

Visita ao Museu de Geociências





EXPOSICIÓN DE MUSEO

EXPOSICIÓN

A POLICIA FEDERAL









O Museu de Geociências foi iniciado em 1934 pelo professor Ettore Onorato. O museu possui cerca de 5 mil peças entre minerais, rochas, meteoritos, gemas lapidadas e em estado natural. A maior parte proveniente do Brasil através de doações, trocas e aquisições feitas por alunos, professores e interessados por assuntos geológicos. Existem também peças vindas de várias partes do mundo.

NATIVE ELEMENTS

San Francisco's reggae favorite Native Elements (now in their 10th year as a cohesive unit) never fail to bring positivity and niceness to all of their music gatherings. As recording artist's they spin a curious fabric of lovers rock, roots and conscious dancehall wrapped cozily in a bright "frisco-pino" treatment. A family before anything else Native Elements strives to make their show a warm and inviting experience for all; young and old, blue and green and everything in between.

NOW PLAYING

OUR STORY

LISTEN

TAKE HOME

TECH

CONTACT

MY SPACE



terry way photography 2002





1.1.1 Grupo do ouro

F m3m 4/m 3 2/m

1.1.1.1 Ouro Au

1.1.1.2 Prata Ag

1.1.1.3 Cobre Cu

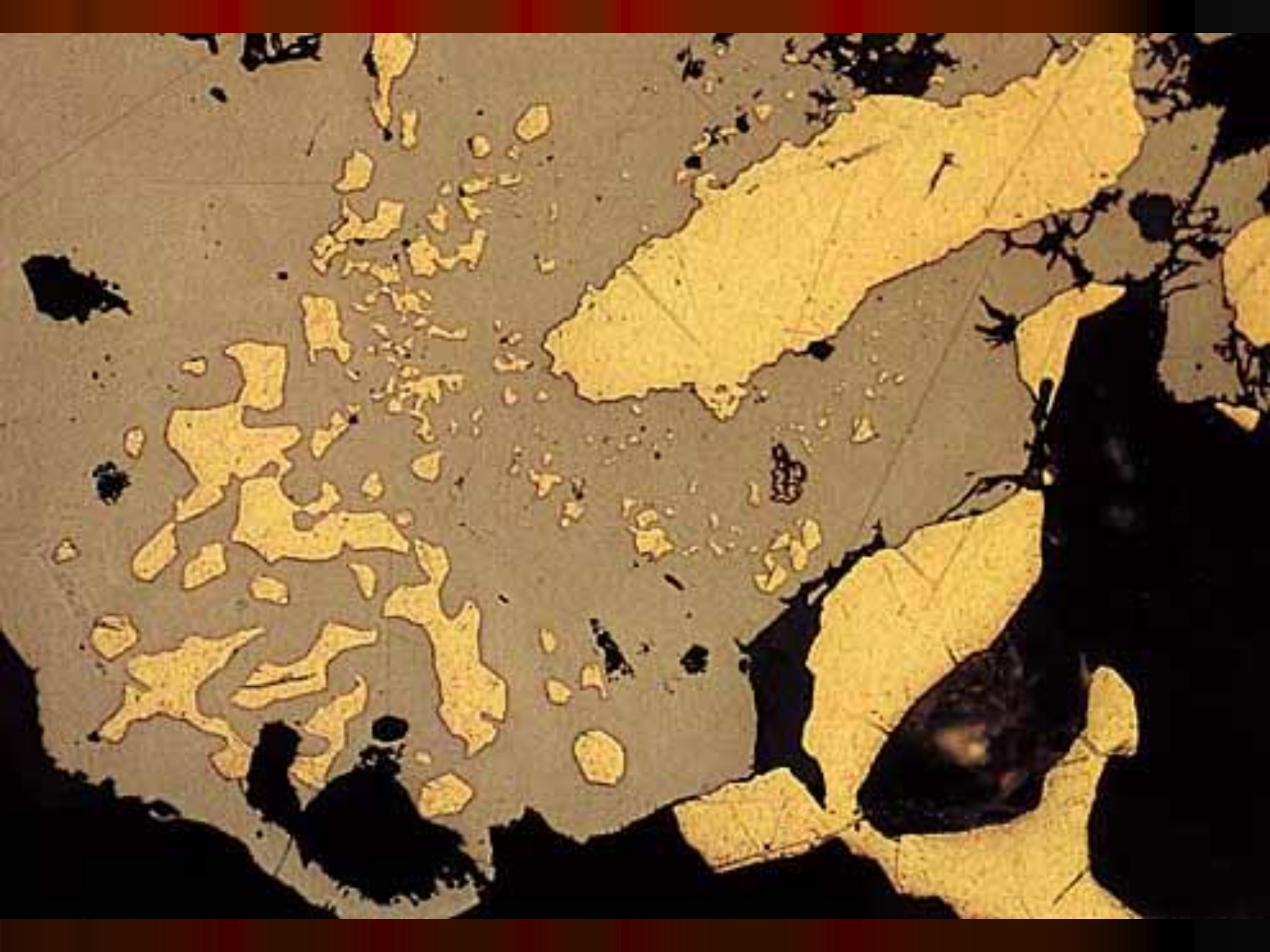
1.1.1.4 Chumbo Pb

1.1.1.5 Alumínio Al



Locality: Alta Floresta, Mato Grosso, Central-West Region, Brazil
3.7 gram hoppered modified alluvial gold crystal measuring 9 x 7 mm.
Crystal shows cubic and dodecahedral faces.
Photograph by Edward Rosenzweig



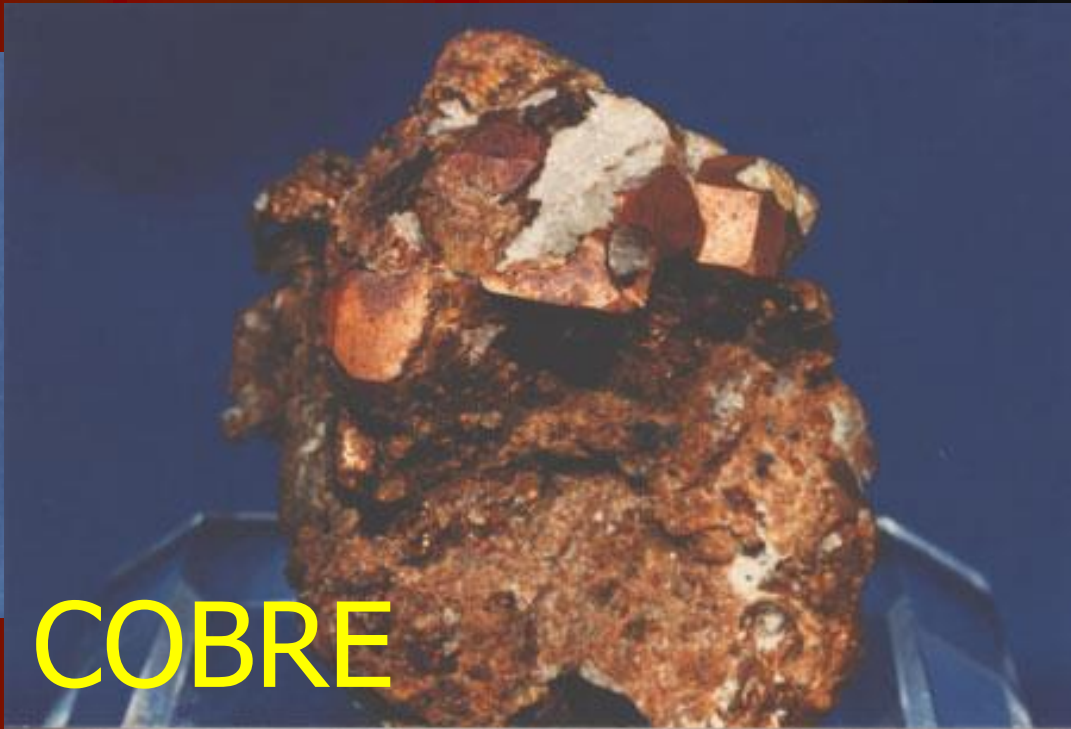
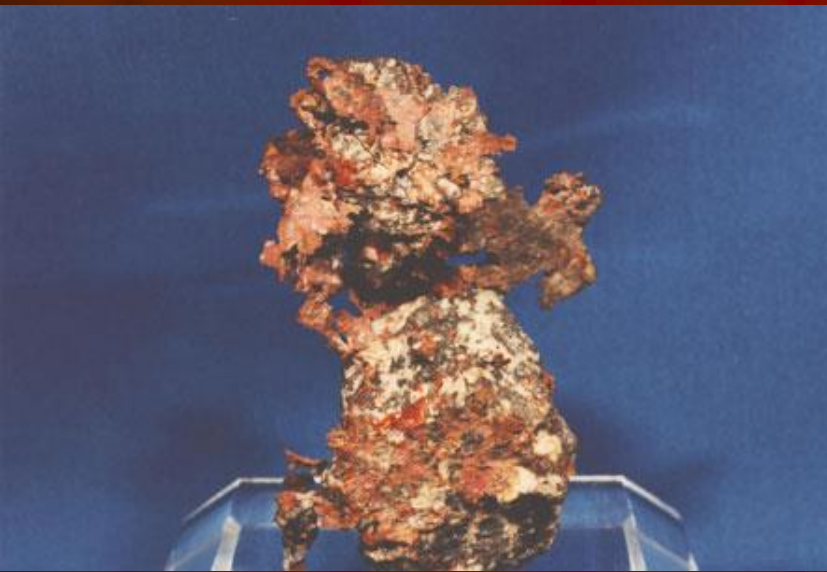




© Dane S. Johnson



PRATA



COBRE



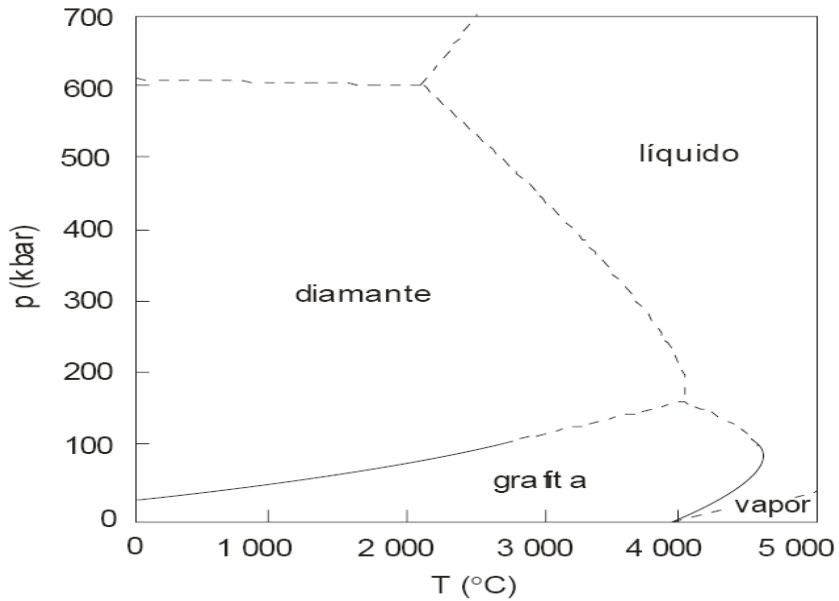


Fig.1.4: Diagrama de estado do carbono. As linhas cheias indicam fronteira de conhecimento garantido; as linhas tracejadas fronteiras aproximadas.

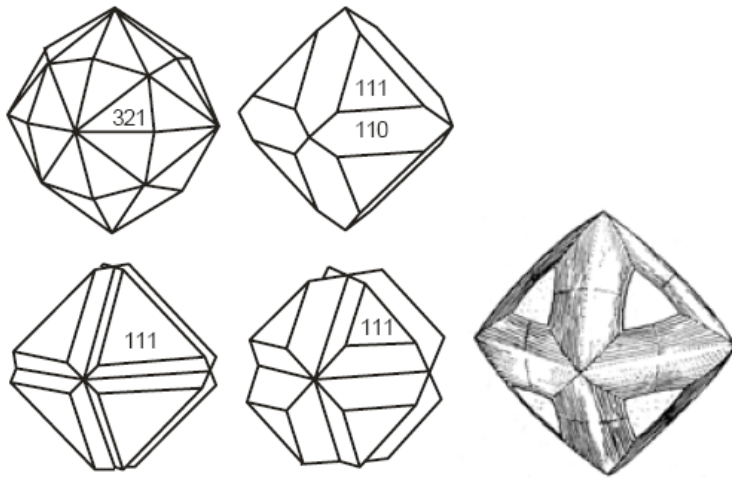


Figura 1.7: Diamante, exemplos da morfologia dos cristais. $4/m\bar{3}2/m$

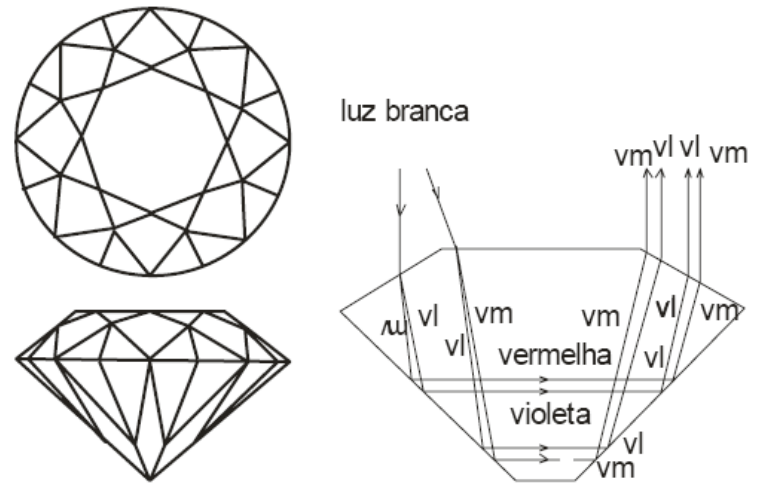
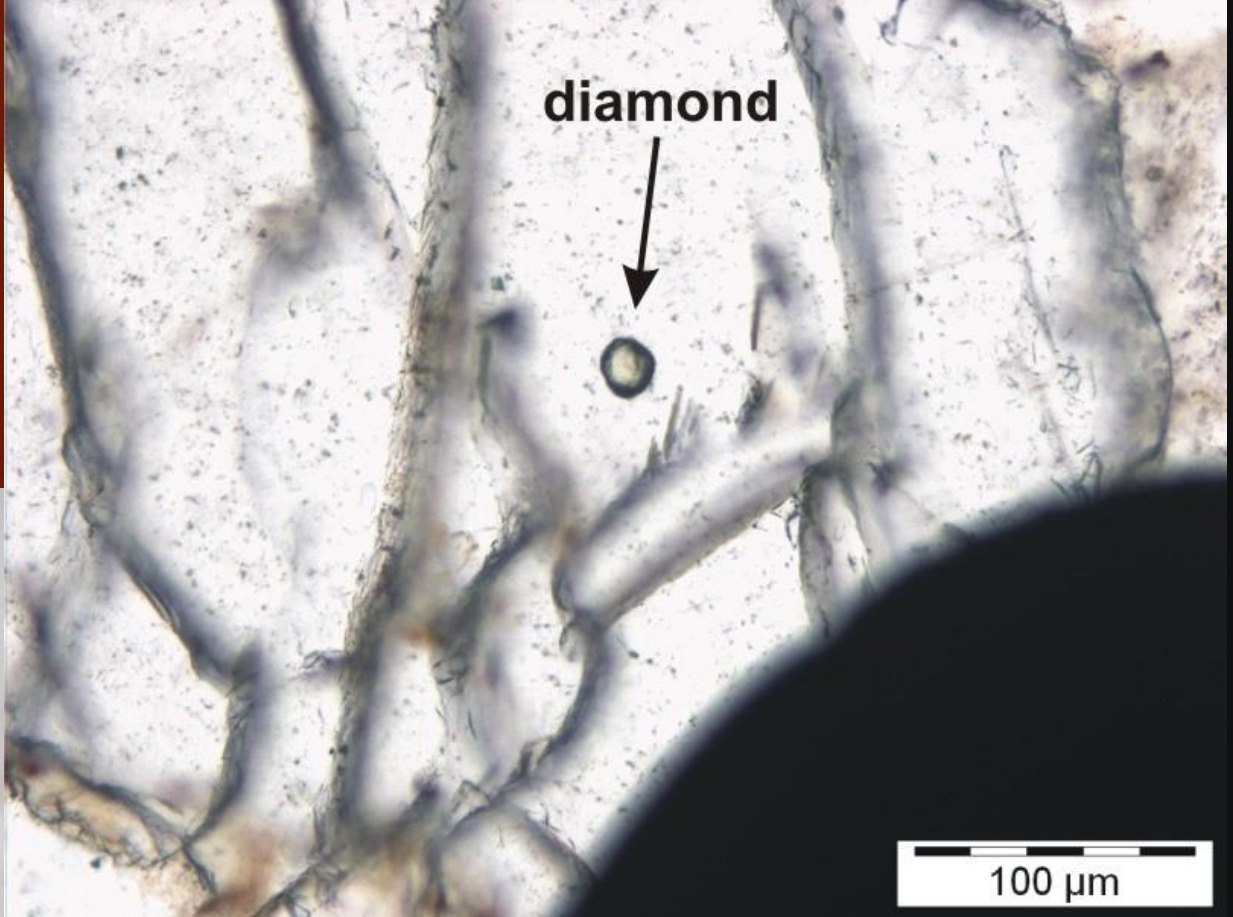


Fig.1.8: Brillhante, um dos formatos da lapidação e da dispersão da luz.



diamond

100 μm

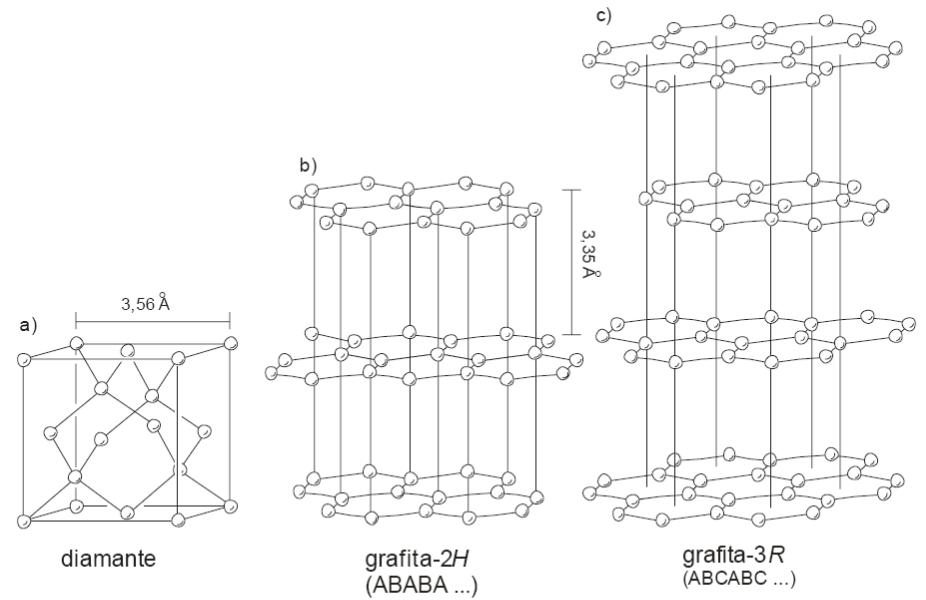


Fig.1.6: Estrutura do diamante (a), da grafita-2H (b) e da grafita-3R (c)



