

# Mineralientage München Virtual 2020

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## SUMMARY

*Mineralientage München 2020 had looked like it was going to take place, after the first wave of the Covid-19 pandemic. Everything indicated that we were beginning to see the light at the end of the tunnel but, just 10 days before the start of the Show, the “surprise” jumped out, canceling the most important European mineral show for 2020. A virus that does not understand dates or deadlines swept everything away.*

*Bad news for fans who already had their trips planned, and even worse bad news for those dealers who already had everything ready. We will see in the future what the consequences of such cancellation may have been.*

*Luckily, at Fabre Minerals, the Mineralientage was held, although in this case in digital format and with pleasant surprises and improvements compared to the Sainte Marie 2020 Virtual Show. Ready to immerse ourselves in it? Welcome to the Munich Mineralientage 2020 Virtual Show.*

*All photos by Fabre Minerals & Joaquim Callén©*

## RESUMEN

*La Mineralientage München 2020 parecía que se iba a celebrar después de una primera oleada de la pandemia provocada por la Covid-19. Todo indicaba que se empezaba a ver la luz al final del túnel y, tan sólo, a 10 días del inicio de la Feria, saltó la “sorpresa”, cancelándose la edición de este 2020 de la Feria de Minerales Europea más importante. Un virus que no entiende de fechas ni de plazos se lo llevó todo por delante.*

*Una mala noticia para aficionados que ya teníamos el viaje preparado, y mucho peor, nefasta noticia para aquellos comerciantes que ya lo tenían todo dispuesto. Veremos en un futuro qué consecuencias puede acarrear dicha cancelación.*

*Por suerte, en Fabre Minerales, sí se hizo la Mineralientage, en este caso en formato digital y con agradables sorpresas y mejoras respecto la SMAM Virtual 2020. Preparados para sumergirnos en ella? Bienvenidos a la Mineralientage München 2020 Virtual.*

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FABRE MINERALS



MUNICH 2020  
(VIRTUAL)



Kamenerita - Top from Turpa cristal: 6.9 x 8.8 cm

Barcelona, 11/10/2020

Muchos vieron y muchos también participaron en el primer **Sainte-Marie-aux-Mines Virtual**

Seguimos creyendo que no hay nada como asistir físicamente a una Feria de Minerales y recomendamos a todo aquel que pueda, que acuda a la próxima edición de la Feria de Múnich 2020, pero debido a las actuales circunstancias nosotros este año ni expondremos ni estaremos allí y lo que haremos será nuestra propia Feria online, un Múnich Virtual en el que durante una semana intentaremos, como hubiésemos hecho en Múnich, 'exponer' nuestras mejores piezas y las novedades que hubiésemos llevado allí.



Lutina y Estibita - Mina Zaldia, Navarra 8.1 x 3.7 cm

Habrà 'La Caja Fuerte', habrá 'El Corazón de Múnich Virtual' y habrá una inauguración de nuestra exposición el Lunes 19 de Octubre a las 16:00 horas (Hora Central Europea) con más de 100 piezas recién salidas de sus cajas y listas para ser vendidas.

Como una Feria pero diferente a lo que siempre conocimos

  
Jordi Fabre

**Non-stop Múnich Virtual, desde el Lunes 19 de Octubre a las 16:00 (Hora Central Europea) hasta el Domingo 25 por la noche**



Prasita con Pala - Inca, Maracay cristal: 1.2 x 1.1 cm



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With this cover letter began the countdown to the celebration of this first virtual edition of the Munich Mineralientage show, which would take place between October 19 and 25, 2020.

Jordi had already broken the ice for virtual mineral shows with the first virtual edition of Sainte Marie aux Mines 2020. Most readers will probably know Jordi. And anyone who knows him knows perfectly well that he was not going to repeat exactly what he did in the Virtual SMAM but that he would try to improve the proposed “game” as much as possible. Improving from an already high level is not an easy task, but with perseverance, tenacity and effort everything is possible. And among those adjectives Jordi moves like a fish in water.



Marie and Terry Huizing from Rocks & Minerals magazine on the left. On the right Joaquim Callén and Bob Jones, with the book “Gold for Collectors” in hand. All hail to the mineral veterans, enjoying a picnic and distilling joy.



Before entering fully into the Munich Mineralientage Virtual 2020 itself, I allow myself the license to explain how I lived in the days before the celebration of this new virtual show.

I was one of the “deluded” who thought that the face-to-face in-person version of the Munich Mineralientage was really going to be held. Although all the European indices regarding the evolution of the pandemic did not bode well, on the show’s official website there was a banner, updated daily, appearing still green just 10 days before the celebration of the show, but then the green turned red, confirming the cancellation of the show. All the excitement, all the planning for a week of vacation, faded away in an instant. And with me being simply an amateur who was going to spend a weekend at a mineral show. I say this because I can not imagine what news of such magnitude would mean for most dealers, with all that is entailed in preparing for a show of this caliber (shipping, customs, insurance, fees, flights, hotel reservations, car rental...). And for many visitors this is an international show, with hotel cancellations, plane flight cancellations, work and personal planning. A hard-to-digest mess. Luckily we have the minerals, always the minerals.

And luckily Jordi really likes minerals.



So with my Munich show pass in hand, that this year was left untouched, without passing even once through the show’s gates, without leaving home, without stepping on the lands of Bavaria. We’ll see what happens in 2021. One thing is clear: *Carpe diem*.



As in the last virtual show, SMAM Virtual 2020, the widgets would not change, because the needs, being away from home, were exactly the same. Namely: battery chargers, both AC and DC for smartphone devices, with mini-USB and type-C connectors, DC to AC inverter with plug for equipment powered at 230 V, such as the laptop computer. And of course the data availability forecast for internet connections, wifi connections when possible, and another essential, the vehicle fuel forecast, especially working in the field and sometimes far from any glimpse of human civilization (even if that sounds like an oxymoron). With all these gadgets ready, I just had to wait, cross my fingers and try to have time to update the screens, all combined as best I could with my regular work. The challenge was beautiful: to see what surprises Fabre Minerals would bring us this time and, as usual, there were quite a lot.

And since we have to live and talk about the present, and since Jordi really likes minerals, let's talk about the Munich Mineralientage 2020 Virtual show from Jordi's virtual booth.

### Novedades Munich 2020 Virtual

- ➡ [Página 1](#) USA, México, Canadá y España
- ➡ [Página 2](#) Fluorita española, Portugal, Francia, Europa, Turquía y FSU
- ➡ [Página 3](#) Marruecos
- ➡ [Página 4](#) África, Brasil, América del Sur, China y Asia
- ➡ [Página 5](#) La Caja Fuerte
- ➡ [Página 6](#) El Corazón de Munich Virtual



This is what the Fabre Minerals website looked like at the start of the show. As happened in the Virtual SMAM 2020, two sections that we are not used to appear again, "The Strongbox" and "The heart of Virtual Munich", in addition to the already classic sections where pieces grouped by territories are offered, either by country (the majority) or by continent or specific region (Spanish Fluorite).

As in the SMAM 2020 Virtual Mineral Show, the first 4 pages turned out to be "static" pages in each of which a certain number of specimens grouped by countries or geographical areas could be seen. Thus, the first page would be dedicated to minerals from deposits in the USA, Mexico, Canada and Spain.

Page 2 would be for specimens of Spanish Fluorite, Portugal, France, Europe, Turkey and the former Soviet Union.

Page 3 dedicated exclusively to specimens from Morocco.

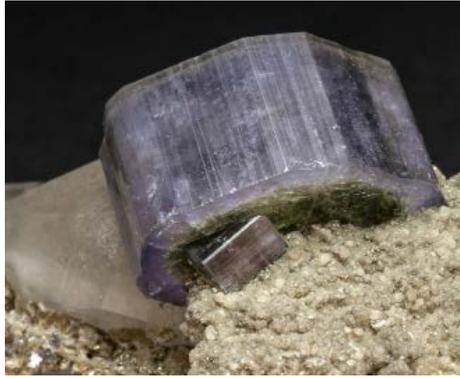
Page 4 would be filled with specimens from Africa, Brazil, South America, China and the rest of Asia.

And on page 5, again, under the title "The Strong Box", suddenly appear specimens of a very high quality. It is a pleasure and a gift for the senses to be able to see these types of specimens, even in this virtual way. Probably, the same specimens at a "face-to-face" show would not be visible to all, and only a privileged few would get to see this type of piece, which we often cannot even see in mineralogy museums. Therefore, a Virtual Mineral Show, such as this Mineralientage München 2020, manages to "democratize" this type of specimen that perhaps, in another context, we would not even know of their existence. I reiterate here that there is nothing like being on site, living it live, and having a piece in your hands. That feeling is unmatched and, for now, I'm not trading it for anything. If you are already lucky enough to see this type of specimen live, your happiness is complete.

