystals of roselite, too, occasionally appear. Currently, on the website of *Treasure Mountain Mining* (treasuremountainmining.com), you'll find about 30 good thumbnails and miniatures of Co-rich calcite from the Aghbar mine, Bou Azzer district, which are "on sale," with a uniform 25% price reduction such that the specimens cost between $35 and $260. Moreover, a small minority of the pink calcite specimens shown in this group come not from Bou Azzer but from the equally famous Mashamba West mine, Katanga, Democratic Republic of the Congo, and these, and not the Bou Azzer pieces, show minor green patches of malachite. The Bou Azzer specimens lack big "focal point" crystals, and instead are solid seam linings of squat calcite crystals in an off-white matrix. They are very nice to look at, with shades and persuasions of pinkness inspiring the site to descriptive terms including Day-Glo, Bubblegum, Raspberry Sherbet, Shocking Pink, Lilac Pink, Peppermint Stick Pink, Outrageous Radiant Neon Pink, and (inevitably) Hot Pink. Although I haven't recorded the term attached to the 4.9-cm specimen pictured here, I can tell you that its "normal" price of $225 has been discounted to $168.75.



Calcite (Co-rich), 4.9 cm, from the Aghbar mine, Bou Azzer district, Ouarzazate, Morocco. Treasure Mountain Mining specimen and photo.

The website of *Penn Minerals* (pennminerals.com), run by Steve Carter, has long featured a fine online museum of specimens from classic Pennsylvania localities, as well as offering mini-articles on some of these long since defunct localities (and back issues of *Matrix* too). Being a native of southeastern Pennsylvania, I've always enjoyed my visits to the *Penn Minerals* site because of all the rich history refracted there. On the other hand, I've been disappointed to find few specimens from any of the hallowed old sites where I used to dig (mostly futilely) actually *for sale* on the site. But then came the update of September 17, whereon two new "Galleries" of Pennsylvania classics appeared, and all 51 pieces, formerly in the collections of Robert Weaver, Martin Anne, C. Carter Rich and William Lorah, are indeed for sale. Many are more of historical than of aesthetic interest; e.g. there are pyromorphites, cerussites and wulfenites from the Wheatley mine, Phoenixville, but only the sphalerite from that locality is of fairly striking appearance (and is fairly priced at $150):

Sphalerite, 7.5 cm, from the Wheatley mine, Phoenixville, Chester County, Pennsylvania. Ex William Lorah collection. Penn Minerals specimen and photo.

Here is the most dramatic of all of the Pennsylvania antiques, the **almandine-spessartine** from Boothwyn, Delaware County (now a suburban tract just over a mile from the line with Delaware state); at $1,250 this is also by far the most expensive of the lot:

Almandine-Spessartine, 9 cm, from Boothwyn, Delaware County, Pennsylvania. Ex Robert Link, C. Carter Rich collections. Penn Minerals specimen and photo.

Some might say that the matrix **schorl** from Marple Township, Delaware County is worth its $175 price for its old label alone—that label showing that the specimen once resided in the collection of one Samuel Trimble (1798-1855):

Schorl, 4 cm, from Marple Township, Delaware County, Pennsylvania. Ex Samuel Trimble, Robert Weaver, C. Carter Rich collections. Penn Minerals specimen and photo.

As we might expect, Spanish dealer Luis Burillo (luisburillominerales.com) has many good things from Spain, including some beautiful cabinet-size specimens of **gypsum** on alabaster from Fuentes de Ebro, Zaragoza. The locality, which first began to turn out such specimens in the 1980s, is near Luis's home in the city of Zaragoza, which may be why, although they are getting rare on the general market, Luis has 13 fine examples for sale on his site (click on "Spain"). These utterly distinctive specimens have sword-shaped crystals of colorless, pristinely transparent gypsum rising at various angles from vugs in hard, snow-white alabaster. For the specimen shown below, Luis asks 580 Euros (≈ $700).

Gypsum on alabaster, 6.7 cm, from Fuentes de Ebro, Zaragoza, Spain. Burillo Minerales specimen and photo.

Also Luis Burillo tempts us with several excellent specimens of metallic sulfosalts from the famous San José mine, Cercado, Oruro, Bolivia. There are good small miniatures of andorite and stannite, some draped with hair-like boulangerite crystals, but the top of this crop is a single miniature with highly lustrous, thin-prismatic crystals of **zinkenite** in a jackstraw group with tabular andorite and equant stannite crystals (click on "South America"), priced at 460 Euros (≈ $550).

Zinkenite with Andorite and Stannite, 4.6 cm, from the San José mine, Oruro, Cercado, Oruro Department, Bolivia. Burillo Minerales specimen and photo.