Sinopse dos sulfetos mais importantes e análogos

2.1 SULFETOS $M : S > 1$

chalcosita	Cu_2S	monoclínico	**
bornita	Cu_5FeS_4	ortorrômbico	**
acantita	Ag_2S	monoclínico	*
pentlandita	$(Fe,Ni)_9S_8$	cúbico	*

2.2 SULFETOS $M : S = 1$

esfalerita	ZnS	cúbico	**
wurtzita	ZnS	hexagonal	*
calcopirita	$CuFeS_2$	tetragonal	**
estanita	Cu_2FeSnS_4	tetragonal	*
cubanita	$CuFe_2S_3$	ortorrômbico	*
pirrotita	$Fe_{1-x}S$	monoclínico e hexagonal	**
troilita	FeS	hexagonal	*
millerita	NiS	trigonal	*
galena	PbS	cúbico	**
alabandina	MnS	cúbico	*
cinábrio	HgS	trigonal	**
metacínábrio	HgS	cúbico	*
covelita	CuS	hexagonal	*

2.3 SULFETOS $M : S < 1$

siegenita	$(Co,Ni)_3S_4$	cúbico	*
antimonita	Sb_2S_3	ortorrômbico	**
bismutinita	Bi_2S_3	ortorrômbico	*
pirita	FeS_2	cúbico	***
marcassita	FeS_2	ortorrômbico	**
laurita	RuS_2	cúbico	*
molibdenita	MoS_2	hexagonal	**

2.4 SULFETOS (SULFOSAIS) COMPLEXOS

tetraedrita	$Cu_{12}Sb_4S_{13}$	cúbico	**
tennantita	$Cu_{12}As_4S_{13}$	cúbico	*
freibergita	$Ag_{12}Sb_4S_{13}$	cúbico	*
enargita	Cu_3AsS_4	ortorrômbico	*
pirargirita	Ag_3SbS_3	trigonal	*
proustita	Ag_3AsS_3	trigonal	*
bournonita	$CuPbSbS_3$	ortorrômbico	*
boulangerita	$Pb_5Sb_4S_{11}$	ortorrômbico	*
jamesonita	$Pb_4FeSb_6S_{14}$	monoclínico	*
auripigment	As_2S_3	monoclínico	*
realgar	AsS	monoclínico.	*

2.5 SULFOARSENETOS

arsenopirita	$FeAsS$	triclínico ?	**
cobaltita	$CoAsS$	ortorrômbico	*
gersdorffita	$NiAsS$	cúbico	*

2.6 ARSENETOS

niquelita	$NiAs$	hexagonal	*
rammelsbergita	$NiAs_2$	ortorrômbico	*
löllingita	$FeAs_2$	ortorrômbico	*
safflorita	$CoAs_2$	monoclínico	*
skutterudita	$CoAs_3$	cúbico	*
sperrylita	$PtAs_2$	cúbico	*

2.7 SELENETOS

			*
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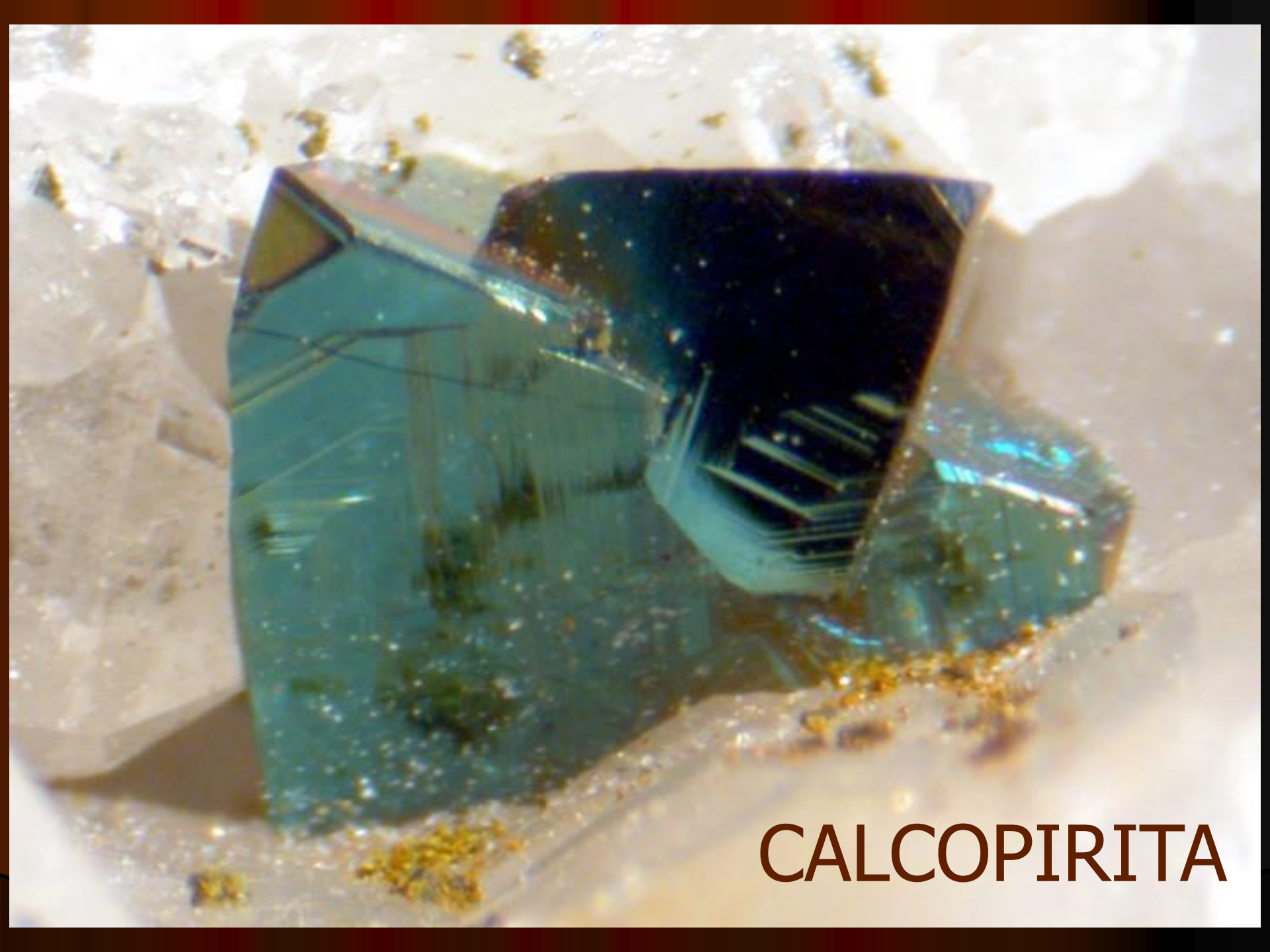
2.8 TELURETOS

			*
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ESFALERITA





CALCOPIRITA



GALENA
PbS
LAB 1






CINÁBRIO



PIRITA



MOLYBDENITE

MoS_2

LAB 1

- tetraedrita $\text{Cu}_{12}\text{Sb}_4\text{S}_{13}$
- tennantita $\text{Cu}_{12}\text{As}_4\text{S}_{13}$
- freibergita $\text{Ag}_{12}\text{Sb}_4\text{S}_{13}$

cúbica ($I \bar{4} 3m$)
 - " -
 - " -

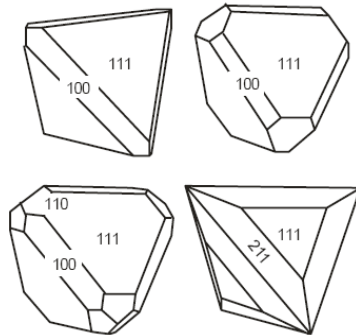


Fig.2.18: Tetraedrita, exemplos da morfologia dos cristais $\bar{4}3m$



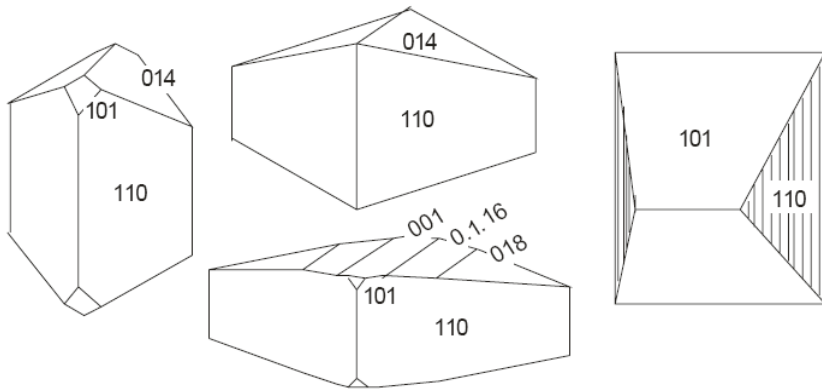
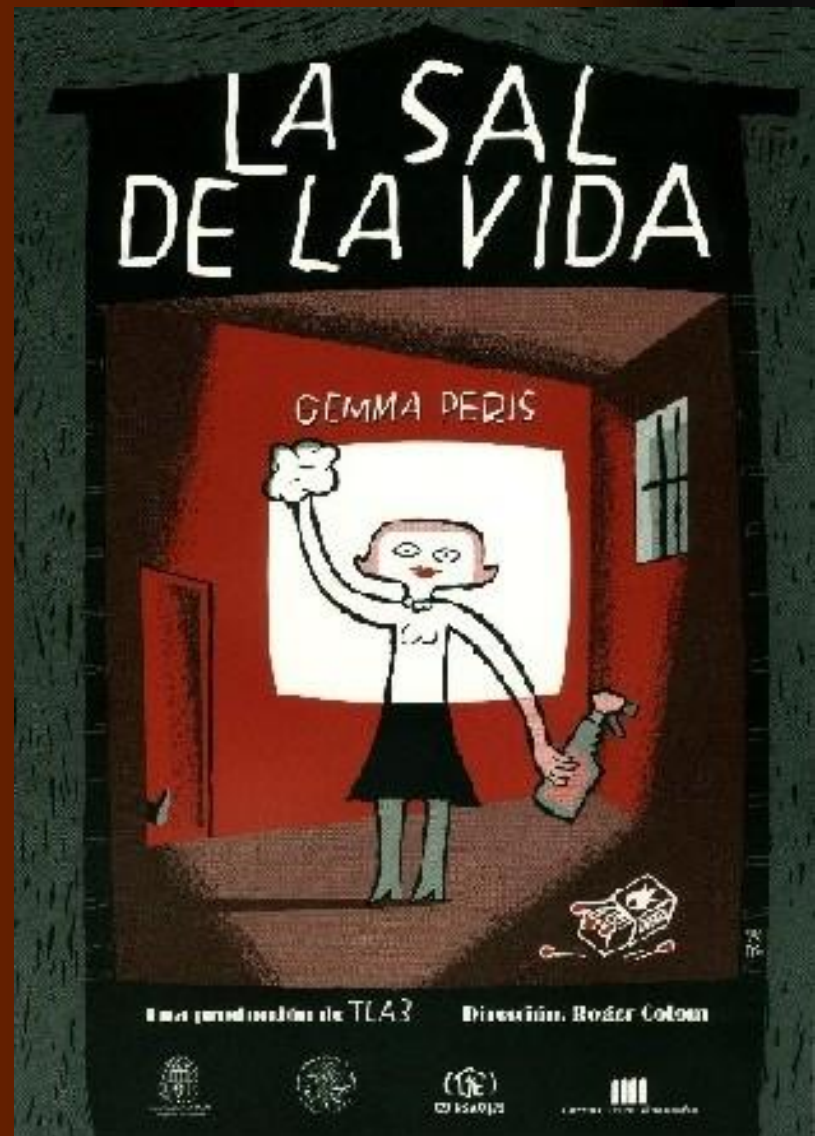


Fig.2.19: Arsenopirita ,exemplos da morfologia dos cristais.
Pseudosimetria $2m\ 2m\ 2m$







PROFESSIONAL
ICE CONTROL

Fast Acting - Dependable - Easy to Use

HALITE

(Rock Salt)

Net Weight (Net Wt.) (56.7 kg)

Halite 50lb Bag
40 per pallet

9.1 Anhydrous and Hydrated Halides where A X

9.1.1

9.1.1.1 Halite NaCl F $m\bar{3}m$ $4/m\bar{3}2/m$

9.1.1.2 Sylvite KCl F $m\bar{3}m$ $4/m\bar{3}2/m$

9.1.1.3 Villiaumite NaF F $m\bar{3}m$ $4/m\bar{3}2/m$

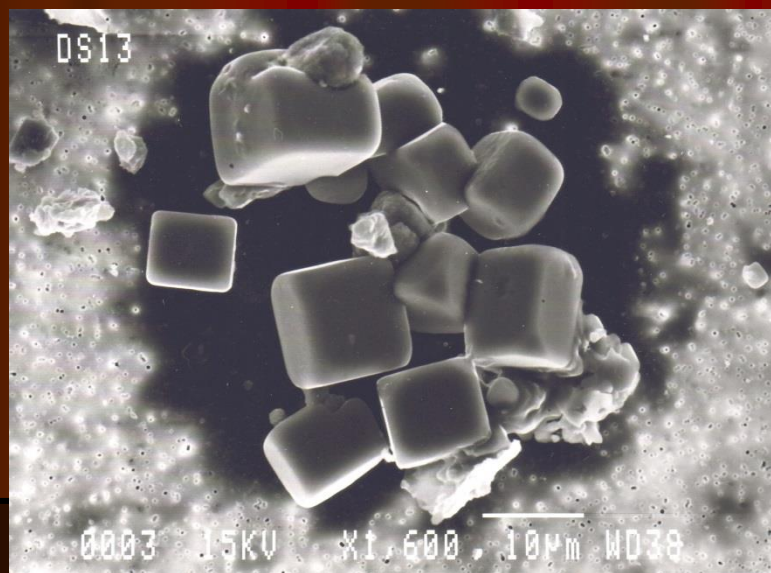
9.1.1.4 Carobbiite KF F $m\bar{3}m$ $4/m\bar{3}2/m$

9.1.1.5 Griceite LiF F $m\bar{3}m$ $4/m\bar{3}2/m$

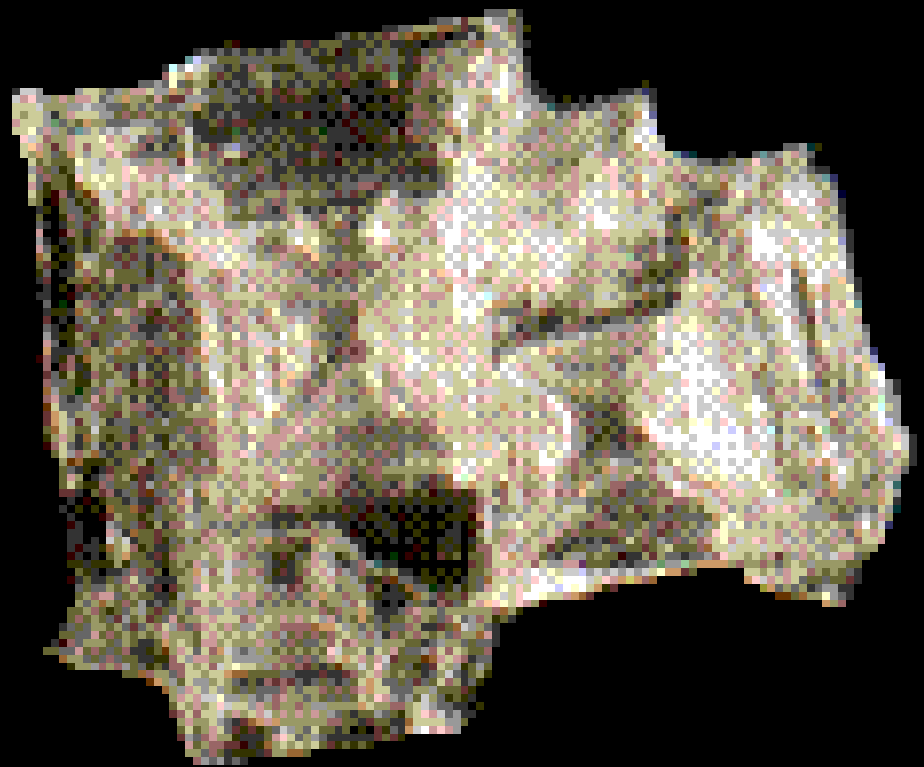
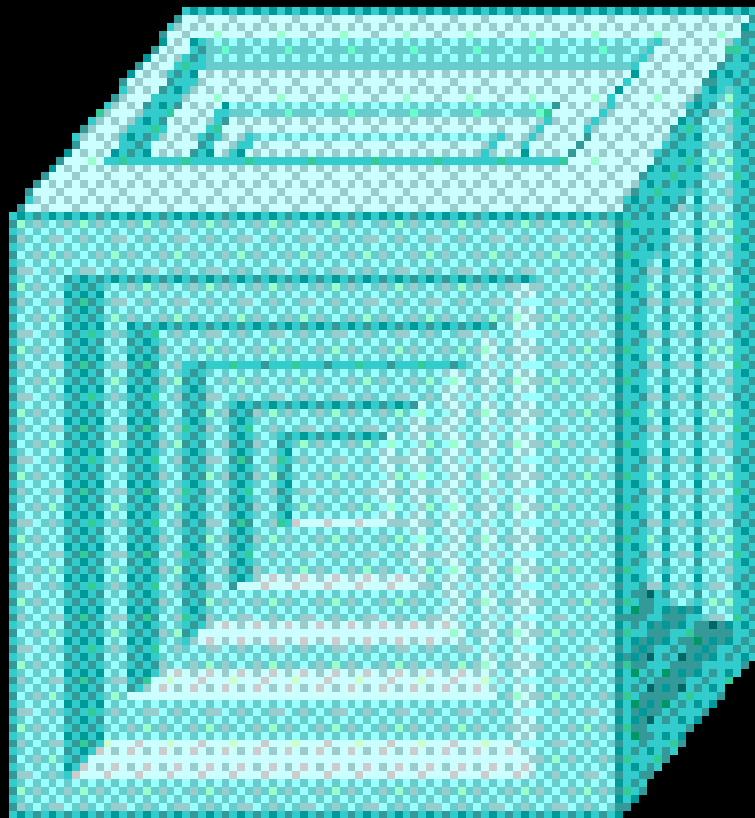
Halite