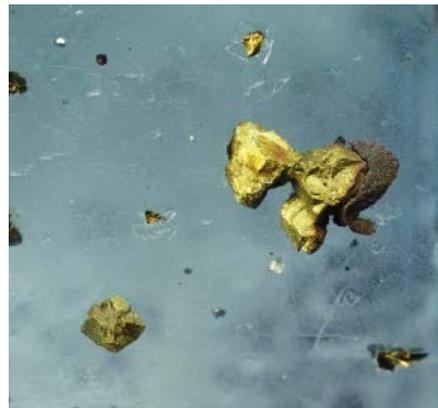


Fluorite, Llamas quarry, Obdulia vein, Caravia mining area, Las Cabañas, Duyos, Caravia, East Region, Asturias, Spain. Specimen size: 8.1 × 4.8 × 6.4 cm. The largest crystal measures 1.9 × 1.8 cm. Cubic Fluorite crystals, one of them clearly dominant, transparent and very lustrous, with a bluish lilac color, very

well arranged in the center of the piece, on a matrix partially formed of Quartz crystals. This deposit can already be considered a classic for Asturian Fluorite, always so beautiful. It is fascinating how in a relatively small geographical and geological environment the conditions existed to favor these deposits, so rich in Fluorites, of such high quality, with superb crystallization and fantastic colors.



Fluorapatite with Quartz, Siderite, Muscovite, and Chlorite. Minas da Panasqueira, Village of São Francisco de Assis, Covilhã, Castelo Branco, Cova da Beira, Centro, Portugal. Specimen size: 11.6 × 7.8 × 6.5 cm. The largest crystal measures 4 × 2.1 cm. Slight fluorescence under long and short wave UV. Short doubly terminated prismatic crystal of Fluorapatite, with very well defined faces and edges, with good luster and a very distinct geometric color zoning with intense and uniform blue-violet prism faces and a greenish yellow color towards the crystal nucleus. This characteristic is popularly known in Panasqueira as "olho de boi" (ox eye). The matrix is formed of lenticular Siderite crystals, coatings of Chlorite and leafy aggregates of Muscovite and Quartz crystals. The specimen is superb. In the Mineralogical Record of January-February 2014, Volume 45, Number 1, the main article is dedicated to this long-lived mine. Under the title "**The Panasqueira Mines**" Castelo Branco District, Portugal, whose authors are Carles Curto i Milà and Jordi Fabre i Fornaguera, it delves into the history of this mine and the magnificent specimens that have been obtained from it and that luckily, even today, are still being obtained.



Fluorite with Chalcopyrite. Le Burc mine, Alban-Le Fraysse Area, Tarn, Occitanie, France. Specimen size: 10.7 × 8.5 × 6.1 cm. The largest crystal measures 8 × 5.5 cm. Fluorescent under both long and short wave UV. Former Pierre-Marie Guy collection. Fluorite crystals with a cubic habit, with perfectly defined faces and edges, with good luster and an extraordinarily intense sky-blue color. Small crystals of Chalcopyrite accompany the piece, some in the form of inclusions. Very intense color for the locality. This mine was the last to mine Fluorite in France (closed in April 2006). A main Fluorite seam was exploited that reached 1200 meters in length by 3 meters in width, in Ordovician (Paleozoic) schists.



Pretzels and beer are two of the products that usually go together in Munich, and it is very common to have beer accompanied by these popular baked buns, not suitable for those with high blood pressure as they are usually impregnated with lots of salt.

Let's leave the beer and the pretzels for the 2021 edition of the show, if it happens, to continue looking at the wonders on offer in "La Caja Fuerte". Once seen, we will go on to the dynamic section of the show, the one in which ever more pieces were appearing daily, every hour, and almost every minute.



Proustite with Silver, Acanthite, and Quartz. Imiter mine, Jebel Saghro, Imiter District, Tinghir Province, Drâa-Tafilalet Region, Morocco ( $\pm$  2019). Specimen size:  $17.3 \times 8.5 \times 6.7$  cm. The largest crystal measures  $1.2 \times 1$  cm. Aesthetic specimen where the Proustite, with its very vivid red color, partially covers hooked Silver crystals. One more example of how wonderful nature can be. A lot of the element silver in several species.



Diaspore with Margarite. Mount Ilbir, Pinarcik, Milâs District, Muğla Province, Aegean Region, Turkey (2020). Partial novelty at SMAM Virtual 2020. Specimen size:  $14.9 \times 3.6 \times 1.7$  cm. Scepter growth of a large doubly terminated Diaspore crystal with polycrystalline terminations, transparent and lustrous, yellow in color with green reflections and partially covered with leafy Margarite crystals. The Diaspore is an aluminum oxyhydroxide that together with Böhmite and Gibbsite form bauxite, a rock that is exploited for aluminum, of which it is the main ore. The Diaspore from this locality is of gemological interest due to the purity, quality of its crystals, and color, as this specimen attests.



Borcarite with Cahnite. Shijiangshan mine, Linxi, Ulanhad League, Inner Mongolia Autonomous Region, China (2011). Specimen size:  $3 \times 1.6 \times 1.1$  cm. Very aerial floater group of sharp Borcarite crystals, a very rare borate-carbonate (hence the name, referring to its composition). The crystals have sharp shapes, they are translucent and have a uniform green color, partially covered by small white and very sharp crystals of Cahnite, an arsenate that is also considered very rare. Both species, and in the same piece, make this one exceptional. The mine where this specimen came from exploits lead and zinc, hosted in a skarn (calc-silicate rock formed when an igneous rock intrudes into a calcareous body) rich in boron minerals.



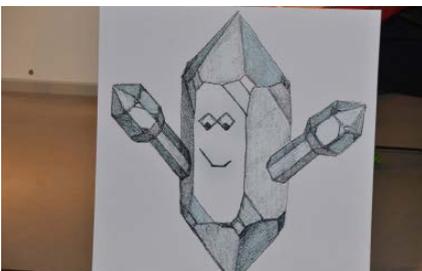
Wittichenite. Cattle Grid reservoir (Mount Gunson), Mount Gunson Mines, Pernatty Lagoon, Stuart Shelf, South Australia, Australia (1981). Specimen size:  $3.2 \times 2.4 \times 0.8$  cm. Very shiny floater Wittichenite crystal with complex polycrystalline growths. The specimen has been reviewed and photographed in the article 'Wittichenite from the Cattle Grid Pit, Mount Gunson mine, South Australia' in the magazine 'Mineralogical Record', on page 140 of volume 44, number 2, March-April 2013.

You can see all the pieces in “The Strongbox” from the 2020 Mineralientage München Virtual show at [https://www.fabreminerals.com/webupdate/AM1/Munich\\_Virtual\\_2020\\_p5\\_EN.php](https://www.fabreminerals.com/webupdate/AM1/Munich_Virtual_2020_p5_EN.php)

And now for “The Virtual Heart of Munich”. The most “dynamic” section of the show, the one where specimens appeared one at a time from Monday, October 19 to Sunday, October 25, or in other words, a week in a row presenting new pieces day by day, and within each day at different time intervals. Quite a challenge for those who wanted to see all the pieces and not miss out on one that would fit into their collection. And at this point we found the first big difference with respect to the Virtual SMAM 2020, where a total of 67 specimens could be seen between the 6 days of “The Heart of Ste. Marie Virtual” while in Virtual Munich the figure amounted to 154 specimens exposed. Even with one extra day of “Show”, the increase in the number of specimens displayed was remarkable, for the enjoyment of those of us who like to see lots of minerals. Another thing is the amount of work that this effort entails, which undoubtedly is not exactly light. The distribution of specimens took place as follows:

- 11 pieces on Monday 19th.
- 18 pieces on Tuesday 20th.
- 20 pieces on Wednesday the 21st.
- 27 pieces on Thursday 22nd.
- 30 pieces on Friday the 23rd.
- 32 pieces on Saturday 24th.
- 16 pieces on Sunday the 25th, the last day of the Show.

I will go on to review those specimens that most caught my attention, day by day, and that we can continue to enjoy on the web. And I point this out because it is another piece of important news regarding the original SMAM Virtual 2020 web page. In this section the option is already activated to see also those specimens that have already been sold, allowing us to view any of the pieces whether or not they are still available.



### Monday, October 19:



Fluorite with Quartz. Tounfit, Boumia, Midelt Province, Drâa-Tafilalet Region, Morocco (2014). Specimen size: 6.6 x 5 x 2.5 cm. Main crystal: 2 x 1.8 cm. Group of cubic Fluorite crystals, very sharp, with a lilac color in most of the crystal, and more intense lilac on the edges, accompanied by small Quartz crystals. Different from the most well known Fluorites from this deposit, in which rhombohedral and/or dodecahedral forms tend to predominate in the crystals.



Mendipite. Torr Works quarry (Merehead quarry), Cranmore, Mendip District, Somerset, England, UK. Specimen size: 3.8 x 2.2 x 1.6 cm. Columnar aggregates of this rare lead oxychloride, pale greenish pink, with dark manganese oxides. The specimen is from the type locality, the Mendip Mountains, in England. This type of specimen is rarely seen and is a great encouragement to collectors of type locality (TL) specimens.