Kevin Downey of *Well-Arranged Molecules* (wellarrangedmolecules.com) knows his specimen mineralogy very well, and although he always carries plenty of contemporary material he likes old classics too, so you never know what sort(s) of treasure Kevin will have in a flat under one of his tables when you see him at shows. But since right now there *are* no shows he has been busy expanding his website, to take in the full scope of which can easily eat up a web shopper's whole morning or afternoon. Go to the *Well-Arranged Molecules* posting which showed up at the end of September, click "Minerals," and you'll find more than 2000 one-of-a-kind specimens distributed at about eight to the page over 266 pages. The specimens are old and new, ugly and beautiful, of every commonly collected size, and bear prices ranging from under $100 to low five figures; they're ordered quite randomly so that each little scroll-down brings on a little surprise.

Moreover, Kevin has a special deal going: for each *pair* of specimens that you order, the price of the less expensive one is reduced by 40%. So I will conclude this report in a simple way: simply by showing you four of the *Well-Arranged Molecules* specimens which in some way I found "special"—perhaps inspiring you to check out every one of those 266 pages (although I left off myself at page 85, in order that I might rise from my desk and address myself to the rest of my day).

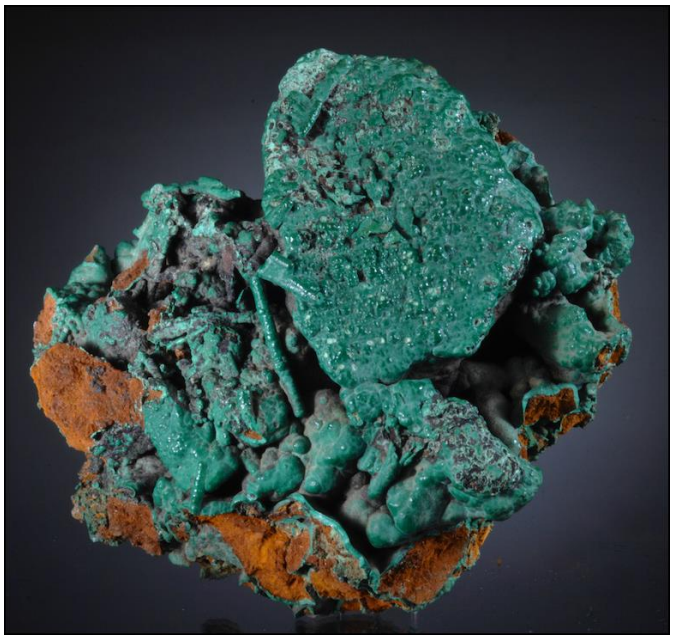
First we have a superb cabinet-size specimen of the very rare calcium-aluminum silicate **lawsonite** (I've always found it sort of remarkable that so many very rare species are made of nothing but very common, mundane elements). This specimen, Kevin writes, is from the type locality for the species, given only as the Tiburon Peninsula, Marin County, California; it is from the "original find," bears a date of 1897, and was once in the famous George Vaux Jr. collection (Kevin has the Vaux label). The blocky blue, lustrous, lightly striated lawsonite crystals reach 2 cm and rest on matrix made mostly of greenish micaceous glaucophane. This major historical piece, shown on page 46 of the site, would set you back $2,950.

Lawsonite, 6.8 cm, from the Tiburon Peninsula, Marin County, California. Well-Arranged Molecules specimen and photo.

Next comes another American classic: a parallel cluster of sharp, metallic black **digenite** crystals, with minor pyrite and quartz, from the 3800-foot level of the Leonard mine, Butte, Montana. As Kevin writes, "This piece is a lot more attractive than most [digenites]," and it has an early David New label (circa 1967). Its price is $750, and you'll find it on Kevin's page 8.

Digenite, 3.8 cm, from the 3800-foot level of the Leonard mine, Butte, Montana. Well-Arranged Molecules specimen and photo.

On Kevin's page 61 is another classic, this one from central Europe: a cabinet-size **pseudomalachite** from the ancient Lubietova mining area, Banska Bystrica region, Slovakia. Rich green botryoidal masses of pseudomalachite are dispersed all over, indeed cover almost completely, a gossany matrix measuring 9 cm in largest dimension: price $480.



Pseudomalachite, 9 cm, from Lubietova, Banska Bystrica region, Slovakia. Well-Arranged Molecules specimen and photo.

Finally, a more modern specimen which also is— if you know me you guessed it—a thumbnail. In 1987 an amazing pocket discovery in the N'Chwaning II mine, Kalahari Manganese Field, Northern Cape Province, South Africa yielded a handful of wondrous small specimens of the complex sulfate-carbonate-hydroxide **thaumasite**. This species was known before as mere annoying chalky white coatings on zeolites from northern New Jersey, but was found in this pocket as sharp, transparent, pale yellow hexagonal-prismatic crystals to 5 cm long. Of the very rare *groups* of these crystals I've seen, this one is near the top: a standup cluster with crystals to 2 cm individually. The specimen is on Kevin's page 64 and costs $650.

Thaumasite, 3.1 cm, from the N'Chwaning II mine, Kalahari manganese field, Northern Cape Province, South Africa. Well-Arranged Molecules specimen and photo.

I hope you've enjoyed this expanded, somewhat offbeat installment of "what's new in the mineral world," and even more I hope that you—everyone—will keep keeping safe from the virus during the rest of this quite exceptionally offbeat year.

Tom Moore