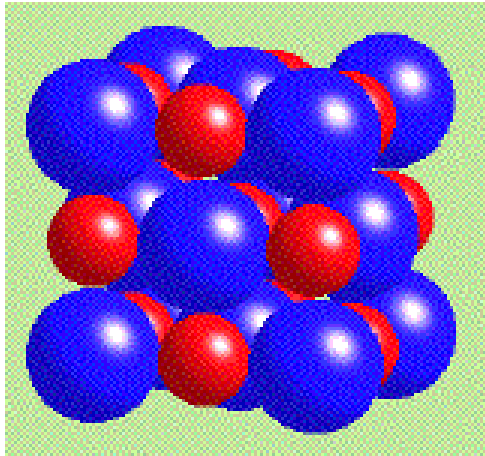
© Université Laval



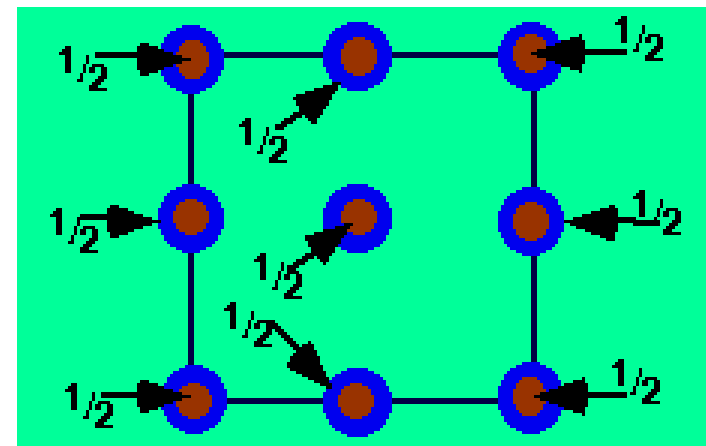
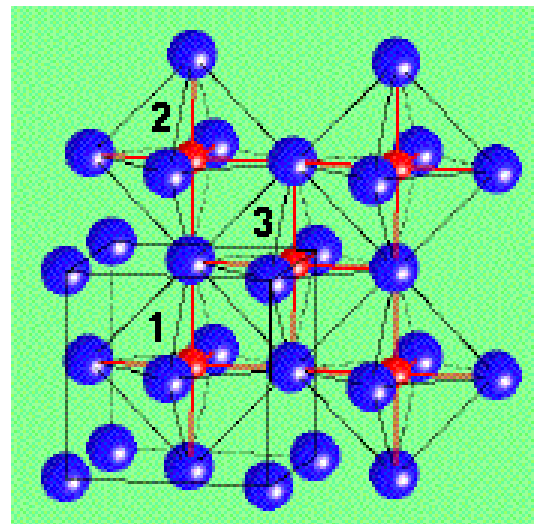
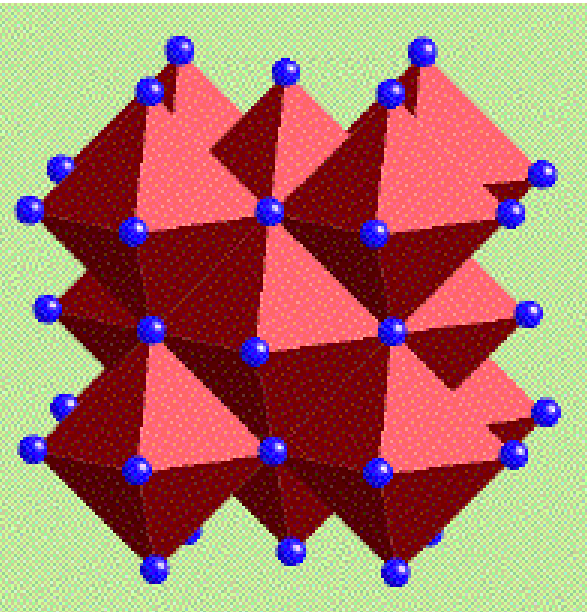
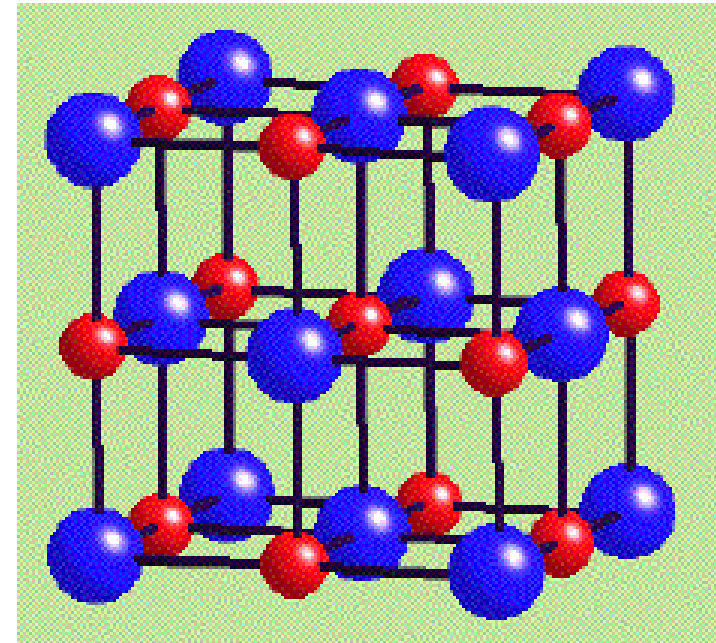
(Courtesy of Robert Bodner, Virginia Tech.)







NaCl
Rock Salt
(Halite)



Sylvite
GROUP OF COMPANIES



9.2 Anhydrous and Hydrated Halides where A (X)₂

9.2.1

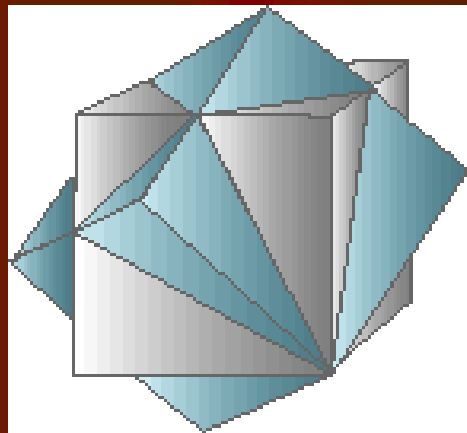
9.2.1.1 Fluorite CaF₂ F m3m 4/m $\bar{3}$ 2/m

9.2.1.2 Frankdicksonite BaF₂ F m3m 4/m $\bar{3}$ 2/m

9.2.1.3 Tveitite-(Y) Ca_{1-x}Y_xF_{2+x}, x~0.3 Unk Mono

9.2.2

9.2.2.1 Sellaite MgF₂ P 4₁/mmn 4/m 2/m 2/m



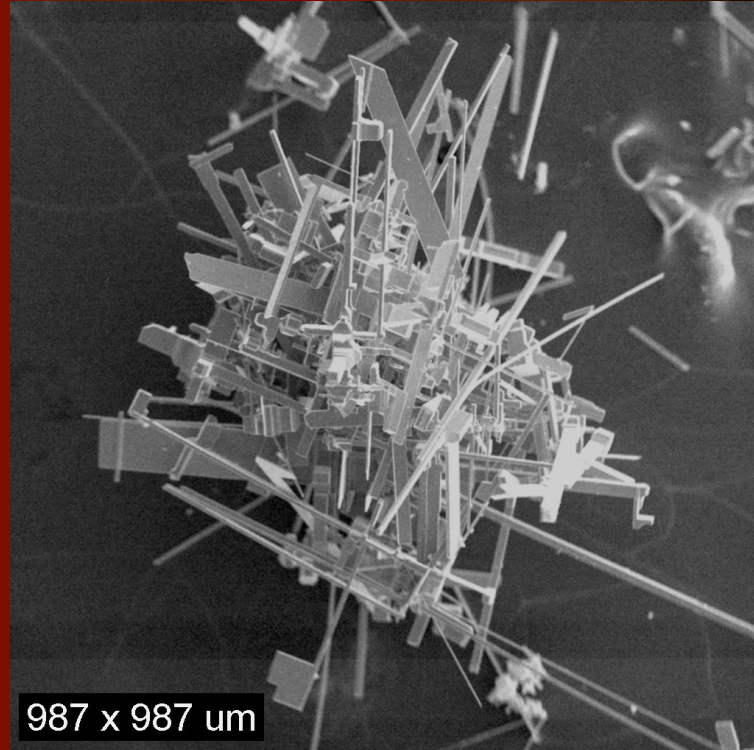
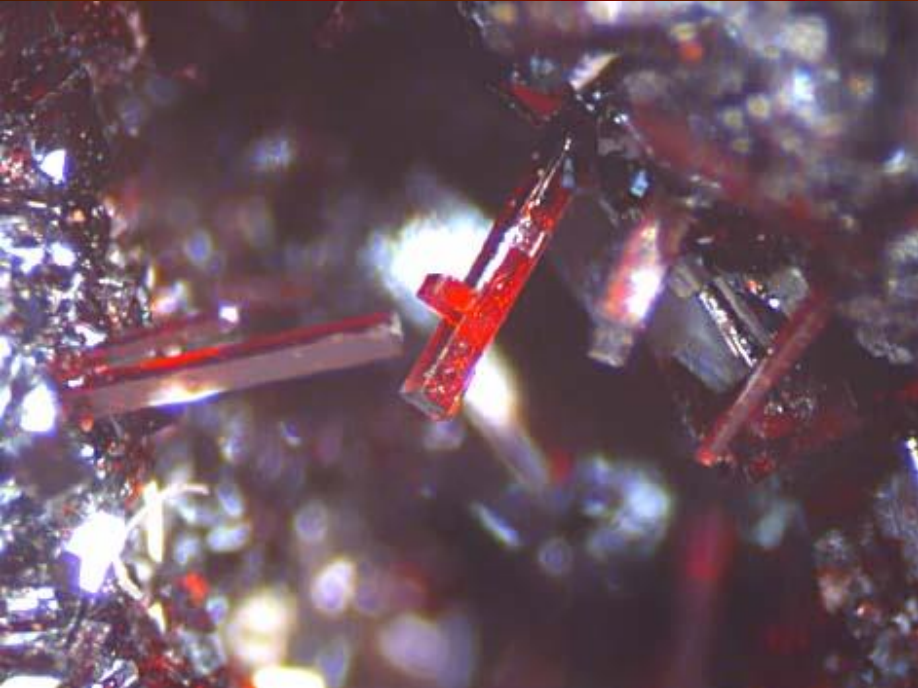
ÓXIDOS

4.1 Simple Oxides with a cation charge of 1+
(A+2 O)

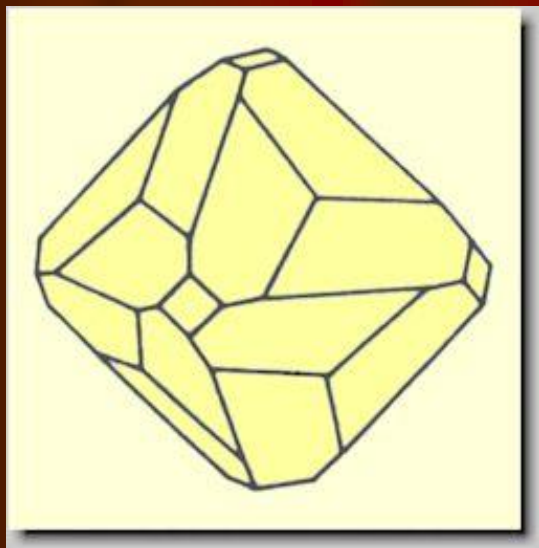
4.1.1 4.1.1.1 Cuprite Cu₂O P n3m 4/m 3 2/m

4.1.2 4.1.2.1 Ice H₂O P 63/mmc 6/m 2/m 2/m



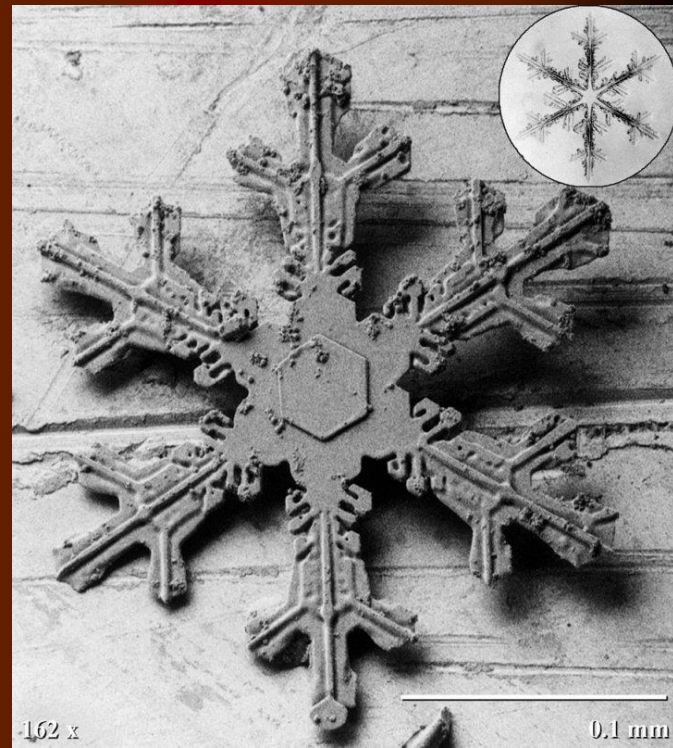
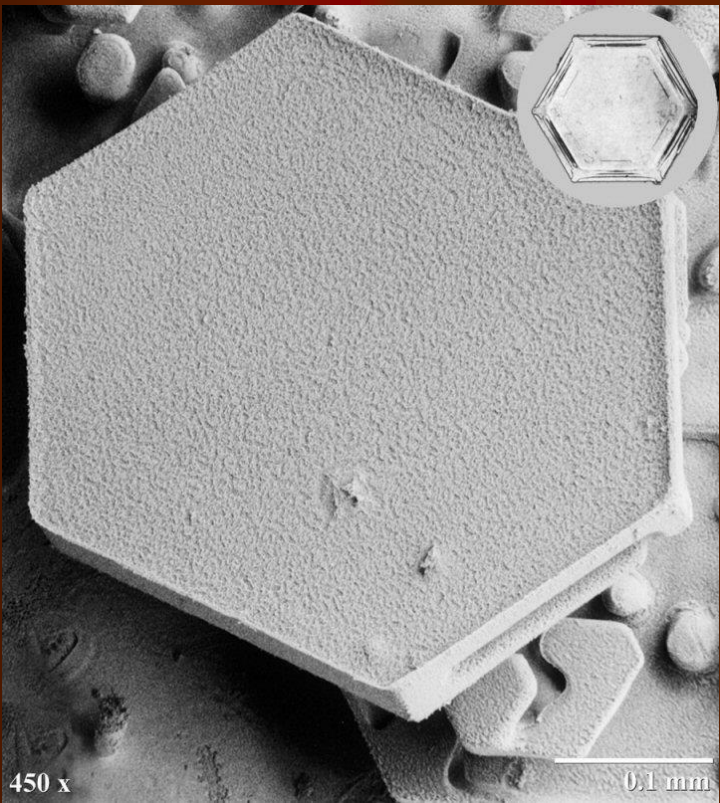