Quartz (variety jacinto de compostela) with Gypsum. Chella, Canal de Navarrés Region, Valencia, Spain. Specimen size: 10 x 8.5 x 4.9 cm. Main crystal: 2.3 x 1.5 cm. Doubly terminated hematoidal Quartz crystal (variety jacinto de compostela) with an intense color, embedded in a matrix of red gypsum. This type of specimen is a classic of Spanish mineralogy due to the large number of Triassic Keuper facies that outcrop in great quantity between the area of Valencia and Cuenca, where the specimen comes from.



Tuesday, October 20:



Rhodochrosite. Manuelita mine, ↓ 1400 meters, Morococha District, Yauli Province, Junín Department, Peru (03/2019). Specimen size: 7 x 6.2 x 4.6 cm. Main crystal: 1 x 0.8 cm. Druse of rhombohedral Rhodochrosite crystals, on matrix, with a more vivid pink color than usual for this mine, where silver is exploited, as well as zinc, copper and lead.



Pyromorphite. Mina des Farges (Mina Les Farges), Ussel, Corrèze, Nouvelle-Aquitaine, France. Specimen size: 5.9 x 3.7 x 3.8 cm. Main crystal: 1.1 x 0.7 cm. Former Philippe Morelon collection. Olive-green spindle-shaped crystals of Pyromorphite, with hopper terminations, and on which a second generation of fine yellowish Pyromorphite crystals have grown. A classic of French mineralogy.



The hard core of the Mineralogical Record (Tom Gressman, Thomas P. Moore, and Christi Cramer) surrounding two illustrious visitors to a European show: John S. White (aka "Rondinaire") and Jim Spann. USA power.



Fluorite, Quartz, Galena. Taolin mine, Linxiang, Yueyang Prefecture, Hunan Province, China (± 2000). Specimen size: 9.8 x 7.2 x 6.3 cm. Main crystal: 2 x 1.8 cm. Ex-Jan Buma collection. Number 200408. Fluorite crystals with polycrystalline growths, with a violet color, partially covered by Quartz crystals and cubo-octahedral crystals of Galena.



Strontianite, Dolomite, Chalcopyrite. Dreislar mine, Dreislar, Winterberg, Sauerland, North Rhine-Westphalia, Germany. Specimen size: 7.3 x 5.4 x 3.5 cm. Main crystal: 1 x 0.3 cm.

Strontianite crystals, many of them doubly terminated, with a slight yellowish hue, on whitish Dolomite crystals and small golden-colored Chalcopyrite twins. This mine was exploited for Baryte, but is already closed.



Wednesday, Octobre 21:



Witherite, Sphalerite, Calcite. Minerva I mine, Ozark-Mahoning group, Cave-in-Rock sub-district, Hardin County, Illinois, USA. Specimen size: 11.6 x 10.2 x 5.3 cm. Another rare carbonate, barium in this case. Parallel growths, perpendicular to the main axis of a slightly yellowish color, on matrix, accompanied by Calcite and Sphalerite. One of the largest "mantle"-type mines in the USA.



Quartz. La Gardette area, Giraud, Villard-Nôtre-Dame, Le Bourg d'Oisans, Grenoble, Isère, Auvergne-Rhône-Alpes, France. Specimen size: 14.5 x 14.3 x 3.3 cm. Main crystal: 2.4 x 0.5 cm. Former Philippe Morelon collection. La Gardette Quartz are considered among the highest quality in the world, completely transparent. A mega-classic of French mineralogy.



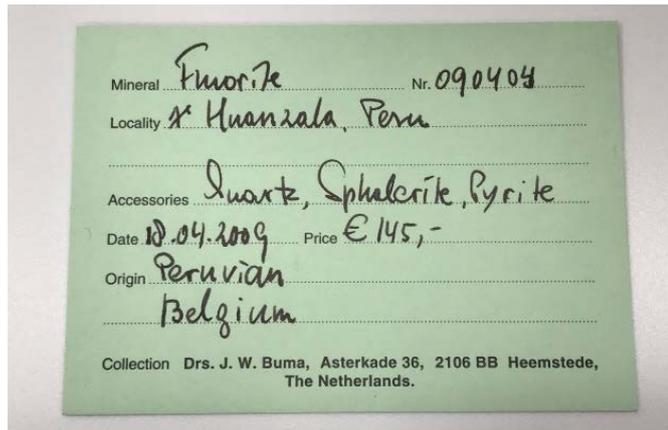
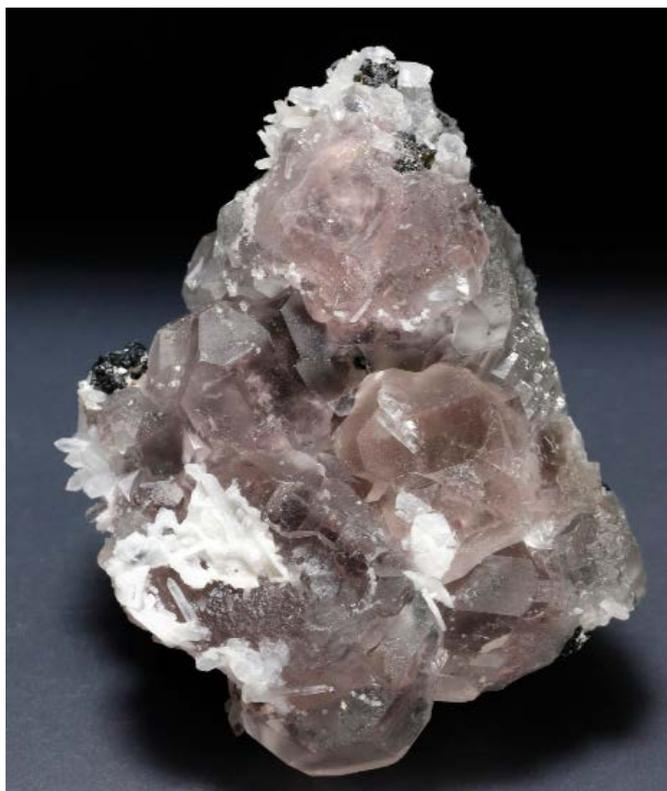
Pyromorphite with Baryte and Quartz. La Vidale mine (Brezies), Asprières, Saint-Martin de Bouillac, Villefranche-de-Rouergue, Aveyron, Occitanie, France (2008). Specimen size: 4.8 x 3.1 x 3.2 cm. Main crystal: 0.3 x 0.3 cm. Globular growths of Pyromorphite on a whitish Quartz matrix, with good luster and an intense greenish yellow color. Lead chlorophosphate, always a very attractive mineral.



Azurite with Malachite. Milpillas mine, Cuitaca, Santa Cruz Municipality, Sonora, Mexico (2013). Specimen size: 4.4 x 4.2 x 1.9 cm. Main crystal: 1.6 x 1.4 cm. Aerial group of Azurite crystals, with well defined faces and edges, with the electric-blue color typical of the best azurites from this deposit, accompanied by acicular Malachite crystals on the back of the specimen. The best possible color for Azurite, much better live in person.



This blue, of another color and not mineral, is the blue that mixed with white forms one of the official flags of the state of Bavaria, in Germany, in whose capital Munich the Mineralientage is held. The snow flower is also characteristic of the city's proximity to the Alps. The fact is that this bag has already become indispensable in the last two years of the show, as it is the perfect size for some mineral *tuppers*



Fluorite with Quartz, Sphalerite, and Pyrite. Huanzala mine, Huallanca District, Dos de Mayo Province, Huánuco Department, Peru ( $\pm$  2009). Specimen size: 7.6 x 6.2 x 3.3 cm. Main crystal: 2.2 x 1.7 cm. Former Jan Buma collection, number 090404. Group of Fluorite crystals with well defined faces and edges, with good luster and an intense violet color. On matrix, accompanied by small crystals of Sphalerite (variety marmatite), water-clear crystals of Quartz and small cubic crystals of Pyrite, a typical association for the deposit. This mine exploits lead and zinc although it is known for its beautiful Pyrite and Fluorite specimens.

Something important in mineral collections is the label that is dedicated to each specimen. Each collector captures on it the information that they believe to be most relevant. Another thing is the format in which you want to save this information. Nowadays digital systems offer a very wide range that allows all the information you want to be included in various formats. We will see what the future holds in relation to this topic (Holograms? Augmented reality?, ...).

Personally, and although it seems old-fashioned, I like labels written by hand (apart from the almost mandatory digital system). The handwritten label gives a more "encyclopedic" or "natural cabinet" feel. Maybe I'm getting old ... But there you have it, a specimen with its handwritten label.

### Thursday, October 22:

This page was dedicated almost exclusively to pieces extracted in Spain, in fact more than 96% of the minerals shown had that origin, with a final infiltrator of American origin.