987 x 987 um









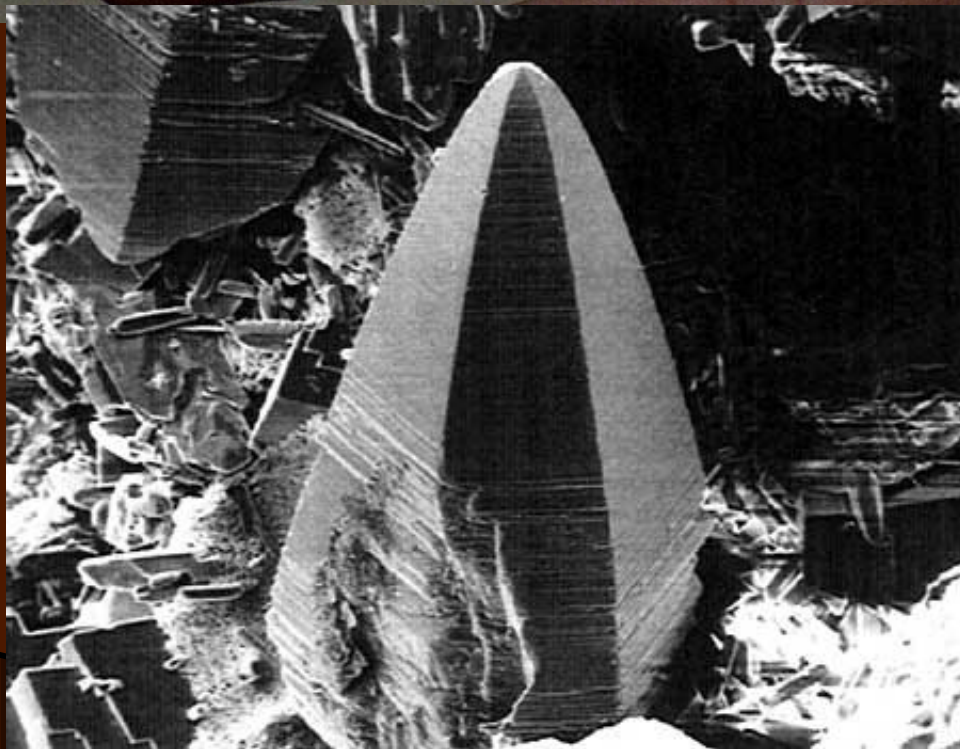
氧化鉛物

Zincite

紅垂鉛礦

ZnO

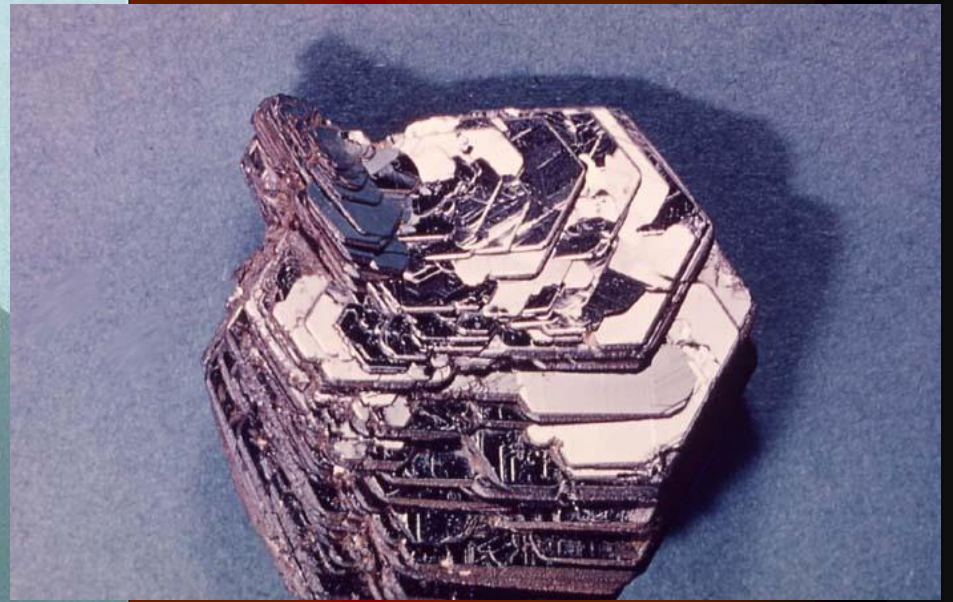
Franklin 又 New Jersey





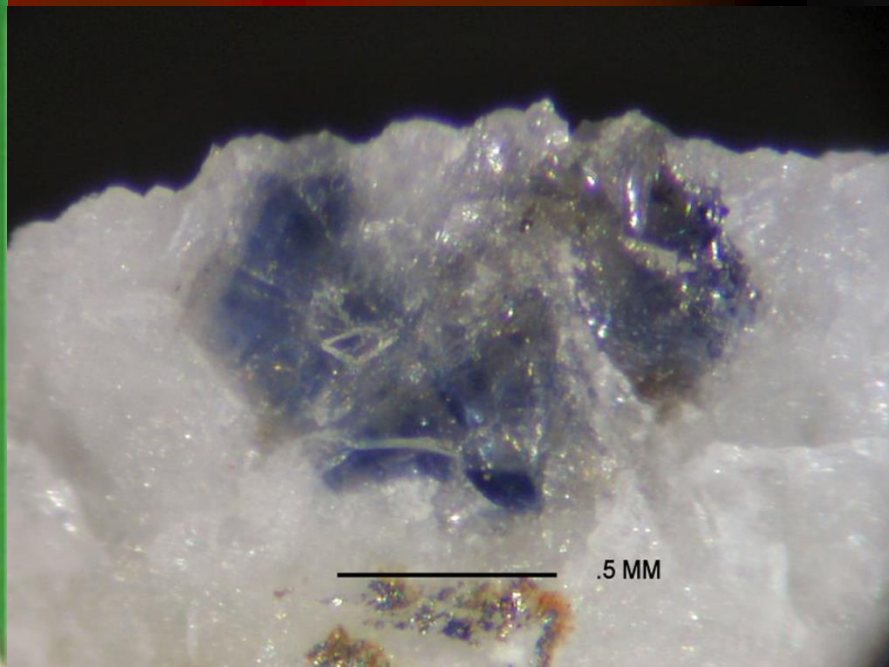


Hematita – Fe₂O₃



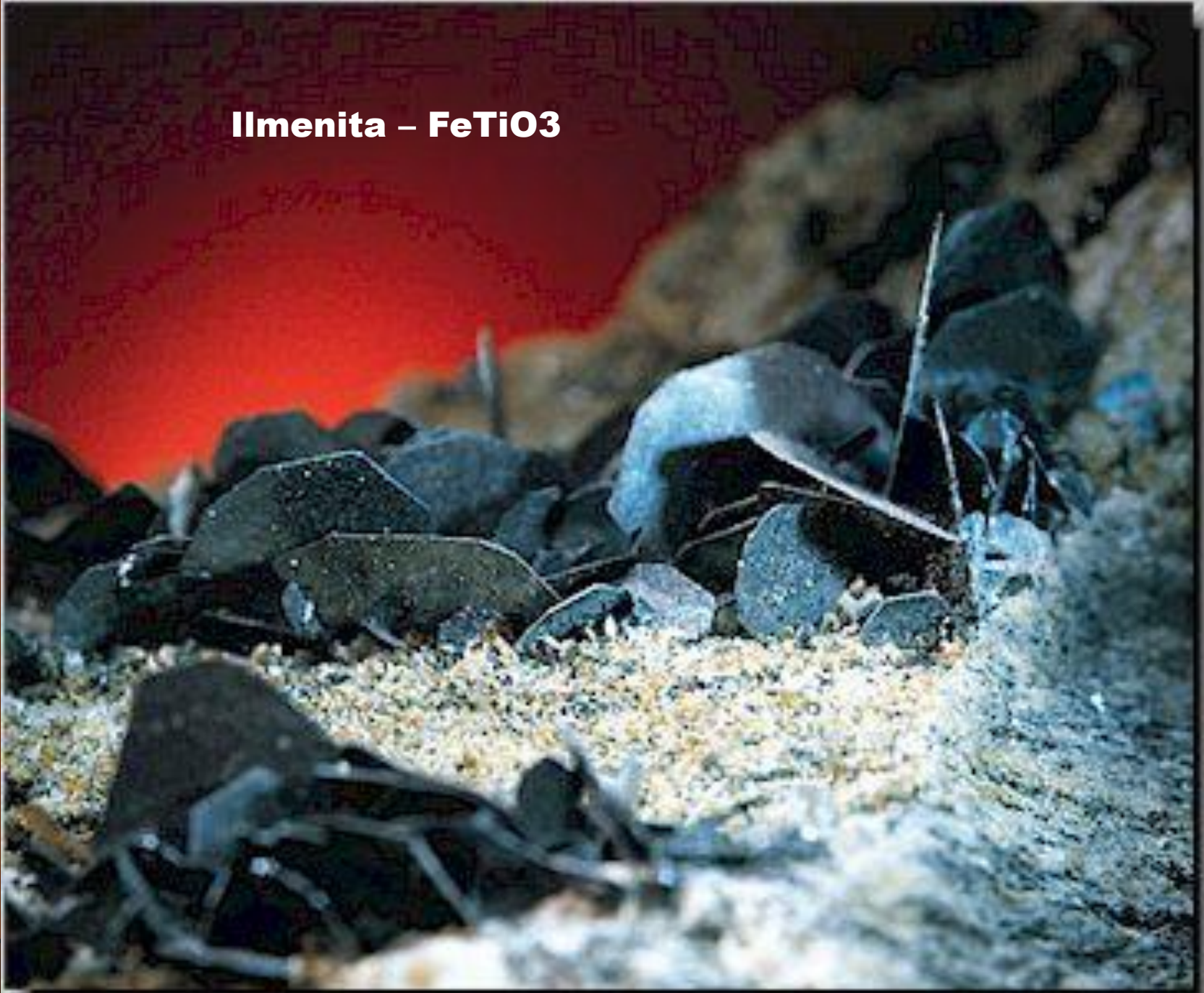


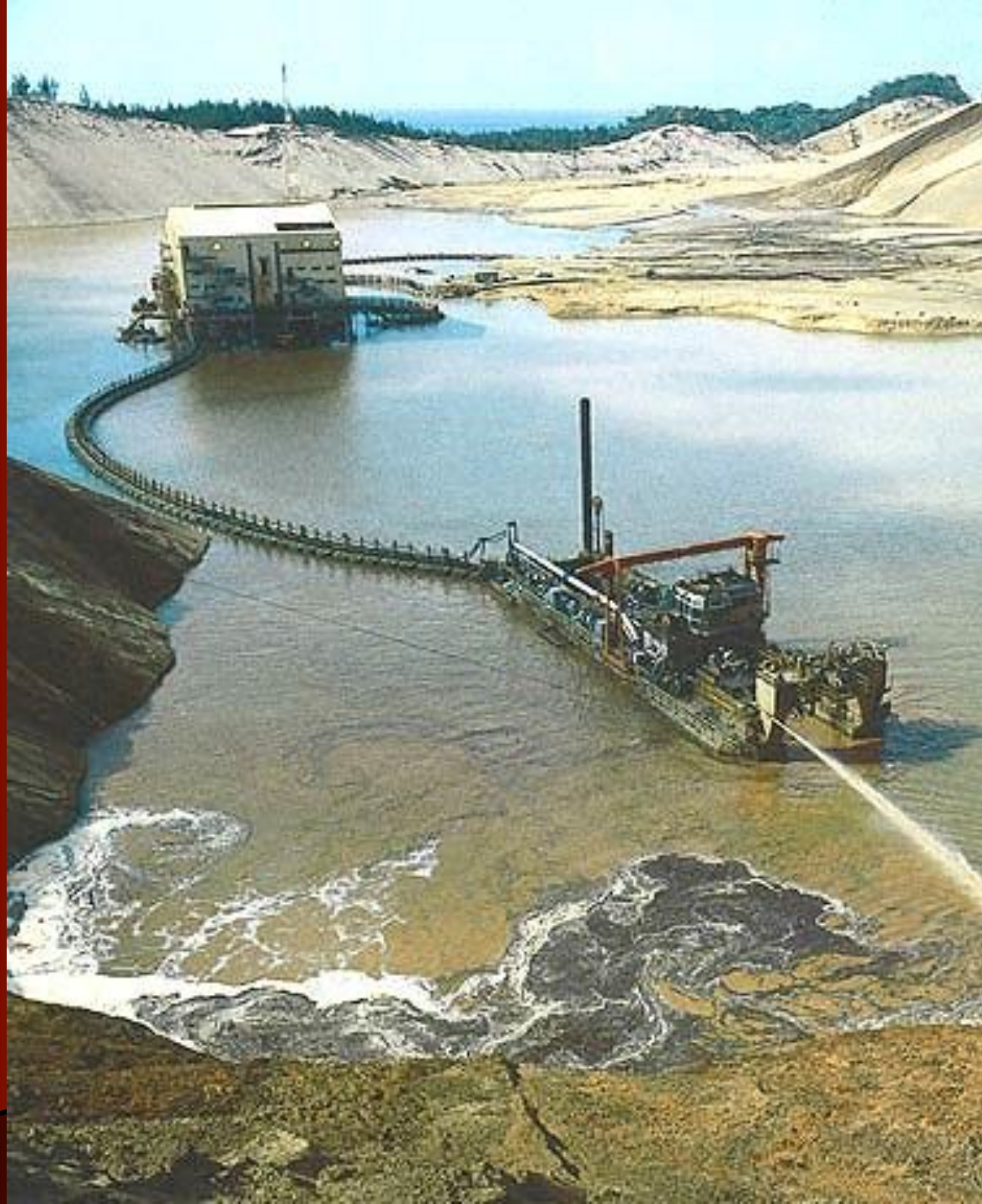
Coríndon – Al₂O₃



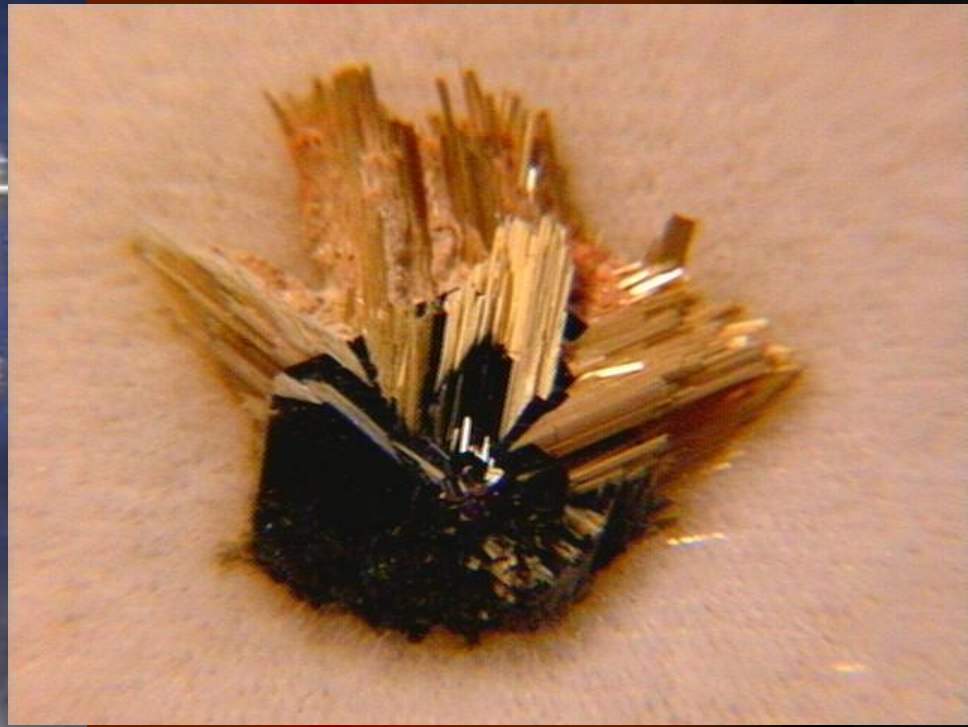


Ilmenita – FeTiO₃



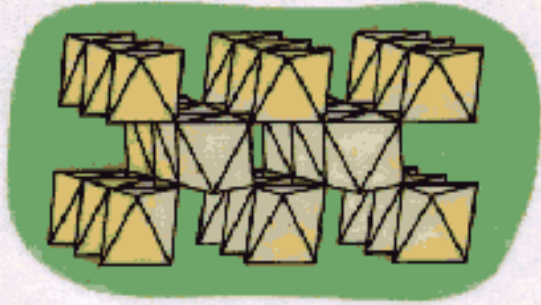


Rutilo – TiO₂



PYROLUSITE

MnO_2



CASSITERITE



SnO₂

2.85ct \$171





0.5 mm



URANINITA

Espinélio - $MgAl_2O_4$



TERRES AUSTRALES ET ANTARCTIQUES FRANÇAISES

1,00F
0,15€

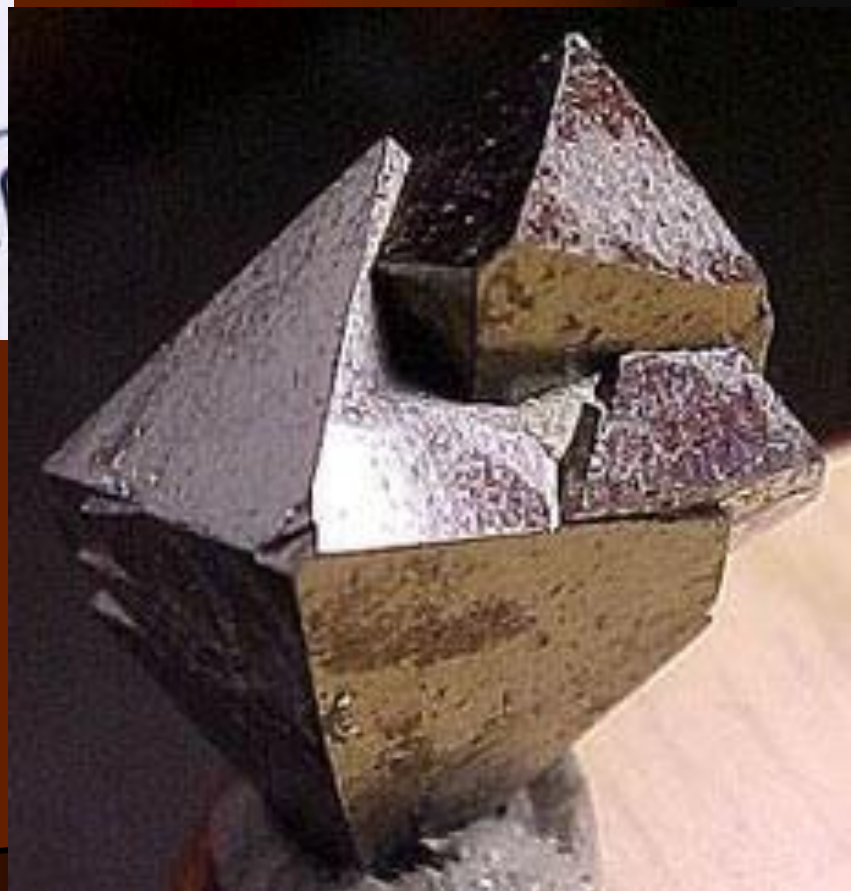


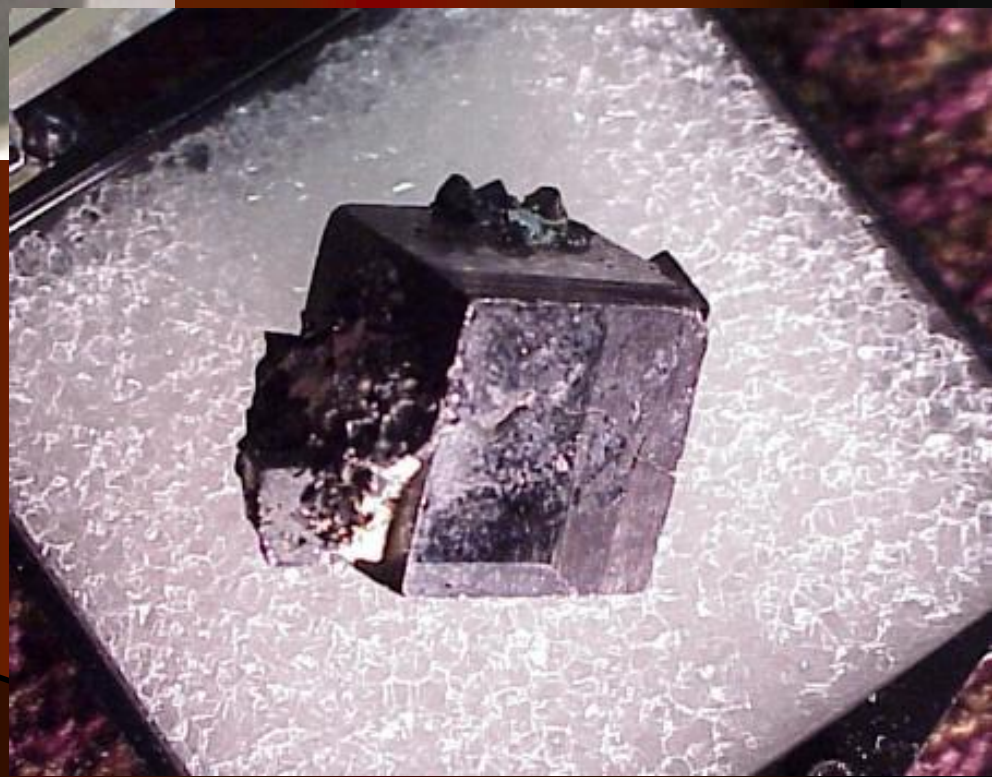
RF
POSTES 2001

ITVF

MAGNET

FRANCE







Chromite

Copyright © 2005 Calvin J. Hamilton



CHRYSOBERYL



BeAl₂O₃

1.15ct \$115





The Mineralogical Record

Volume Fifteen Number Four
July-August 1984 547-618

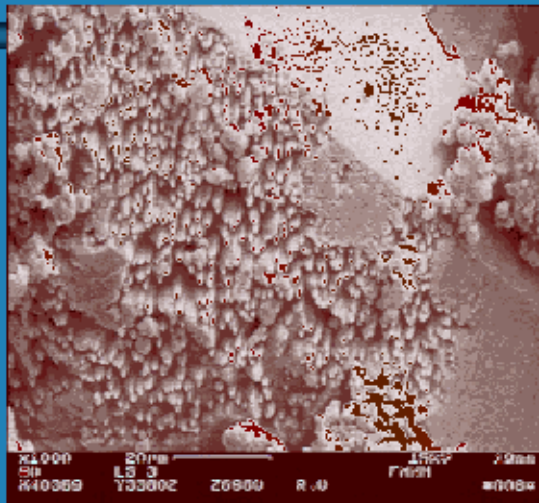


Columbita – FeNb₂O₆



Carbonates

- sparry calcite
- micrite mud



14.1 Anhydrous Carbonates with Simple Formula A+ CO₃

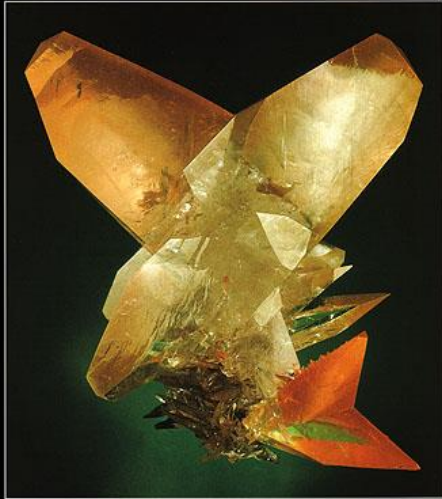
14.1.1 Calcite Group (Trigonal: $R\bar{3}c$)