Quartz coated with the chalcedony variety of quartz. Barranco Los Pajaritos-Cabezo de Don Juan, Llano del Beal, Cartagena, Campo de Cartagena Region, Murcia, Spain. Specimen size: 12.8 x 9.5 x 7.7 cm. Main crystal: 5.7 x 4.6 cm. Former collection

of Miguel David Martínez. Group of Quartz crystals covered by a second generation of Quartz (variety chalcedony) with a pinkish purple color. A classic example for the mining district of La Unión, where there is a great fondness for searching for minerals in the many existing mines, all of which are now defunct.



Baryte. Victoria mine, Cabezo de San Ginés, Cartagena, Murcia, Spain (1980). Specimen size: 12 x 8.5 x 7.7 cm. Another of the most abundant and characteristic minerals of the La Unión mining district, Baryte, in this case forming an aggregate of sharp tabular crystals, yellowish and with reddish tones of iron oxides.



Baryte with Pyrolusite. Marisol mine, Las Nogueras ravine, Golf Courses, Atamaria, Cartagena, Murcia, Spain (1995). Specimen size: 10.5 x 6.8 x 5.2 cm. Main crystal: 5 x 3.4 cm. Tabular crystals of Baryte with a yellowish white color, almost covered by black microcrystals of Pyrolusite. Another classic from the La Unión area, where manganese oxides are almost ubiquitous in all the mines.



Fluorapatite with Quartz. Barruecopardo, La Ramajería Comarca, Salamanca, Castilla y León, Spain. Specimen size: 4.3 x 2.6 x 2.1 cm. Fluorapatite crystals on a matrix formed by Quartz crystals, with very well defined faces and edges, with good luster and an intense blue color, although yellow in some areas. Of excellent quality for the deposit.



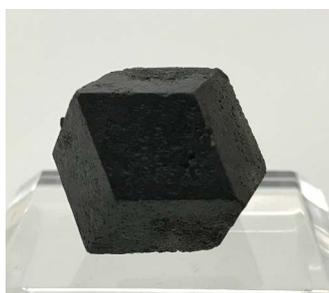
Cerussite with Goethite. San Valentín cut, Sancti Espirito, Sierra Minera de Cartagena-La Unión, La Unión, Murcia, Spain. Specimen size: 9.1 x 6.4 x 3.7 cm. Main crystal: 1 x 0.6 cm. Very sharp and translucent prismatic Cerussite crystals on a Goethite matrix. They are white and very aerial. Typical mineral for this type of deposit that originated in the oxidation zone where these lead carbonates usually form.



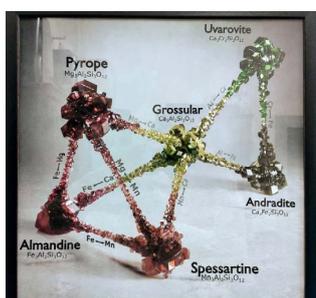
Cerussite with Galena. Grupo Minero La Cruz, La Cruz vein, shaft 5, Linares, Sierra Morena region, Jaén, Andalusia, Spain. Specimen size: 5.4 x 3 x 2.1 cm. Main crystal: 1.4 x 1.4 cm. Group of sharp, lustrous Cerussite crystals on a Galena matrix. The La Cruz mining group is a classic of Spanish mineralogy.



Celestine. Socavón Santa Bárbara (El Ardeal tunnel), Sierra Almagrera, Cuevas del Almanzora, Almería, Andalusia, Spain. Specimen size: 8.8 x 7 x 2.8 cm. Main crystal: 4 x 1.8 cm. Group of very sharp tabular crystals of Celestine with a superficial recrystallization of a second generation of platy crystals of the same mineral. The locality is better known for its iron and potassium sulphate, Jarosite, but here we have strontium sulphate. This piece came home, virtually.



Andradite (variety melanite). San Antonio mine, Cehegin, Northwest Region, Murcia, Spain (2005). Specimen size: 2 x 2 x 2 cm. Floater dodecahedral crystal of Andradite (melanite variety), with very well defined faces and edges. Within the Garnet Group, as we see in the attached diagram, Andradite is rich in Fe<sup>3+</sup> and Ca.





Andradite with Calcite. Minas de Cala, Cala, Huelva, Andalusia, Spain. Specimen size: 5.5 x 4.7 x 3.4 cm. Main crystal: 2.7 x 2.5 cm. Aerial group of Andradite crystals with polycrystalline growths on the crystal faces, lustrous, and larger than usual for the deposit, included in a matrix of Calcite.



The Cala mines were developed on a large skarn (a body of calc-silicate rocks originating from the action of hydrothermal fluids of magmatic origin on carbonate rocks). These mines exploited copper and iron as far back as Roman times.



Smithsonite. El Lirio mine, Cabezo de Ponce, Llano del Beal, Cartagena, Murcia, Spain (2018). Specimen size: 7.6 x 6.8 x 2.5 cm. Main crystal: 0.5 x 0.3 cm. Doubly terminated Smithsonite crystals on a limonitic matrix, with the characteristic "rice grain" morphology, common in this mineral species. The crystals are translucent, lustrous, pearly white, a classic for Murcian mineralogy and specifically for the La Unión area.



Pyromorphite. San Andrés mine, Espiel, Valle del Guadialto Region, Córdoba, Andalusia, Spain (1987). Specimen size: 1.3 x 1.3 x 0.9 cm. Group of Pyromorphite crystals with an elongated prismatic habit, with well defined faces and edges, translucent, lustrous, and with a vivid green color.



Fluorite. La Viesca mine, La Collada mining area, Huergo, Siero, Oviedo region, Asturias, Spain. Specimen size: 6.4 x 6.2 x 4.7 cm. Main crystal: 2.7 x 2.2 cm. Former collection of Miguel David Martínez. Group of Fluorite crystals, very sharp, transparent, with good luster and a blue color with violet tones on the edges of the cubes. There seems to be no end to production from this mine.



Quartz. East Coleman mine, Jessieville, Garland County, Arkansas, USA ( $\pm$  1981). Specimen size: 13.3 x 12.2 x 12.8 cm. Main crystal: 12.2 x 7.7 cm. Group of colorless Quartz crystals very rich in lustrous terminal faces. Garland County, Arkansas, has multiple deposits of Quartz yielding specimens like this. Characteristic for the sharpness of its crystals and the numerous crystal faces. A classic of yesteryear, not so easy to find today.



Copper. Boinás Este, Platform 380, Boinás, Belmonte de Miranda, Oviedo Region, Asturias, Spain (11/2011). Specimen size: 3 x 2.9 x 2 cm. Main crystal: 0.2 x 0.2 cm. Dendritic growths of small copper crystals,

with shiny faces and edges that contrast with the metallic matrix. This mine has exploited gold since Roman times but with modern methods only from 1997 to 2006. The gold from this mine was found both in native form and as the electrum variety.



Friday, Octobre 23:



Hematite pseudo after Magnetite (variety martite). Payún Matrú volcano, Malargüe Department, Mendoza Province, Argentina (2008). Specimen size: 6.8 x 6.7 x 5 cm. Main crystal: 2.9 x 2.5 cm. Very aerial group of crystals with sharply defined faces and edges, lustrous, of Hematite pseudomorphs after Magnetite, on matrix, which is something unusual for the specimens from this deposit.



Quartz. Divino das Laranjeiras, Governador Valadares, Vale do Rio Doce, Minas Gerais, Brazil. Specimen size: 14.8 x 14.3 x 10 cm. Former José Luis Vallecillo collection. Group of Quartz crystals, one of them clearly dominant, with very marked hopper growths, between transparent and translucent, with bright luster and intense smoky tones. This type of specimen is found in pegmatite areas, widely distributed in that Brazilian region.



'Lepidolite' pseudo after Elbaite, with Manganotantalite. Naipa mine, Upper Ligonha District, Zambezia Province, Mozambique (07/2017). Specimen size: 4.5 x 2.8 x 3.2 cm. Main crystal: 1.7 x 0.3 cm. Another wonder that pegmatites have in store for us, in this case from Mozambique and formed by parallel growths of fibrous-looking Lepidolite series pseudomorph after an Elbaite crystal, with doubly terminated crystals of Tantalite-(Mn) with very well defined faces and edges, transparent and bright red. This pegmatite is of the lithium-cesium-tantalum-rich type.



Wardite coated by Childrenite. Stoneman Camp, Young's Creek, Dawson Mining District, Yukon Territory, Canada (07/1996). Specimen size: 6.7 x 4.3 x 2.7 cm. Main crystal: 1.4 x 1.3 cm. Matrix group of very sharp Wardite crystals covered by a thin layer of Childrenite microcrystals (both are aluminum phosphate-hydroxides with Na and Fe<sup>2+</sup> respectively). There is an interesting article in *Mineralogistes de Catalunya / Parageneses magazine*, titled "Phosphates from Rapid Creek and Big Fish

River, Yukon, Canada" whose authors are Paulí Gispert and Josep Lluís Garrido, in volume 13, number 3, May 2020, edited by the GMC (Grup Mineralògic Català) which delves into the variety of phosphates existing in this vast territory.



Shattuckite with Quartz, Malachite and Chrysocolla. Milpillas mine, level 1100, Cuitaca, Santa Cruz Municipality, Sonora, Mexico (01/2019). Specimen size: 5.8 x 3.6 x 1.8 cm. Spherulitic growths of Shattuckite with an intense color, encompassed in crystals of Quartz, which is a rare species in Milpillas.



Vanadinite. Mammoth-Saint Anthony mine, Tiger, Mammoth District, Pinal County, Arizona, USA. Specimen size: 6.3 x 4.9 x 3.4 cm. Main crystal: 0.3 x 0.1 cm. Group on matrix of prismatic Vanadinite crystals with a bright red color. A difficult American classic to find today and very old, as the original label shows. The mine exploited Au-V-Pb-Zn-Mo-Cu-Ag-W-F-Ba.



Galena with Baryte, Pyrite, and Quartz. Bou Nahas mine, Oumjrane mining area, Alnif, Tinghir Province, Drâa-Tafilalet Region, Morocco (01/2018). Specimen size: 8 x 5.8 x 5.2 cm. Main crystal: 2.5 x 1.9 cm. Cubo-octahedral Galena crystal on a Baryte and Quartz matrix from a classic Moroccan polymetallic mine, where mainly copper is mined.



Copper. Bou Nahas mine, Oumjrane mining area, Alnif, Tinghir Province, Drâa-Tafilalet Region, Morocco (2014). Specimen size: 13.8 x 6.6 x 4.5 cm. Main crystal: 0.3 x 0.3 cm. Former Christian Mondeilh collection. As Bou Nahas literally means "where the copper is", here is a Copper from that mine formed by arborescent, aerial growths, with sharp octahedral terminations and with crystalline Quartz as matrix.



Vanadinite with Mottramita. Mohamedine, Coud'a, Mibladen, Midelt Province, Drâa-Tafilalet Region, Morocco (05/2012). Specimen size: 4.9 x 3.8 x 2.7 cm. Main crystal: 0.9 x 0.7 cm. Very vivid red platy crystals implanted on a matrix partially covered by shiny black crystals of Mottramite (analyzed). Morocco, a natural paradise for Vanadinites, offers beautiful specimens like this one with a captivating contrast between red and black.



Fluorapatite in Prehnite. Anemzi, Imilchil, Anti-Atlas, Er Rachidia Province, Drâa-Tafilalet Region, Morocco (10/2017). Specimen size: 7.7 x 5.6 x 5.7 cm. Main crystal: 2.4 x 1.5 cm. Continuing with minerals from Morocco, this piece can be considered a rarity, formed by a Fluorapatite crystal embedded in a Prehnite nodule. The Fluorapatite crystal displays a terminal pinacoid with polycrystalline growths with a pink coloration of different shades and a yellow-green termination, which could make one think that it could be a tourmaline. This piece was virtually acquired and is now part, really, of one more collection of the always exciting Morocco.



No less captivating are the autumn colors in the Bavarian capital, where colors such as ocher and red reign.



Gold on Quartz with Malachite and Covellite. Bleida Far West mine, Bou Azzer district, Zagora Province, Drâa-Tafilalet Region, Morocco (2017-2018). Specimen size: 2.6 x 2.2 x 1.6 cm. Small Gold crystals on Quartz matrix, with small Covellite crystals and Malachite coatings.

Saturday, October 24:



Cassiterite with Calcite, Arsenopyrite, and Quartz. Minas da Panasqueira, Aldeia de São Francisco de Assis, Covilhã, Castelo Branco, Cova da Beira, Centro, Portugal (10/2017). Specimen size: 5.2 x 3.8 x 2.1 cm. Main crystal: 2.5 x 2.3 cm. Aerial group of Cassiterite crystals with a cyclic twin, with sharply defined faces and edges, lustrous and somewhat translucent, on a matrix of white Calcite, Arsenopyrite, and Quartz crystals. Panasqueira specimens characteristically have several mineral species on a single piece.



Arsenopyrite-Marcasite with Muscovite. Minas da Panasqueira, level 3, Aldeia de São Francisco de Assis, Covilhã, Castelo Branco, Cova da Beira, Centro, Portugal ( $\pm$  2005). Specimen size: 6.8 x 5.3 x 4.8 cm. Main crystal: 3.5 x 2.5 cm. Group of Arsenopyrite crystals with sharp crystal forms together with "cockscomb" aggregates of Marcasite partially covered by lamellar Muscovite crystals. Nice combo, typical of the locality.



Fluorapatite with Fluorite, Arsenopyrite and Muscovite. Minas da Panasqueira, level 0, Aldeia de São Francisco de Assis, Covilhã, Castelo Branco, Cova da Beira, Centro, Portugal (11/2014). Specimen size: 5.7 x 3.5 x 3 cm. Main crystal: 0.1 X 0.1 cm. Thick tabular Fluorapatite crystals, translucent, with good luster and a yellowish green color, implanted on matrix with Arsenopyrite crystals, coatings of small Fluorite crystals with a vivid purple color and leafy Muscovite aggregates. As usually happens with Panasqueira specimens, there are several mineral species on a single piece. I do not remember that such a characteristic happens in too many other localities worldwide. Panasqueira, a mine active since 1898, was started for the extraction of tungsten (previously named wolfram). Fluorapatite is perhaps one of the most characteristic species of the deposit, occurring as excellent specimens.



Dolomite in Quartz with Siderite and Ferberite. Minas da Panasqueira, Village of São Francisco de Assis, Covilhã, Castelo Branco, Cova da Beira, Centro, Portugal ( $\pm$  2000). Specimen size: 10.8 x 7.6 x 6.6 cm. Main crystal: 2.3 x 2 cm. Group of whitish Dolomite crystals with well-defined faces and edges, partially covering a Quartz crystal with Ferberite and small lenticular Siderite crystals, from a mine in which Dolomite is not one of the most frequent minerals.



Pyrite with Marcasite, Calcite, and Muscovite. Minas da Panasqueira, level 3, Aldeia de São Francisco de Assis, Covilhã, Castelo Branco, Cova da Beira, Centro, Portugal ( $\pm$  2005). Specimen size: 7.9 x 7.5 x 4 cm. Druse of Pyrite crystals partially covered by Calcite crystals with concentric zoning.





Gypsum. La Dificultad mine, Sierra Minera de Cartagena-La Unión, Portmán, La Unión, Murcia, Spain (1981-1985). Specimen size: 13.7 x 7.2 x 4.5 cm. Main crystal: 12 x 5.2 cm. Main gypsum crystal with a "swallowtail" twin and ocher coloration due to inclusions.

Classic locality for quality gypsum in the La Unión mining district. Along with the San Timoteo / Humboldt mine, this could be considered one of the two most emblematic mines for this mineral species.



Fluorite. Berbes mining area, Ribadesella, Eastern Region, Asturias, Spain. Specimen size: 6.2 x 5.7 x 3 cm. Main crystal: 2.4 x 2.4 cm. Group of very sharp cubic Fluorite crystals, with bright luster and an intense violet color, with very marked geometric zoning, especially towards the crystal edges. A classic for Spanish and world-renowned mineralogy.



Twinned dolomite. Cantera Asturreta, 'el pozo', Eugui, Esteribar, Comarca Auñamendi, Navarra, Spain (± 1970). Specimen size: 14.5 x 11.8 x 6.8 cm. Main crystal: 5.5 x 3 cm. Group of rhombohedral Dolomite crystals, very lustrous and transparent, with a slightly gray color, on matrix.

These types of pieces are a classic for Spanish mineralogy. The Asturreta quarry lies to the north of the one more recently exploited, the Azkárata, and it has been restored and reforested, so this type of specimen can be considered a classic and historical piece for Spanish mineralogy. These Dolomite crystals are considered the best in the world, due to their crystallization, perfection, and clarity.



Baryte with Galena. Minas de Osor, Osor, La Selva, Girona, Catalunya, Spain. Specimen size: 9 x 6.2 x 4.8 cm. Main crystal: 1.5 x 1.1 cm. Platy and tabular aggregates of Baryte crystals, translucent, white and on matrix, with Galena. A classic Catalan locality from where you don't usually see quality specimens like the one shown. The main mine exploited a deposit enriched in F-Ba-Pb-Zn located in schists, porphyries, and pegmatites. This mine ceased activity in 1979, after which obtaining specimens has been very difficult except from old collections, almost the only way of obtaining certain types of specimens like this. There has been a certain boom in the sales of old collections - on the other hand, there always has been - but the use (and abuse) of the internet has magnified this method of obtaining historical-classical mineral specimens.



Sphalerite with Dolomite. Las Mánforas mine, Áliva mining district, Camaleño, Liébana Region, Cantabria, Spain. Specimen size: 3.3 x 2.7 x 2.1 cm. Main crystal: 2.7 x 1.7 cm. Group of Sphalerite crystals on a matrix formed by white rhombohedral Dolomite crystals. The sphalerite has an intense toasted honey color, with lustrous and transparent crystals. Classic world locality for its specimens of Sphalerite, of very rich purity and crystallography.