- 14.1.1.1 Calcite CaCO₃ $R\bar{3}c$ $\bar{3}$ 2/m
- 14.1.1.2 Magnesite MgCO₃ $R\bar{3}c$ $\bar{3}$ 2/m
- 14.1.1.3 Siderite Fe⁺⁺CO₃ $R\bar{3}c$ $\bar{3}$ 2/m
- 14.1.1.4 Rhodochrosite MnCO₃ $R\bar{3}c$ $\bar{3}$ 2/m
- 14.1.1.5 Sphaerocobaltite CoCO₃ $R\bar{3}c$ $\bar{3}$ 2/m
- 14.1.1.6 Smithsonite ZnCO₃ $R\bar{3}c$ $\bar{3}$ 2/m
- 14.1.1.7 Otavite CdCO₃ $R\bar{3}c$ $\bar{3}$ 2/m
- 14.1.1.8 Gaspeite (Ni, Mg, Fe⁺⁺)CO₃ $R\bar{3}c$ $\bar{3}$ 2/m

14.1.2

Calcite

extraLapis English No. 4:
The Mineral With the Most Forms



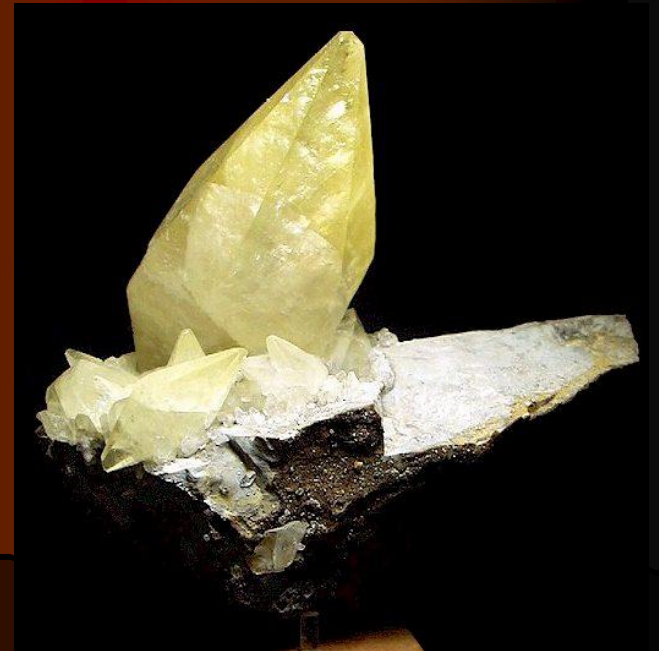
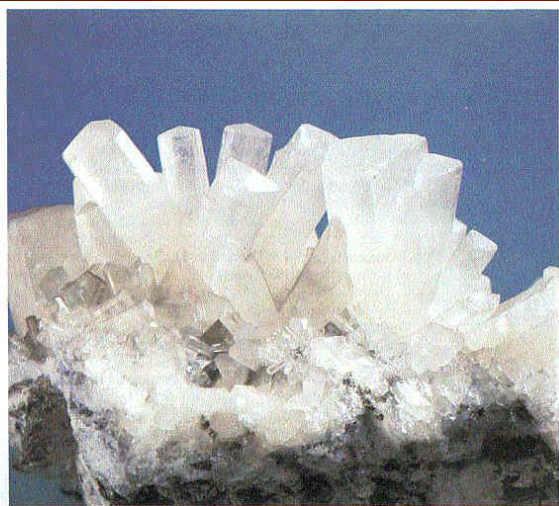
Calcite, Aragonite & Co:
The Calcium Carbonates
Calcite Likes to Lie:
Pseudomorphs
René Just Haüy and the
Broken Crystal
Under the UV Lamp:
Calcite Fluorescence



A Lucky Break for
Polarization: The Optical
Properties of Calcite
Top Calcite Localities
The Bizarre World of
Limestone Caves
The Art of Cleaning
Calcite & Aragonite



Calcite
CaCO₃

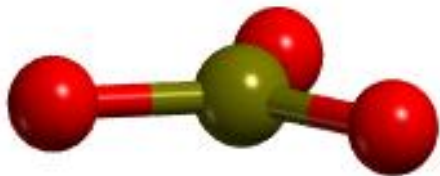
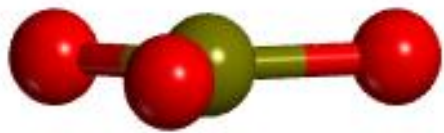


Calcite #R 024

Red - Blue - Green - Orange



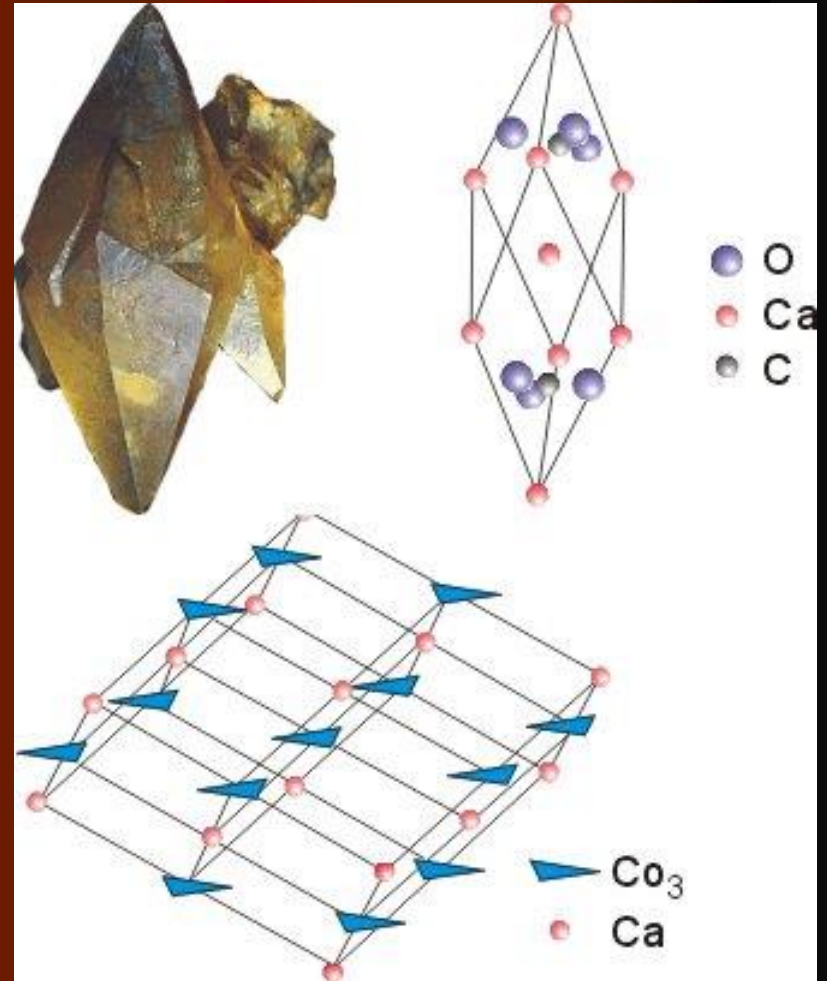




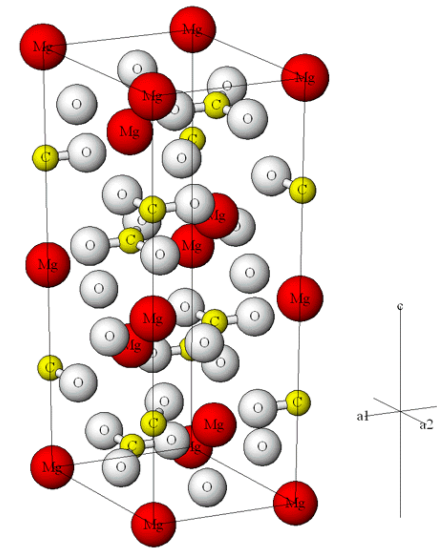
Ca

C

O



Magnesita



14.2.1 Dolomite Group (Trigonal: $R\bar{3}\bar{3}$)

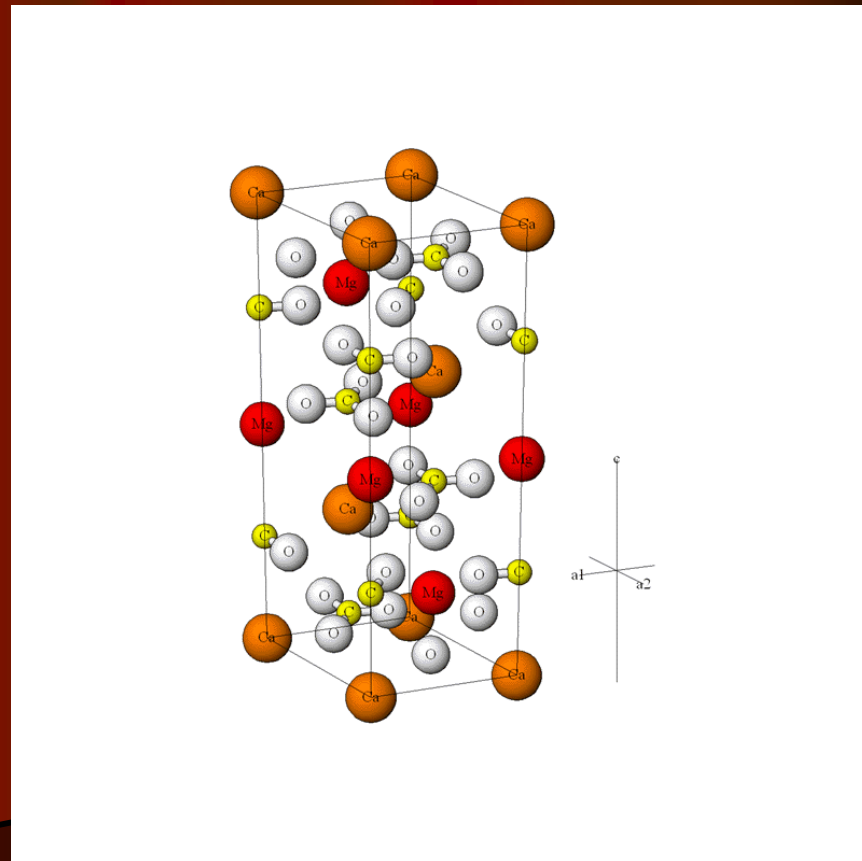
14.2.1.1 Dolomite $\text{CaMg}(\text{CO}_3)_2$ $R\bar{3}\bar{3}$

14.2.1.2 Ankerite $\text{Ca}(\text{Fe}^{++}, \text{Mg}, \text{Mn})(\text{CO}_3)_2$ $R\bar{3}\bar{3}$

14.2.1.3 Kutnohorite $\text{Ca}(\text{Mn}, \text{Mg}, \text{Fe}^{++})(\text{CO}_3)_2$ $R\bar{3}\bar{3}$

14.2.1.4 Minrecordite $\text{CaZn}(\text{CO}_3)_2$ $R\bar{3}\bar{3}$

14.2.2





TRIUMPH DOLOMITE 1939 / DY 17

1990



Dolomite

(c)2002 Walter Feller

14.1.3 Aragonite Group (Orthorhombic: Pmcn)

14.1.3.1 Aragonite CaCO_3 Pmcn 2/m 2/m 2/m

14.1.3.2 Witherite BaCO_3 Pmcn 2/m 2/m 2/m

14.1.3.3 Strontianite SrCO_3 Pmcn 2/m 2/m 2/m

14.1.3.4 Cerussite PbCO_3 Pmcn 2/m 2/m 2/m







16a.3.2 Malachite Group

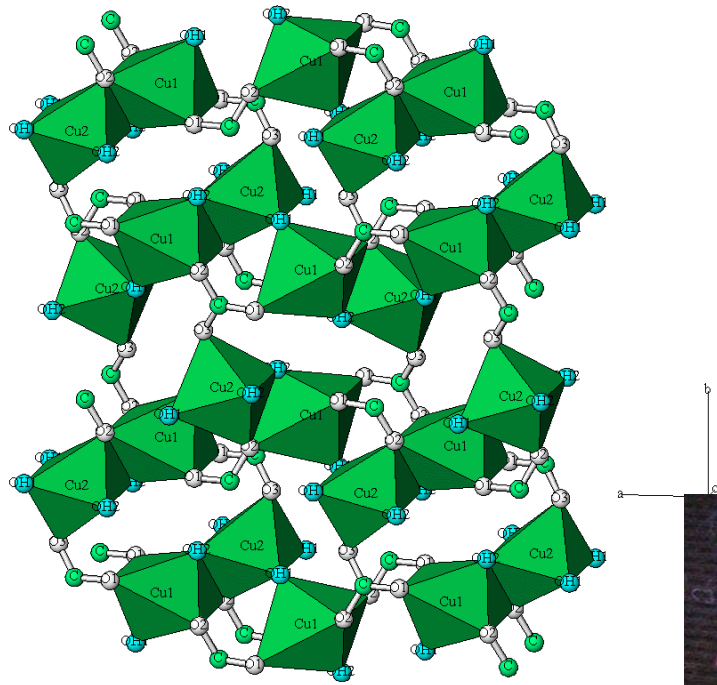
16a.3.2.1 Malachite $\text{Cu}_2(\text{CO}_3)(\text{OH})_2$ P $2_1/a 2/m$

16a.3.2.2 Nullaginite $\text{Ni}_2(\text{CO}_3)(\text{OH})_2$ P $2_1/m, P 2_1$ Mono

16a.3.2.3 Pokrovskite $\text{Mg}_2(\text{CO}_3)(\text{OH})_2 \cdot 0.5(\text{H}_2\text{O})$ P $2_1/a 2/m$



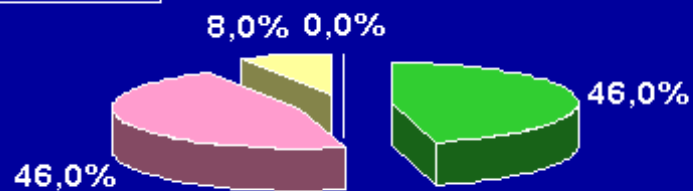






0,0-0,5
 0,5-1,0
 1,0-1,5
 >1,5

SULFATOS g/l



28.3.1 Barite Group

28.3.1.1 Barite BaSO₄ Pbnm 2/m 2/m 2/m

28.3.1.2 Celestine SrSO₄ Pbnm 2/m 2/m 2/m

28.3.1.3 Anglesite PbSO₄ Pbnm 2/m 2/m 2/m

28.3.2

28.3.2.1 Anhydrite CaSO₄ Amma 2/m 2/m 2/m

28.3.3

28.3.3.1 Chalcocyanite CuSO₄ Pmnb 2/m 2/m 2/m

28.3.4





29.6.3.1 Gypsum $\text{CaSO}_4 \cdot 2(\text{H}_2\text{O})$ $A2/a$ $2/m$

29.6.4

29.6.4.1 Sanderite $\text{MgSO}_4 \cdot 2(\text{H}_2\text{O})$ Mono ? Mono

29.6.5









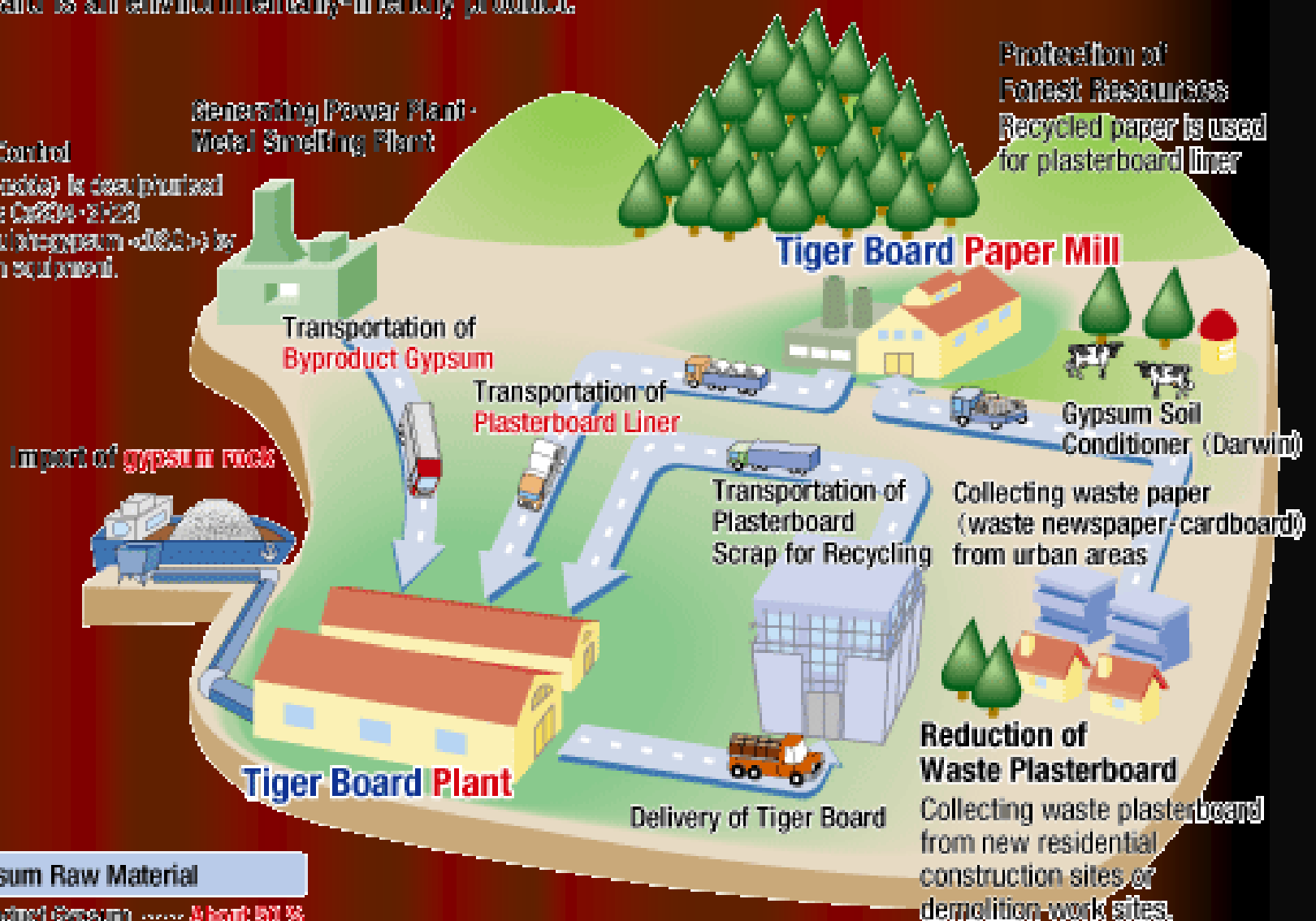
■ Tiger Board is an environmentally-friendly product.

Air Pollution Control

SO₂ (sulphur dioxide) is desulphurized and collected as CaSO₄·2H₂O (gypsum) using wet-gypsum desulphurization equipment.

Generating Power Plant -
Metal Smelting Plant

Protection of
Forest Resources
Recycled paper is used
for plasterboard liner



Gypsum Raw Material

Domestic Recycled Gypsum **About 80 %**

Imported Raw Gypsum **About 43 %**

Mallee's Waste Plasterboard **About 4 %**

Gypsum Raw Material

Recycled paper and off-cut waste

newspaper and cardboard **100 %**

PELLETIZED GYPSUM

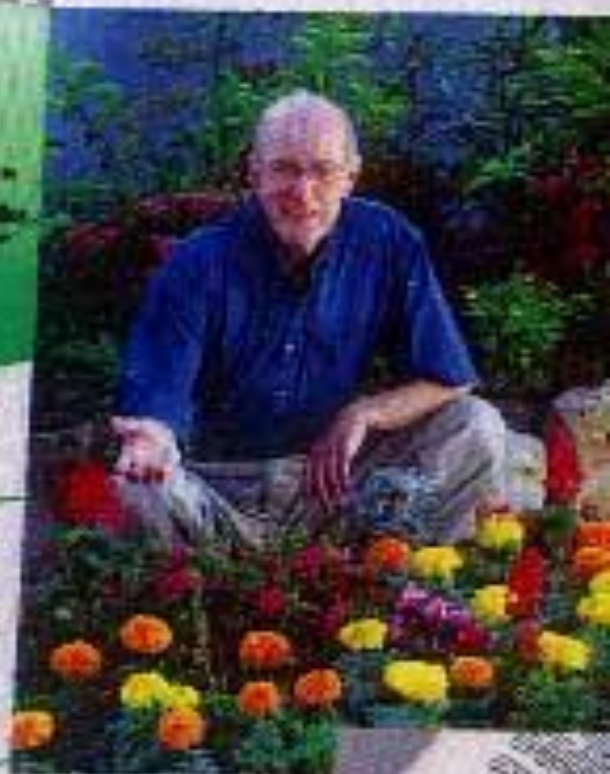
**Loosen/Aerate
Hard-Packed or Clay Soils!**

This is the perfect soil conditioner! It works through a chemical reaction to loosen and aerate hard-packed or heavy clay soils. It improves drainage and root penetration, enhances proper cell development and growth, plus it is gentle acting and ecologically safe to use. Gypsum works like a thousand little rototillers, conditioning the soil so that everything can penetrate down to the roots. It works great on "doggy damage" and tire tracks, too! 4 lbs. in a handy shaker canister.

Item #1631 **Your Cost \$9.95**



Handy
Shaker
Canister





FOSFATOS

Apatite
Ca₅(PO₄)F



Cal Apatite Plus 270 tabs



Cal Apatite Plus provides a unique combination of the same calcium-rich MCHC found in original Cal Apatite®, but with key nutritional factors added to help maintain healthy bone density.

Features ipriflavone, a unique isoflavone derivative that helps support healthy bone metabolism.

Supplies vitamin D, an essential nutrient for the maintenance of healthy bones that stimulates intestinal calcium absorption and helps to regulate calcium and phosphorus homeostasis in the body.

THREE TABLETS SUPPLY:

Microcrystalline Hydroxyapatite Concentrate (MCHC)† 1,500 mg
 Vitamin D (as cholecalciferol) 600 IU
 Calcium (as MCHC and dicalcium phosphate) 660 mg
 Phosphorus (as MCHC and dicalcium phosphate) 423 mg
 Ipriflavone 150 mg

Recommendations: Up to six tablets daily.

Price: \$65.00

Quantity



ADD TO CART

Manufacturer

Unit

SKU

E-mail a friend about this item.

 SEARCH

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Books

Allergies

Exercise Equipment

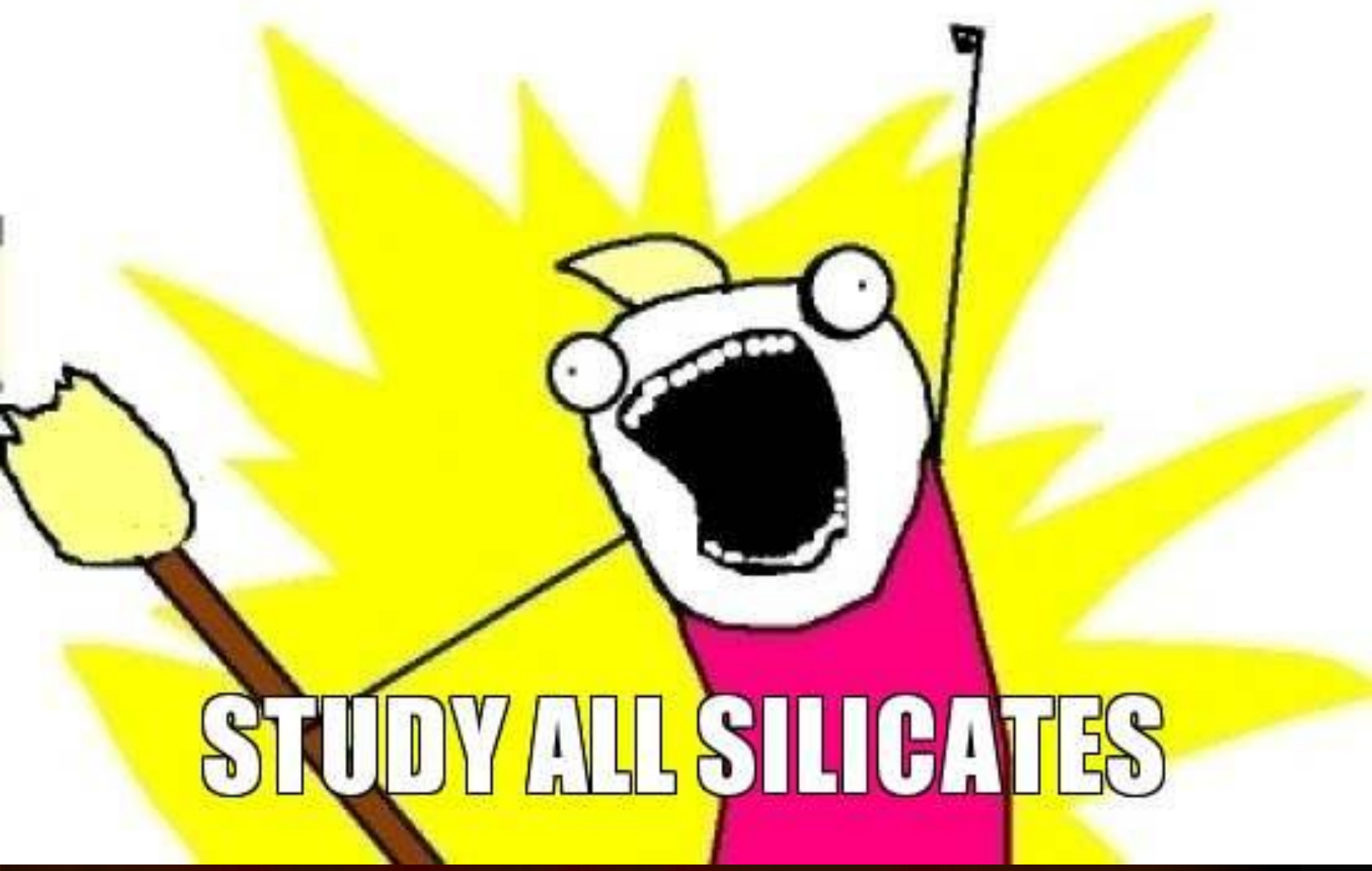
Dina's Chocolate

Anemia

Appetite

Blood Pressure

LOVESICK GEOLOGY STUDENT

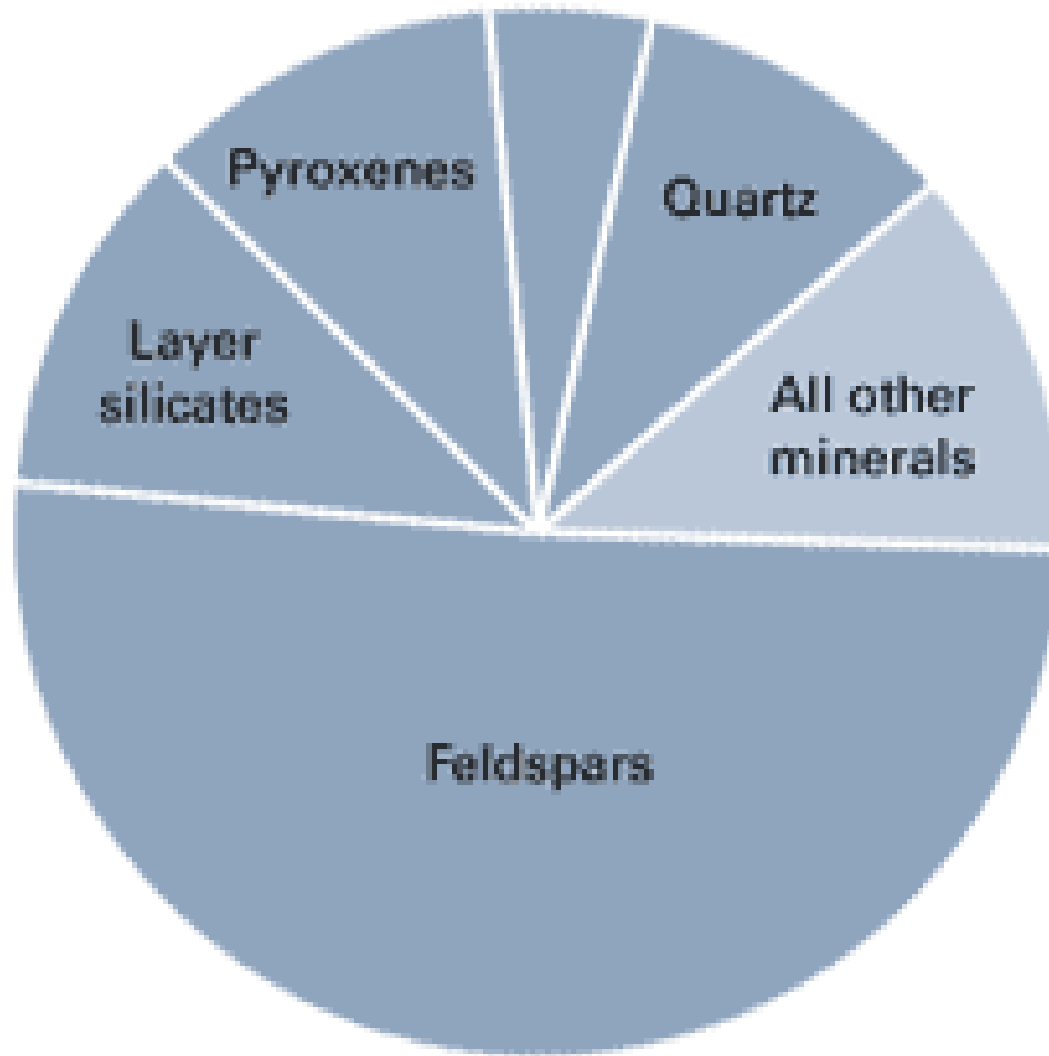


STUDY ALL SILICATES

Os

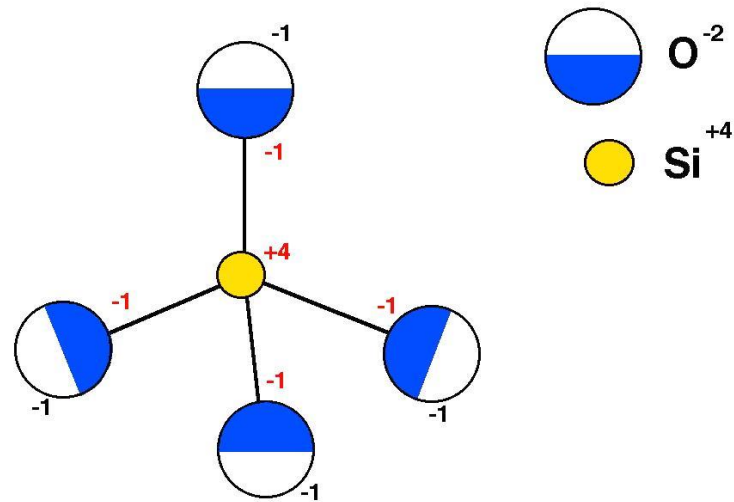
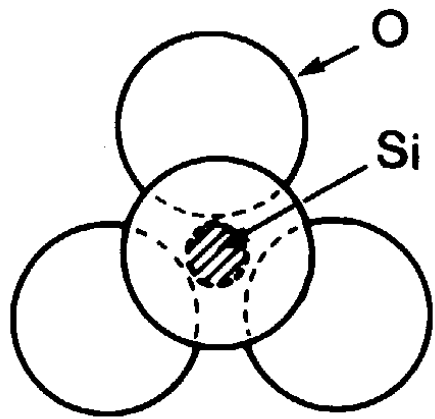
Silicatos

Amphiboles

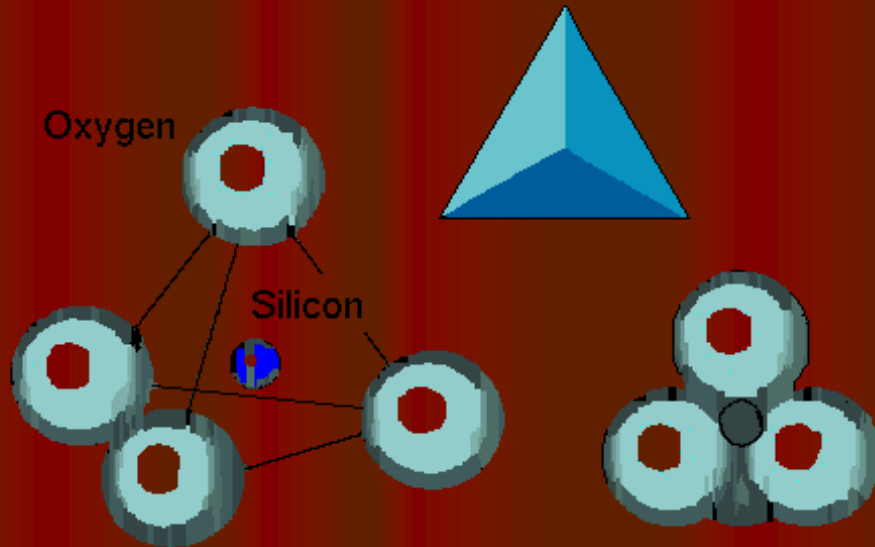


Minerais comuns da crosta terrestre (continental e oceânica)

Plagioclásio	39%	Micas	5%
FK	12%	Argilominerais	5%
Quartzo	12%	Outros silicatos	3%
Piroxênio	11%	Não silicatos	8%
Anfibólio	5%		



Silica Tetrahedra



Subgroup*	Structure	Si:O Ratio
<u>Nesosilicates</u>	single tetrahedrons (no oxygens shared between neighboring tetrahedra) joined by bonds with other cations	1:4
<u>Sorosilicates</u>	two neighboring tetrahedra share one point	2:7
<u>Cyclosilicates</u>	all tetrahedra share 2 oxygens, each one with a different neighbor, building up 3, 4, 6 or 12 tetrahedra into a ring structure	1:3
<u>Inosilicates Single Chain</u>	all tetrahedra share 2 oxygens, each one with a different neighbor, building a chain structure	1:3
<u>Inosilicates Double Chain</u>	alternate tetrahedra share 2 then 3 oxygens, each one with a different neighbor, building a side-by-side double chain structure	4:11
<u>Phyllosilicates</u>	each tetrahedron shares 3 basal oxygens, each one with a different neighbor, building a sheet structure	2:5
<u>Tectosilicates</u>	each tetrahedron shares all 4 oxygens, each one with a different neighbor, building a 3-D framework structure	1:2

51.3 Nesosilicates Nesosilicate Insular SiO₄ Groups Only with all cations in octahedral [6] coordination

51.3.1 Olivine group

51.3.1.0 Olivine* (Mg,Fe)2SiO₄ Pbnm 2/m 2/m 2/m

51.3.1.1 Fayalite Fe₂SiO₄ Pbnm 2/m 2/m 2/m

51.3.1.2 Forsterite Mg₂SiO₄ Pbnm 2/m 2/m 2/m

51.3.1.3 Liebenbergite (Ni,Mg)2SiO₄ Pbnm 2/m 2/m 2/m

51.3.1.4 Tephroite Mn₂SiO₄ P nma 2/m 2/m 2/m

51.3.1.5 Laihunite Fe⁺⁺Fe⁺⁺⁺(SiO₄)₂ P 2₁/b 2/m

51.3.2 Monticellite - Kirschsteinite series

51.3.2.1 Monticellite CaMgSiO₄ P nma 2/m 2/m 2/m

51.3.2.2 Kirschsteinite CaFe⁺⁺SiO₄ Pbnm 2/m 2/m 2/m

51.3.2.3 Glaucochroite CaMnSiO₄ Pbnm 2/m 2/m 2/m

51.3.3

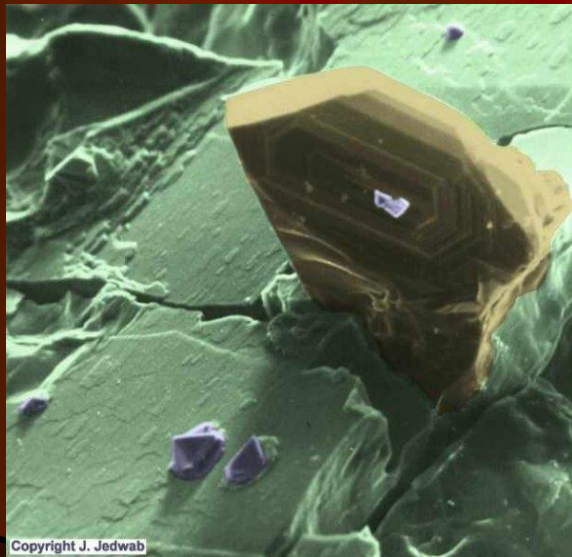
51.3.3.1 Ringwoodite Mg₂SiO₄ F d3m 4/m $\bar{3}$ 2/m