In a mineral show as huge as the one in Munich, the collecting interests are almost as varied as the number of mineral species which exist, and systematic species collecting continues to enjoy a lot of acceptance and adepts. For these collectors, furniture with drawers are essential.

Sunday, October 25, the last day of the 2020 Mineralientage München Virtual Show:



Smithsonite. Kelly mine, Magdalena, Socorro County, New Mexico, USA. Specimen size: 14.7 x 10.8 x 8 cm. Botryoidal growth of Smithsonite of deep blue color with greenish tones, translucent and lustrous. This North American classic, of considerable size, comes from a mine that exploited a mineralized vein enriched in Zn-Pb-Cu-Ag-Au, industrially closed in 1957 although work continues to extract collectibles such as the one displayed here.



Gold. Río Fanado placers, Minas Novas, Jequitinhonha, Minas Gerais, Brazil (2013). Specimen size: 2 x 1.9 x 1 cm. Weight: 10.1 grams. Gold with placer-tumbled shapes but which retains some distinguishable crystal forms. Very aerial and bright piece, with remnants of matrix. The Fanado river is a tributary of the right bank of the Araçuaí river. Placers are deposits formed by the concentration of minerals in river sand, as in this case, or on beaches, as a consequence of its high density, gold being a very dense element.



Celestine with Sulphur. Agrigento Province (Girgenti), Sicily, Italy (± 1990). Specimen size: 6.8 x 4.7 x 4.2 cm. Main crystal: 3 x 0.3 cm. Former Carlos Prieto Paramio collection. Tapered crystals of Celestine with well defined faces and edges and sharp, shiny, brown terminations, on matrix with Sulphur. An Italian classic for both species, with the yellow Sulphur especially prominent.



Baryte. Feitais deposit, Aljustrel, Beja District, Baixo Alentejo, Alentejo, Portugal (2019). Specimen size: 6 x 4.7 x 2.4 cm. Main crystal: 4.3 x 2.8 cm. Group of tabular Baryte crystals, fine and sharp, one of them clearly dominant, transparent, with good luster and a slightly smoky yellowish color with abundant inclusions. From a little-known locality for collecting.



Octahedral Fluorite with Scheelite and Muscovite. Mount Xuebaoding, Pingwu, Mianyang Prefecture, Sichuan Province, China. Specimen size: 6.3 x 5.9 x 5.2 cm. Main crystal: 5.7 x 5.3 cm. Octahedral Fluorite crystal, with polycrystalline growths on the faces, transparent, lustrous and colorless. On matrix, with Scheelite crystals and leafy, very sharp aggregates of Muscovite. In the area of Mount Xuebaoding, in the northeast of Pingwu County, there are more than 40 mineralized veins known that contain elements such as W and F that make up part of the minerals existing in this piece.



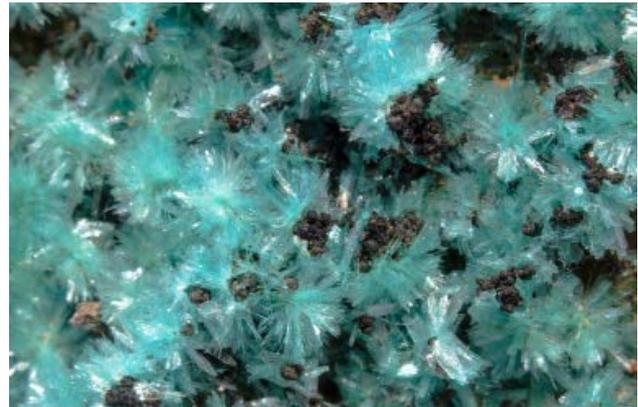
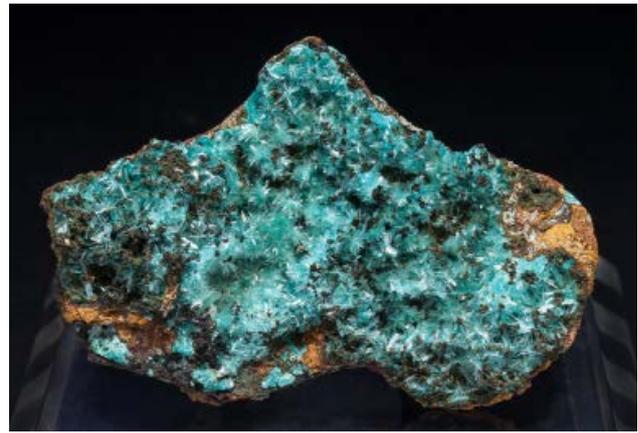
So that was my review on the minerals that most caught my attention in the section “The Heart of Virtual Munich”. I especially liked the amount of minerals that we know as “classics”, those that are recognized on a global scale, whose particular characteristics have given “fame” to a certain deposit, a certain mine. Names such as the El Horcajo mines, Almadén, Las Mánforas mine, Berbes, Navajún, or Panasqueira to name some of the Iberian mineralogy associated with their emblematic minerals such as Pyromorphite, Cinnabar, Sphalerite, Fluorite, Pyrite, and Fluorapatite, respectively. These are examples that resonate in the heads of every collector, wherever he is from and whatever he collects. That’s a “classic” in mineral jargon.

Following is a summary of more mineral specimens, this time in the “fixed” sections that also made up this virtual edition of the Mineralientage and, following the same order, let’s start with...

#### USA, Mexico, Canada, and Spain::



Pyromorphite. Bunker Hill mine, Kellogg, Coeur d’Alene district, Shoshone County, Idaho, USA. Specimen size: 13.3 × 8.6 × 5.4 cm. The largest crystal measures 0.6 × 0.5 cm. Group of crystals formed by two generations of Pyromorphite that differ both by color and by the habit of the crystals. From a classic North American mine, a large polymetallic deposit.



Aurichalcite. Ojuela mine, Mapimí, Durango, Mexico. Specimen size: 5.9 × 3.7 × 1.4 cm. The largest crystal measures 0.6 × 0.6 cm. Former Carles Curto collection. Aggregate of acicular crystals of Aurichalcite with an intense bluish green color, on a limonite matrix. An old and classic locality from which 6 new type locality minerals have been described.



Analcime with Aegirine. Poudrette quarry, Mont Saint-Hilaire, La Vallée-du-Richelieu RCM, Montérégie, Québec, Canada. Specimen size: 4 × 2.9 × 3.1 cm. The largest crystal measures 3.3 × 3.2 cm. Slight fluorescence with shortwave UV. Former Carles Curto collection. Floater aggregate of trapezohedral Analcime crystals, with well defined faces and edges and a snow-white color. Accompanied by black Aegirine crystals. Coming from another classic mine, which together with the Jeffrey mine, are the best known in Canada. This quarry has a whopping 71 type locality species!





Cassiterite with Quartz. La Luceta mine, Vecinos Municipality, Campo de Calatrava Region, Salamanca, Castilla y León, Spain ( $\pm$  1971). Specimen size: 2.2 x 1.7 x 1.6 cm. The largest crystal measures 2.2 x 1.5 cm. Former Carles Curto collection. Angular twin of two shiny Cassiterite crystals, with brown tones, with remains of a matrix made up of Quartz. The northwestern part of the Iberian Peninsula is rich in deposits for this tin oxide.



Antimony with Quartz. La Viñuela reservoir, La Viñuela, La Axarquía region, Málaga, Andalusia, Spain (1987). Specimen size: 3.3 x 2.9 x 1.6 cm. Brilliant crystalline growths and cleavage forms of native Antimony on Quartz matrix. A Spanish classic from a locality from which it is hard to find specimens today.



Baryte. San Simón mine, La Parreta, Alumbres, Cartagena, Murcia, Spain (2020). Specimen size: 19.6 x 12.8 x 7 cm. The largest crystal measures 2 x 1 cm. Slight fluorescence with long and shortwave UV. Druse of sharp platy Baryte crystals with a uniform celestial blue color. Of remarkable quality for the deposit in a mining district very rich in number of Baryte specimens, but not always as good quality as this specimen.



Quartz (variety jacinto de compostela). Chella, Canal de Navarra region, Valencia, Spain. Specimen size: 6.3 x 4.4 x 2.2 cm. The largest crystal measures 2.5 x 1.4 cm. Doubly terminated crystals of Quartz (variety jacinto de compostela), one of them clearly dominant, very aerial, with a uniform red color, on matrix. A classic of the Triassic outcrops corresponding to the Keuper facies, very abundant in the Spanish Levant.



Cinnabar with Quartz. Almadén mine, Almadén, Valle de Alcudia Region, Ciudad Real, Castilla-La Mancha, Spain ( $\pm$  1960-70). Specimen size: 6.1 x 4.1 x 3.8 cm. The largest crystal measures 1.2 x 0.6 cm. Polycrystalline growth of Cinnabar with sharp crystal forms, and an intense red color, on matrix accompanied by small Quartz crystals. Here is one of the most classic of world renowned cinnabars. A mine where mercury reigns supreme.



Spanish Fluorite, Portugal, France, Europe, Turkey and ex-USSR:

Turning to page 2 of the Mineralientage Munich Virtual 2020, it should be noted that one of the zones, although usually grouped by countries or even continents, is reserved “only” for Spanish Fluorite. This may seem exaggerated but it is not, due to the huge number of great pieces that have been extracted from one specific area, Asturias, of very high quality, during a relatively short period of time, that have become recognized worldwide.



Fluorite. La Viesca mine, La Collada mining area, Huergo, Siero, Oviedo region, Asturias, Spain (2016). Specimen size: 4.2 × 3.4 × 2.7 cm. The largest crystal measures 2 × 1.7 cm. Former Miguel David Martínez collection. Group of Fluorite crystals with a cubic habit, with polycrystalline growths on the faces, transparent, very lustrous and with a uniform blue, slightly purple color. From a mine still in operation, another source for this calcium fluoride that seems to be “inexhaustible” and which has given so much joy to mineral collectors.



Fluorite with Baryte. Berbes mining area, Ribadesella, Eastern Region, Asturias, Spain. Specimen size: 4.1 × 4 × 3.6 cm. The largest crystal measures 2.3 × 2.2 cm. Former Pierre-Marie Guy collection. Very sharp crystals of Fluorite, with an intense violet color, with its geometric color zoning being very marked towards the

edges of the crystals, very shiny, on a matrix of white lamellar Baryte crystals. A great Spanish classic, of splendid quality and that gives an idea of what could be found there in the better years for this type of piece.



The Mineral Up team or, in other words, Joaquim Callén and Eloisa Artola in full operation. Many photos in this report are Joaquim’s work, such as the detail photo of the first Fluorite on this page. Things done well, photos in this case, require patience, a keen eye, teamwork, and lots of light. The result is obvious to the eye.



Pyrite with Calcite and Muscovite. Minas da Panasqueira, Village of São Francisco de Assis, Covilhã, Castelo Branco, Cova da Beira, Centro, Portugal. Specimen size: 6 × 5.4 × 3.2 cm. Calcite, mildly fluorescent under both long and shortwave UV. Aggregate formed by polycrystalline growths of Pyrite with a cubic habit, very shiny and with brass-colored reflections. On matrix with perimeter coatings of white, lenticular Calcite crystals as well as leafy aggregates of grayish Muscovite crystals.



Dr. Joan Viñals (R.i.P.), like a fish in water, learned and teaching in front of Enrique Kucera.



The Munich Show is held, normally, filling about 5 large halls of the Messestadt fairgrounds. Between these halls there is a large outdoor garden area that allows you to get a breath of fresh air after so much mineral tumult, and a refuge for those hooked on nicotine.



And not taking a breath of fresh air from time to time can lead to hilarious situations like the one Christophe Gobin is about to experience. It has long been said that people who collect stones end up going crazy, and seeing this image one begins to question things ...;



Azurita. Chessy-les-Mines, Les Bois d'Oingt, Villefranche-sur-Saône, Rhône, Auvergne-Rhône-Alpes, Francia (±1820). Tamaño de la pieza: 4.7 × 2.6 × 2.8 cm. El cristal más grande mide: 3 × 1.6 cm. Localidad tipo. Ex colección Alain Martaud. Si pensamos en uno de los clásicos de la mineralogía francesa lo más probablemente es que la mente nos vaya hacia las Azuritas de Chessy. En este caso en forma de cristales perfilados y un hábito de tendencia lenticular con finos crecimientos policristalinos, caras y aristas bien definidas y con el color azul eléctrico muy intenso y transparencia y brillo más vivos de lo habitual en este yacimiento, por el que la Azurita es localidad tipo (TL). Un ejemplar de mucha calidad proveniente de un hallazgo realizado en el año 1820. Estas Azuritas fueron popularmente conocidas como "Chessylitas".



Fluorite. Montagnes des Coltes, Urbeis, Sélestat, Bas-Rhin, Grand Est, France (2018). Specimen size: 9.3 × 7.2 × 4 cm. The largest crystal measures 4.3 × 3.7 cm. Slight fluorescence with long and shortwave UV. Pale green Fluorite crystals on matrix with Quartz crystals.



Fluorite with Quartz. Le Beix mine, Saint-Germain-près-Herment, Clermont-Ferrand, Puy-de-Dôme Department, Auvergne-Rhône-Alpes, France. Specimen size: 4.5 × 4.5 × 4 cm. Fluorescent with long and shortwave UV. Former Pierre-Marie Guy collection. Floater cubic crystal of Fluorite, with a very deep blue color, partially coated by Quartz, which is also included within the Fluorite.



One of the best known mineral magazines published in Germany and a benchmark in specialized publications on mineralogy. On the right, the Warins, happy with minerals, always minerals, a reason for pilgrimage from various points of the world's geography. Minerals, photography, mineral magazines, passionate about minerals and mineral shows closing the circle.



Strontianite with Magnesite. Oberdorf an der Laming, Laming valley, Bruck an der Mur, Styria, Austria. Specimen size: 6 × 4.9 × 4.2 cm. The largest crystal measures 0.7 × 0.5 cm. Former Francesco S. Stoppa collection. Austrian classic formed by the combination of Strontianite crystals, parallel and doubly terminated, with more greyish rhombohedral Magnesite crystals.



Baryte with Dolomite. Frizington, West Cumberland iron field, Cumbria, England, UK. Specimen size: 17 × 13.5 × 7.5 cm. The largest crystal measures 13.8 × 5.7 cm. On a matrix covered by a bed of white Dolomite crystals rests a group of tabular Baryte crystals with a blue color in the center and a little paler around the edges. An English classic, hard to find on the market.



Clinocllore with Cr (variety kämmererite). Kop Krom mine, Kop Daglari, Erzurum Province, Eastern Anatolia Region, Turkey. Specimen size: 6.8 × 5.1 × 4 cm. The largest crystal measures 0.8 × 0.6 cm. Druse, on matrix, of twinned crystals of chromium-bearing Clinocllore (variety kämmererite) with a deep mauve color, lustrous and translucent. A classic of Turkish mineralogy, and although it is well known by most collectors, it still offers pleasant surprises.



If at SMAM 2020 Virtual we saw Jordi at the entrance of the swimming pool about to be approached by BlueCap Productions staff to be interviewed, at Mineralientage Munich 2020 Virtual we see him already in full action wandering along with Alan Hart while Bryan Swodoba immortalizes the moment camera in hand. And it seems that the plot is in the details.



Twinned diaspore. Mount Ilbir, Pinarçik, Milâs District, Muğla Province, Aegean Region, Turkey (2020). Specimen size: 6.4 × 3.4 × 2 cm. A pair of flattened and doubly terminated Diaspore crystals forming a very marked angular twin, with polycrystalline growths, of a yellow-green color, between transparent and translucent, and with good luster. Partial novelty in SMAM Virtual 2020. One of the components of bauxite.



Fluorite with Quartz. Nikolaevski mine, Dalnegorsk, Primorsky Krai, Far-Eastern Region, Russia (07/2003). Specimen size: 5.1 × 4.7 × 4.4 cm. The largest crystal measures 3.7 × 3.4 cm. Group of Fluorite crystals, on matrix with an aerial arrangement, with dominant forms of the dodecahedron and with transparent, lustrous and colorless cube faces, accompanied by Quartz crystals. A Russian classic from the Dalnegorsk area, which has produced excellent colorless specimens of this species, often of exceptional transparency.



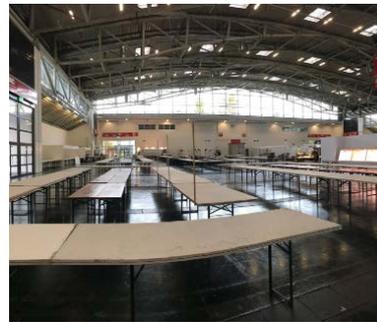
Morocco:



Copper (spinel twin). Bou Nahas mine, Oumjra-ne mining district, Alnif, Tinghir Province, Drâa-Tafilalet Region, Morocco (2018). Specimen size: 5.1 × 3.8 × 2.2 cm. The largest crystal measures 1.5 × 0.4 cm. Arborescent growth of Copper crystals, with very marked spinel-law twins in some of the crystals. From a Moroccan mine that can already be considered a classic locality due to the native copper specimens extracted there, as well as other species such as Baryte, Marcasite and Pyrite, many of them of high quality.



Russian daydreams. Ludmila Cheshko, from the Russian Mineralogical Almanac magazine, at the German appointment.



The empty fair / The full fair. This image with so much contrast and taken only a few days apart is a metaphor for what happened in 2020. A pandemic has eliminated the possibility of seeing an image like the one on the right. What will happen in 2021? *Alea jacta est.*



Jordi Fabre, always on his feet, having a quiet moment with two famous Americans, Thomas P. Moore and John S. White.