51.3.4

51.3.4.1 Wadsleyite (Mg,Fe⁺⁺)2SiO₄ I2/m 2/m



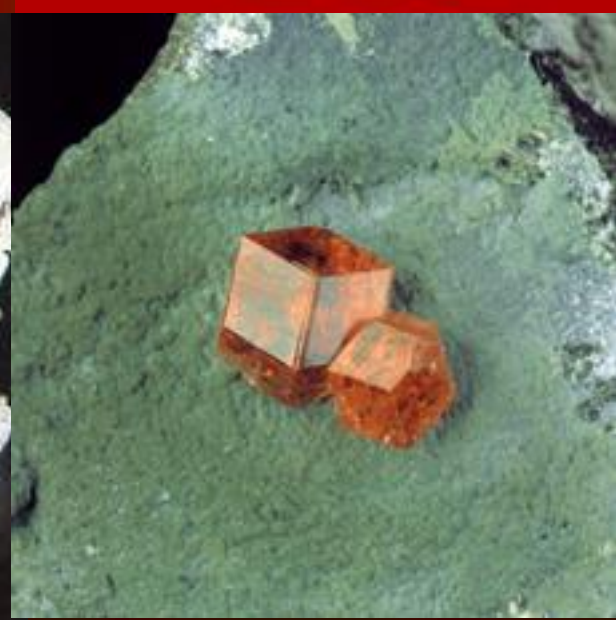
Olivina



Copyright J. Jedwab



Granada





Alaska Garnet Mining & Manufacturing Corporation

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Corporation in the United States*



GARNET CLEANERS

SHIRT TAILORS DRY CLEANING
FUR/LEATHER HOUSEHOLDS
SHOE REPAIR ALTERATIONS
SAND BY SERVICE BOX STORAGE

WE'RE
OPEN



51.5.2 Zircon group

51.5.2.1 Zircon ZrSiO_4 I $4_1/\text{amd}$ $4/m$ $2/m$ $2/m$

51.5.2.2 Hafnon HfSiO_4 I $4_1/\text{amd}$ $4/m$ $2/m$ $2/m$

51.5.2.3 Thorite ThSiO_4 I $4_1/\text{amd}$ $4/m$ $2/m$ $2/m$

51.5.2.4 Coffinite $\text{U}(\text{SiO}_4)_{1-x}(\text{OH})_{4x}$ I $4_1/\text{amd}$ $4/m$ $2/m$ $2/m$

51.5.2.5 Thorogummite $\text{Th}(\text{SiO}_4)_{1-x}(\text{OH})_{4x}$ I $4_1/\text{amd}$ $4/m$ $2/m$ $2/m$



Zircon Penn Maryland Materials Quarry



ZIRCÃO



ZIRCÃO

estauroлита





STAUROLITE INN & SUITES

BROOKINGS, SD

ABOUT THE STAUROLITE INN & SUITES

- SERVICES & AMENITIES
- ACCOMMODATIONS
- FOOD & BEVERAGE
- LOCAL ENTERTAINMENT
- LOCATION MAP
- CONTACT US

• BOOK TO-DAY

The Staurolite Inn & Suites opened in 1973 and is re-energized with a new look and new look to the look and feel of your stay. Through the years, the Staurolite Inn & Suites has maintained its position as the premier full service hotel in Brookings, South Dakota.

Completely renovated in 2011, all amenities in the Staurolite is within walking distance of the site that offers Supercenter and general merchandise and retail outlets. Just across the street, the conference center is the site of many exhibits, trade shows, seminars and special events. Adjacent to the Center Center is the Center for Center where youth and college age students gather and spend their leisure time. Brookings, South Dakota is a beautiful town and a great place to visit.

The Staurolite Inn & Suites is a newly renovated full-service hotel featuring the Premier Restaurant & Lounge and Casino (2011) with the latest in gaming and slot games, the spa, and more. The Staurolite Inn & Suites is the place to stay in Brookings.

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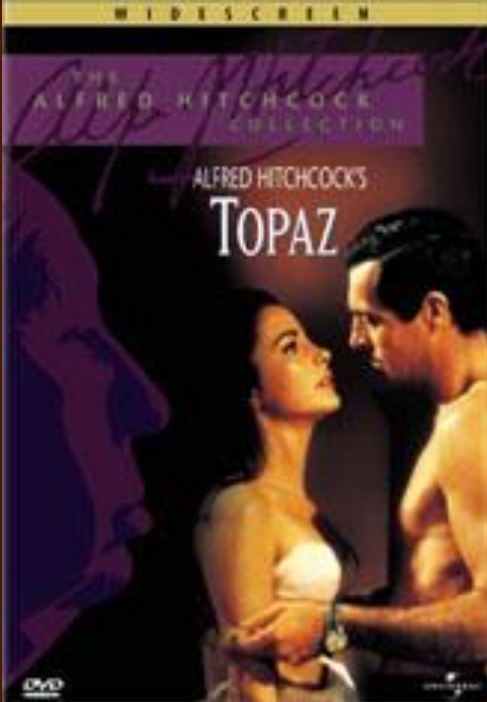
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in 3D ▶



TOPAZ
ACCESSORIES ▶



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SAN. VE TIC.A.S.



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HITCHCOCK TAKES YOU BEHIND THE ACTUAL HEADLINES TO EXPOSE THE MOST EXPLOSIVE SPY SCANDAL OF THIS CENTURY!

ALFRED HITCHCOCK'S

TOPAZ

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Inflammatory best seller

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 MICHEL SUBOR · JOHN FORSYTHE · MUSIC BY MAURICE JARRE · SCREENPLAY BY SAMUEL TAYLOR · DIRECTED BY ALFRED HITCHCOCK

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MINERALOGICAL RECORD

JANUARY-FEBRUARY 1955 • VOLUME 26 NUMBER 1 • \$10

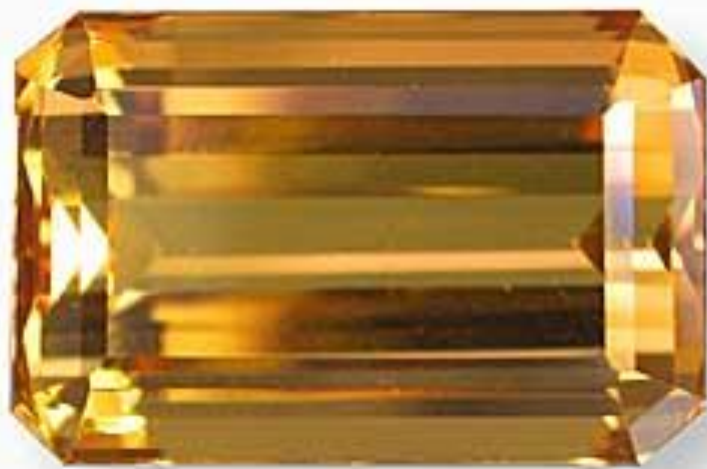
Topaz
Aoyama
Produced by Trinity Corsetiere





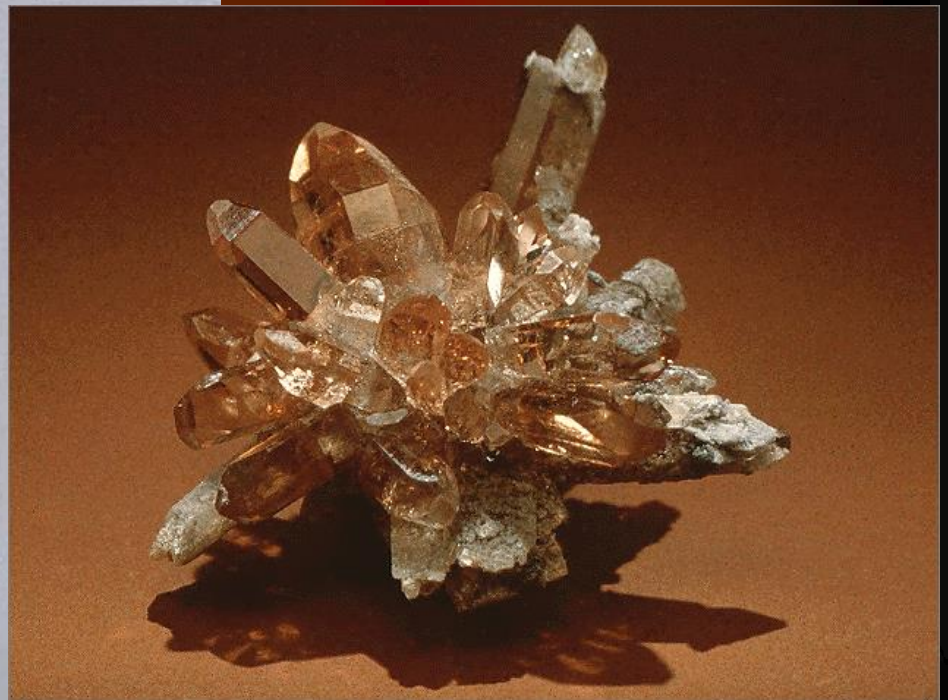
Topázio

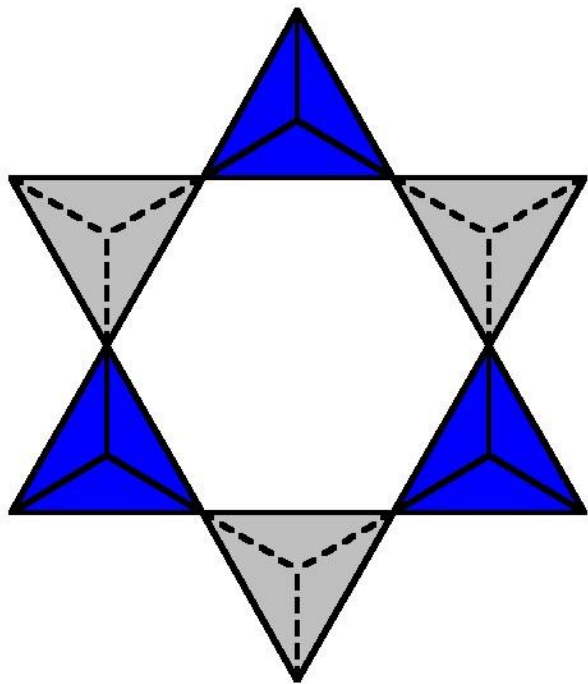




Topázio

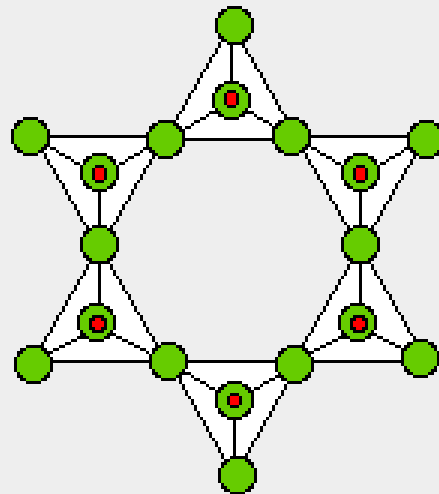






Cyclosilicate

Arrangement of
silica tetrahedra



Formula of
complex ion

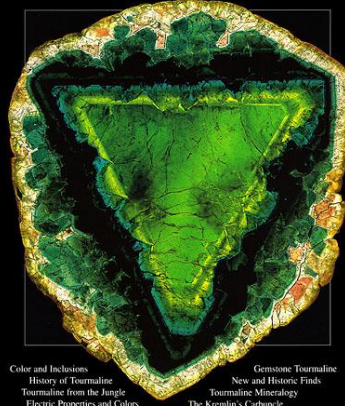


Common minerals

Tourmaline
Beryl

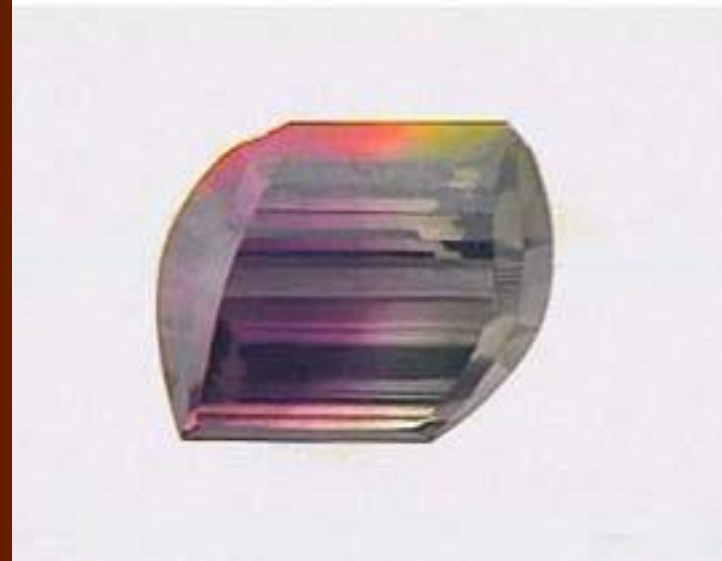
Tourmaline

extraLapis English No. 3: A Gemstone Spectrum



Color and Inclusions
History of Tourmaline
Tourmaline from the Jungle
Electric Properties and Colors
Phenomena and Theories
Localities from the Americas to Europe and Africa to Australia

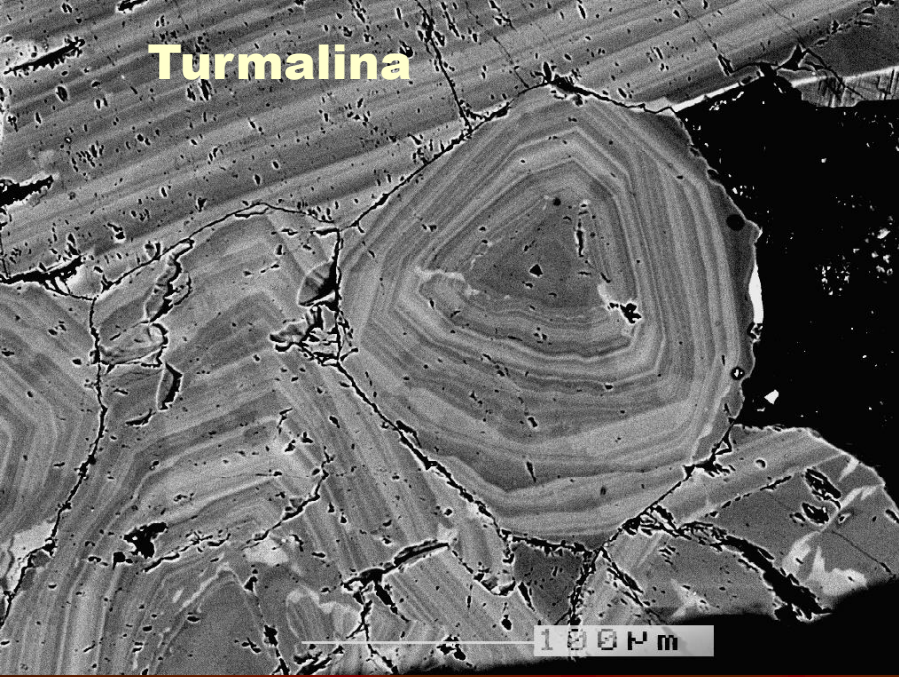
Gemstone Tourmaline
New and Historic Finds
Tourmaline Mineralogy
The Kremlin's Carbuncle
Research and Discoveries



Turmalina



Turmalina



Cricket

Ask Kate is Now Open!
email Kate your beauty dilemmas: kate@avenueyou.com

DevaSun Dryer Plus Tourmaline

Pre-Order New DevaSun Power 3 DevaCurler Now!!!

BROWSE BY MFG.

CATEGORY

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American Culture
AminoGenesis Skin Care
Aquolina (Pink Sugar + Chocolate)
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Cochetals
Artizon
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Beauty Buffet Cosmetics
Beba' Baby Care Products
Bella il Fiore
Betty Beauty
Bio-Ionic
Bionic Cosmetics (KissMe)
Bliss Spa
Breeze Skin (latest trends)
Catharine Jones

Cricket Tourmaline Air Flow S175T

List Price: \$159.95
Your Price: \$140.00
Qty: 1

[Add to Shopping Cart](#)
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Email this to a friend

Detailed Description

Cricket Tourmaline Air Flow S175T

- 1875 Watts
- Ionic with Tourmaline
- Tourmaline maximizes the negative ion output and infrared heat generated, delivering more conditioned, super shiny, frizz free hair.
- Ion on/off switch with LED indicator
- AC Motor
- 2 Speeds / 2 Heat Settings
- Separate heat and speed controls

• Cold Shot Button, Concentrator Attachment and Removable Lint Filter

Purchase Cricket's New Tourmaline Dryer and Receive a Free Folding

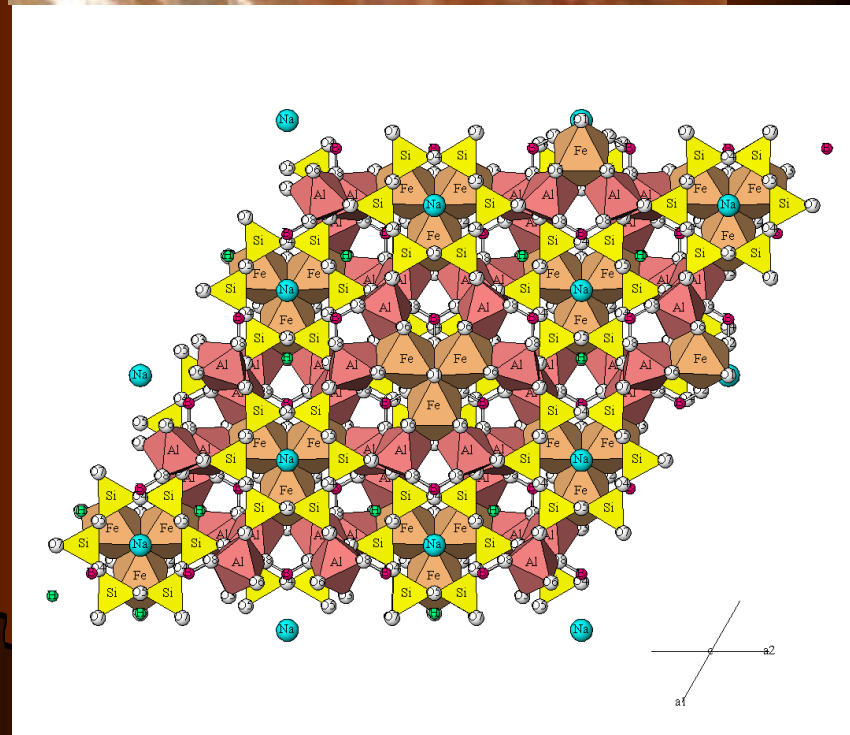
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TOP PRODUCTS

- 1.) DevaCurl One Condition
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- 3.) DevaCurl No-Poo
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- 8.) DevaCurl Wet or Right
- 9.) OPI Retired and Discontinued Colors
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- 13.) DevaCurl Set It Free Finishing Mist
- 14.) Bella il Fiore Roller-Ball Eye Shadows
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- 16.) Vititone Cream Hair Color
- 17.) - Japanese Nail Lacquers
- 18.) Bliss Poetic Cosmetics Fat Girl Slim
- 19.) DevaCurl B Leave-in
- 20.) Divinity Lipgloss





5cm



Berilo

B

BERYL



Geology 306
University of Wisconsin - Madison



Beryl

And Its Color Varieties



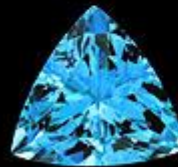
Aquamarine, Heliodor, Morganite
Goshenite, Emerald, and Red Beryl

Beryl

*And Its Color Varieties:
Aquamarine, Heliodor, Morganite, Goshenite, Emerald, and Red Beryl*



The colorful varieties of beryl, from clear goshenite to vibrant emerald to serene aquamarine, have been inspiring scientists, mystics and poets for millennia. Found in a range of shapes, sizes and colors, beryl is as diverse as the Earth in which it forms. Today, much is known and much remains unknown about the gemstone, mineral specimen and strategic ore that is beryl.