Magnetite. Zgounder mine, Jebel Siroua, Taroudant Province, Souss-Massa Region, Morocco. Specimen size: 5.8 × 4.6 × 4.7 cm. The largest crystal measures 0.7 × 0.7 cm. Druse of very sharp crystals of Magnetite, shiny and with a dipyramidal habit, with a skeletal appearance. The specimen could easily be confused with Hematite. Very different from other pieces found at this locality, a polymetallic deposit where silver, mercury, and copper are mined.





Wulfenite with Mottramite. Sidi Amer area, Touissit, Jerada Province, Oriental Region, Morocco (03/2020). Specimen size:  $3.4 \times 2.9 \times 1.7$  cm. Floater group of tabular Wulfenite crystals, the largest measuring  $1 \times 1$  cm, translucent, with bright luster and an intense yellow color on a Dolomite matrix, together with small coatings of dark Mottramite crystals. Recent find from a classic Moroccan locality.



Galena with Sphalerite and Dolomite. Zelidja mine, Touissit-Bou Bekker mining district, Jerada Province, Oriental Region, Morocco. Specimen size:  $4.7 \times 2.8 \times 2.1$  cm. The largest crystal measures  $1.2 \times 1.1$  cm. A novelty at Virtual Munich 2020. Cubo-octahedral Galena crystals with polycrystalline growths on a pale pink Dolomite matrix.



Sphalerite with Dolomite. Zelidja mine, Touissit-Bou Bekker mining district, Jerada Province, Oriental Region, Morocco. Specimen size:  $4.7 \times 4.5 \times 3$  cm. The largest crystal measures  $1.5 \times 1.5$  cm. A novelty at Virtual Munich 2020. Complex crystal of Sphalerite with an equant habit, with polycrystalline growths and with very well defined faces and edges, on a matrix covered by rhombohedral Dolomite crystals with a pale pink color. Although some specimens of this material had elusively appeared before, the quantity and quality of pieces seen now has been much greater.



Ullmannite (arsenical) with Calcite. Souss-Massa region, Morocco (2020). Specimen size:  $3.6 \times 2.7 \times 2.8$  cm. The largest crystal measures  $2 \times 1.5$  cm. A novelty at Virtual Munich 2020. Group on matrix of cubic Ullmannite crystals with well-defined faces and edges and of considerable size for the species, a rare nickel-antimony sulphosalt that belongs to the cobaltite group. Acid-etched specimen, as it is inside a Calcite matrix.





Elbaite with Quartz and Feldspar. Demnate zone, Azilal Province, Béni Mellal-Khénifra Region, Morocco (04/2020). Specimen size: 5.6 × 4 × 2.7 cm. The largest crystal measures 1.5 × 0.7 cm. Elbaite crystals with sharply defined faces and edges, between transparent and translucent, with good luster and dominant yellowish tones, and black in the terminal area, popularly known as a "Black Cap". On matrix, with whitish Feldspar and Quartz crystals offering a good color contrast to the whole. This piece was virtually brought home to add to the part of the collection dedicated to those always attractive Moroccan specimens.

[Africa, Brazil, South America, China, and Asia:](#)

And now the following section ends the review of what has been the 2020 first edition of the Virtual Munich Show. Once this last section is finished I will comment on my conclusions about these types of event and their possible continuity over time. But first it's time to see more minerals, ever more minerals.



Descloizite with Calcite. Berg Aukas, Grootfontein District, Otjozondjupa Region, Namibia ( $\pm$  1973). Specimen size: 3 × 2.4 × 1 cm. The largest crystal measures 1.4 × 0.9 cm. Fluorescent calcite under both long and shortwave UV. Former Carles Curto collection. Parallel floater growths of very sharp tabular Descloizite crystals, translucent, lustrous, and partially covered by creamy white Calcite crystals. The deposit is a zinc-lead-vanadium-rich deposit discovered in 1913 and mined until 1978. A Namibian classic.





Scolecite with Fluorapophyllite-(K). Antas tunnel, Alto Uruguai, Rio Grande do Sul, Brazil ( $\pm$  1969). Specimen size: 6.1  $\times$  1.8  $\times$  1.3 cm. The largest crystal measures 6.1  $\times$  1.3 cm. Former Carles Curto collection. Group of three thick Scolecite crystals with well defined faces and edges and perfect terminations, something rare for the species. The crystals are partially covered by small equant crystals of Fluorapophyllite-(K). The locality is very rich in Zeolite group specimens.



Fluorite with Sphalerite. Pasto Bueno district, Pallasca Province, Ancash Department, Peru. Specimen size: 4.5  $\times$  3.9  $\times$  2.6 cm. Slight fluorescence with shortwave UV. Druse of very sharp crystals of Sphalerite (variety marmatite), covered by small crystals of Fluorite with bright luster and a pale lilac color. The specimen is from the ex-Jan Buma Fluorite collection, number 200401.



Fluorite. Qinglong mine, Dachang, Qinglong, Qianxi'nan Autonomous Prefecture, China (2018). Specimen size: 12.5  $\times$  4.6  $\times$  3.2 cm. The largest crystal measures 1.6  $\times$  1.1 cm.

Very aerial growth of Fluorite crystals, of cubic habit, with curious deformations and distinct polycrystalline growths. The crystals are translucent, lustrous, and have an intense violet color that is concentrated on the edges. A different type of specimen from the Fluorites we usually know, due to its growth habit, although well known for its color.



At mineral shows, people come from far away, along with minerals that have been extracted from all parts of the Earth, even some from outside our planet, and with all that immensity, sometimes the minerals come around several times, going from one ex-collection and joining a new collection, in a new home, far away from where they came from. And what is the common link and meeting point? The mineral shows and the interest they arouse in us to want to take care of them. We are just here in passing, they -the minerals- will remain, will endure.





Lazurite with Calcite. Sar-e Sang, Koksha valley, Khash & Kuran Wa Munjan districts, Badakhshan Province, Afghanistan. Specimen size:  $1.8 \times 1.6 \times 1.3$  cm. The largest crystal measures  $17 \times 1.5$  cm. Former Carles Curto collection. Type locality. Complete dodecahedral crystal of Lazurite, with very well defined faces and edges, with an intense and uniform color on a little bit of Calcite matrix. There is a beautiful article about this locality in the Mineralogical Record magazine, Volume 45, Number 3, May-June 2014, whose authors are Thomas P. Moore and Rob M. Woodside, under the title "The Sar-e-Sang lapis mines, Kuran Wa Munjan district, Badakhshan Province, Afghanistan".



Heulandite-Ca with Stilbite-Ca. Jalgaon district, Maharashtra, India. Specimen size:  $9.8 \times 7.7 \times 3.9$  cm. Aggregate of flattened Heulandite-Ca crystals with sharply defined faces and edges, very lustrous, with a pink color, on matrix, associated with white Stilbite-Ca crystals, some of them doubly terminated. An unusual specimen for the locality, in the immense basalt flows which form the Deccan Traps, in India, and of higher quality than other specimens seen from there.



### Conclusions:

Coming from the SMAM 2020 Virtual show to this edition of the Munich Mineralientage 2020 Virtual show, we notice a quantitative leap since the number of specimens exhibited was greater, both by number of days of the show and by number of specimens displayed. In addition, qualitatively, a greater number of novelties was seen, something not easy to achieve and even more so without the interaction between professionals that is encouraged during a face-to-face show, where mineral transactions going on just before the start of the show are usually very productive.

Like everything in life, online has its advantages and disadvantages, but the balance seems positive because once the official days of the virtual show are over, improvements can be continued, such as adding the descriptive texts for all the exhibited specimens, the insertion of videos to see the many pieces not only in the two dimensions offered by a photograph (although the quality of the photos offered by Jordi is sufficient to get an idea of what a piece is like).

And now a somewhat broader reflection related to the current context and the consequences it may entail. The cancellation of the face-to-face Munich show just one short week before it was due to take place was shocking to say the least. We'll see whether Munich has enough muscle to recover from a blow like this. Time will tell. But the reflection is that seeing the success of this type of "virtual show", there will probably be a continuity. In this type of event there is no social contact, something inevitable in a "normal" mineral show, so there is no possibility of contagion during a pandemic like the one we are experiencing currently. Online commerce is fully integrated into our lives. New generations of collectors will see it as completely normal to access a collector item this way. Probably other dealers will adopt this type of experience and we will see to what extent they can crystallize a new way of seeing and understanding mineral shows. Jordi has already fired the starting gun, and since there can't be two without three, see you at the Barcelona Expominer 2020 Virtual show!

Translation: *Alfredo Petrov*



Although the last Munich Mineralientage shows have enjoyed fairly benevolent atmospheric conditions, it is true that the time of year in which the show is held usually coincides with cold weather already in Bavaria. The show also tends to coincide some years with November 1, so the night of Halloween falls squarely during the show. Locally and in these latitudes the Castanyada is celebrated where the panellets are the protagonists. These sweets, made from marzipan, are a real delight, in this case an edible delight. Another real treat is being able to collect minerals and enjoy them while you can.