Beryl And Its Color Varieties
Lapis International, LLC
East Hampton, Connecticut, USA
ISBN 0-971537-16-X



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Wherever You Are

SINGLE CHAIN SILICATES



**SILICA
TETRAHEDRA**



IRON



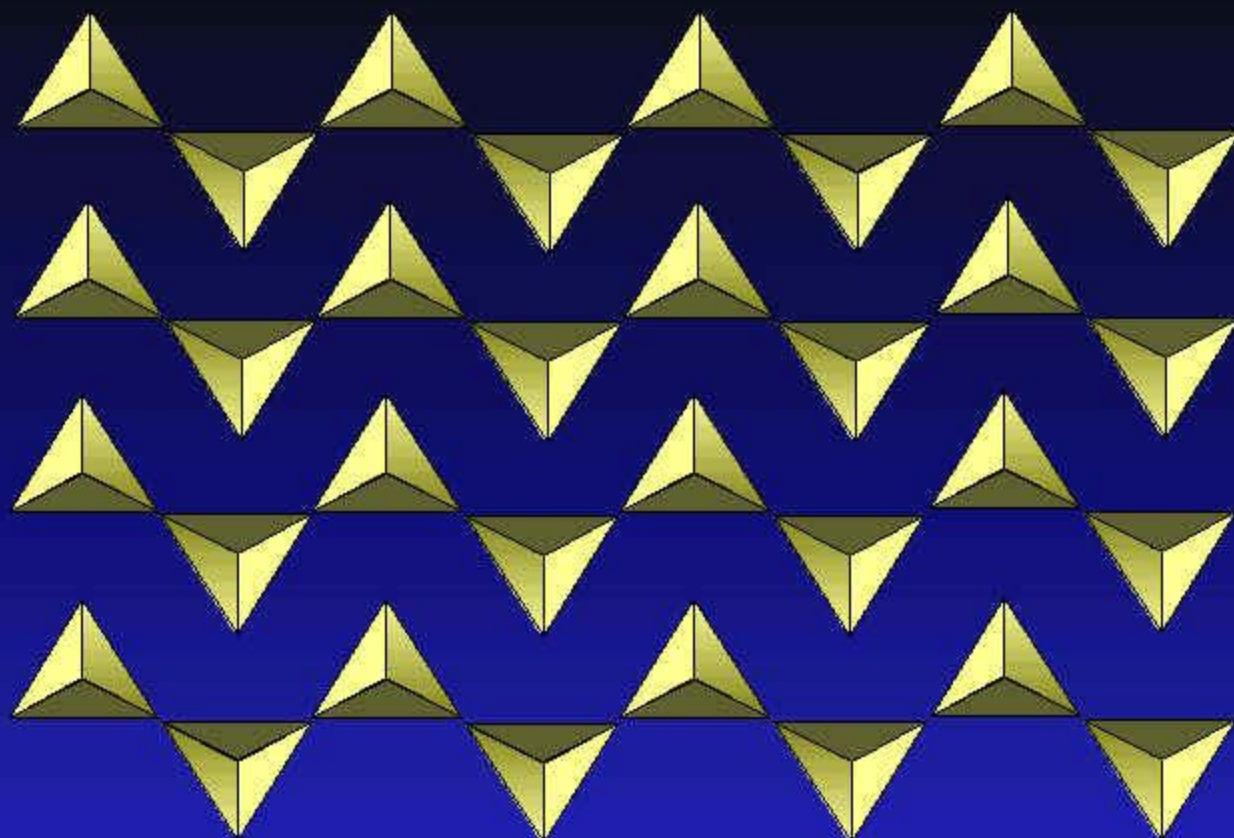
SODIUM



CALCIUM



MAGNESIUM



**PYROXENE STRUCTURE
(AUGITE)**

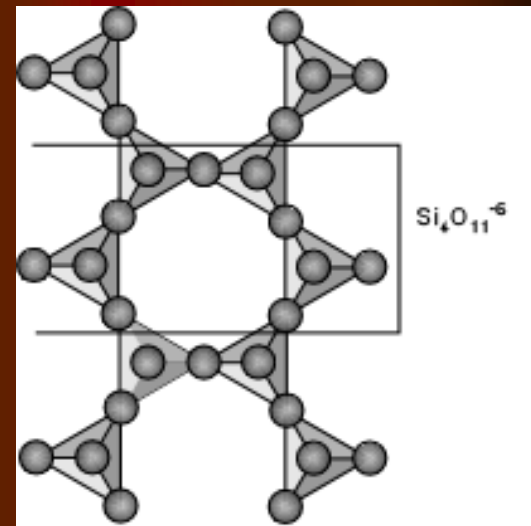




PIROXÊNIOS



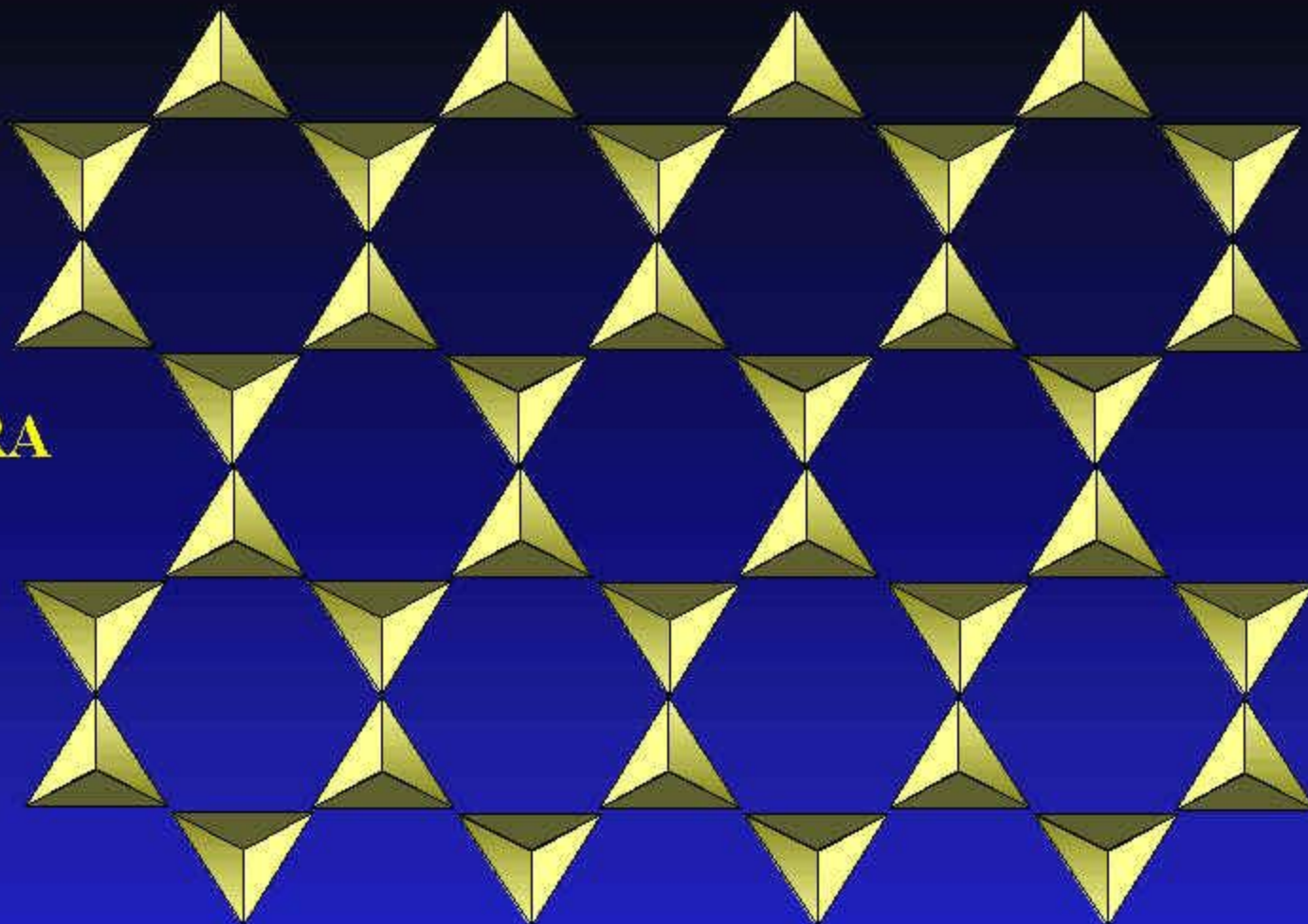
Anfibólio



SHEET SILICATES


**SILICA
TETRAHEDRA**


HYDROXYL



**MICA STRUCTURE
(BIOTITE, MUSCOVITE)**



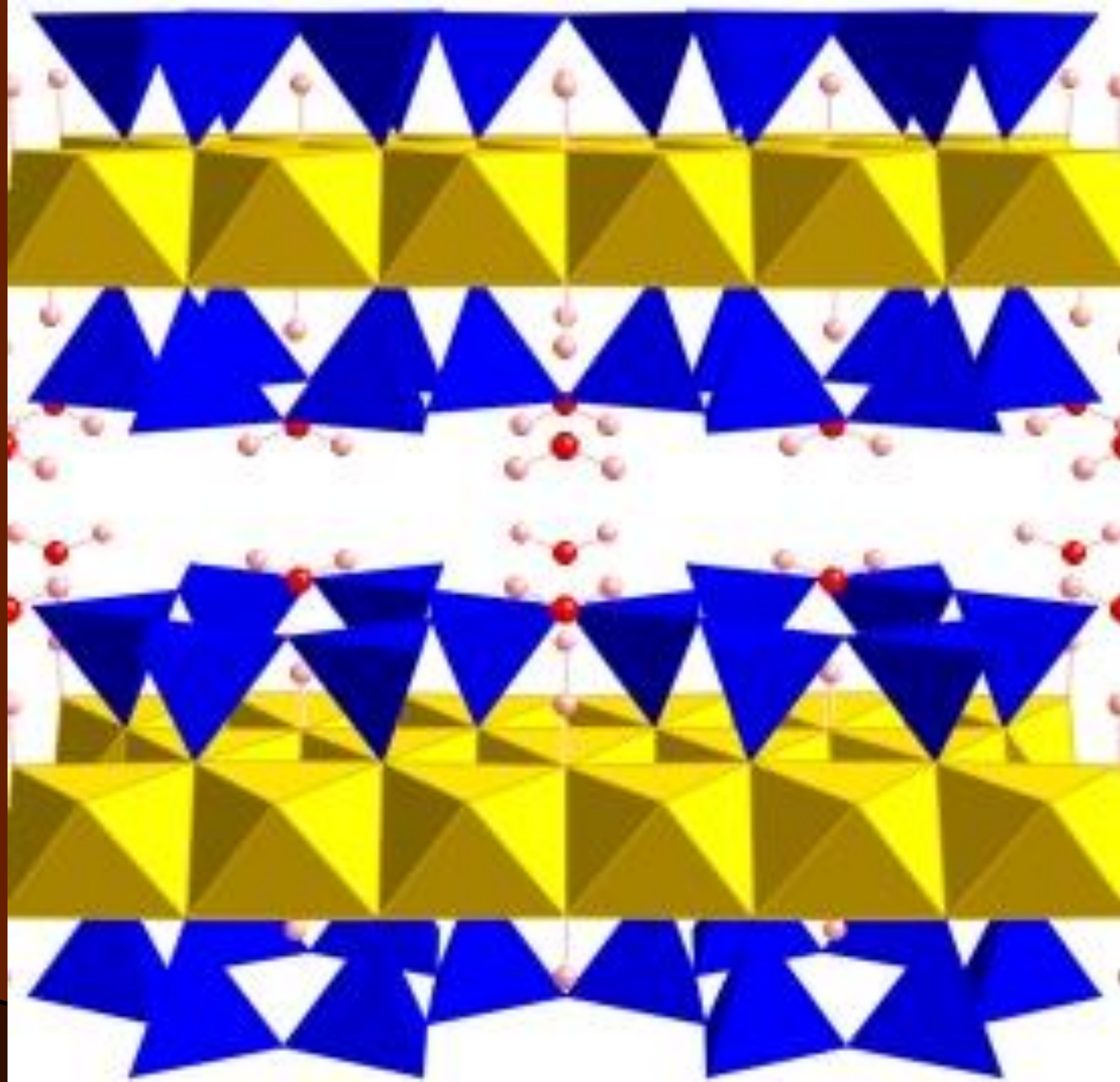
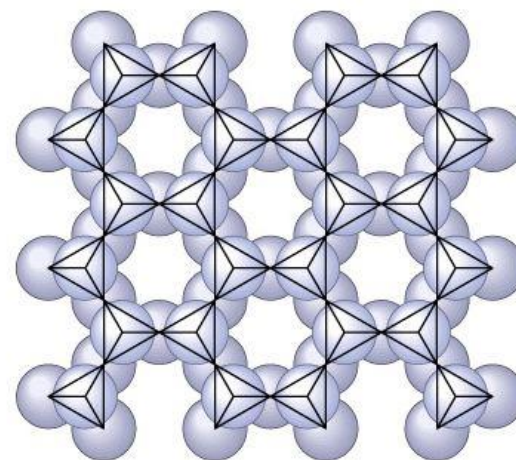
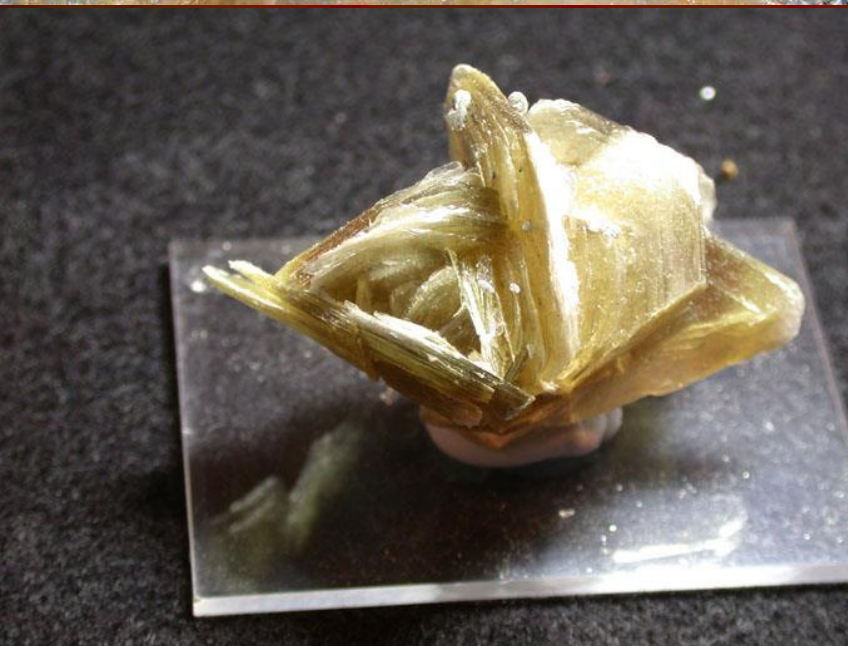




photo: J. Buss



Sheet Silicate
(Si,Al)₄O₁₀

Muscovite: $K_2Al_4[Si_6Al_2O_{20}](OH,F)_4$



Biotite





lepidolita

flogopita

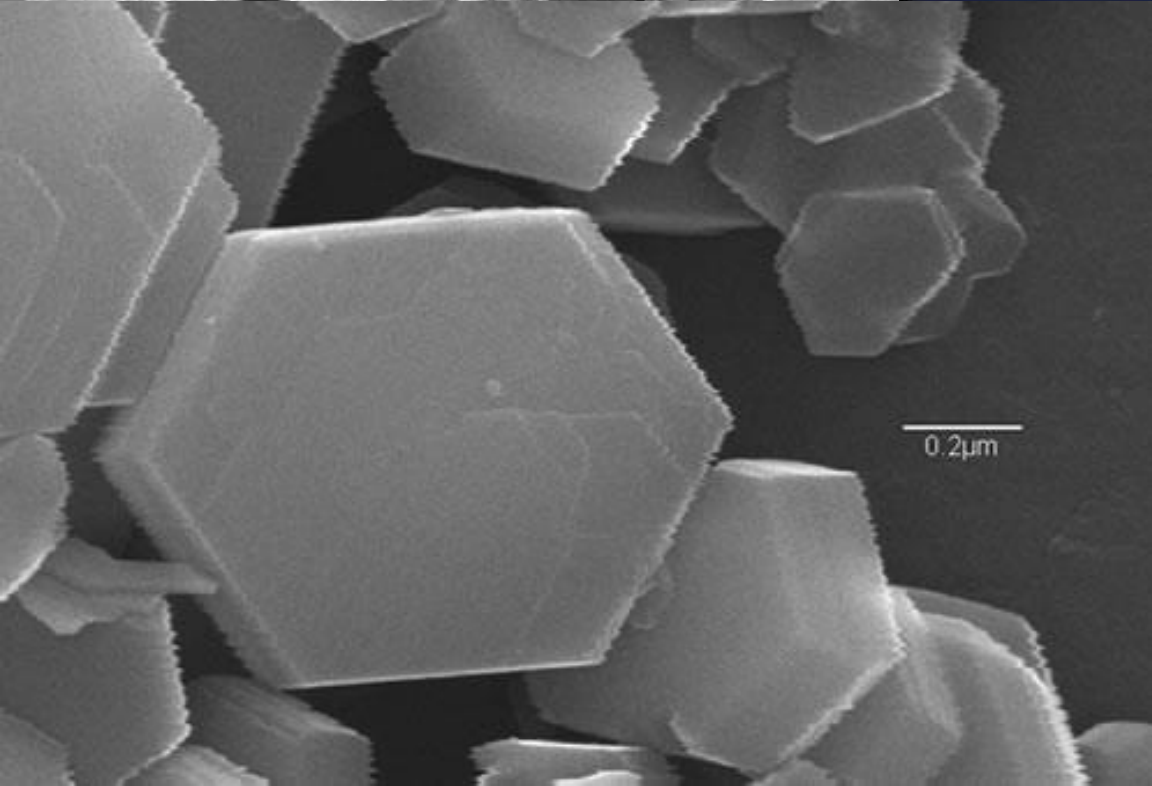
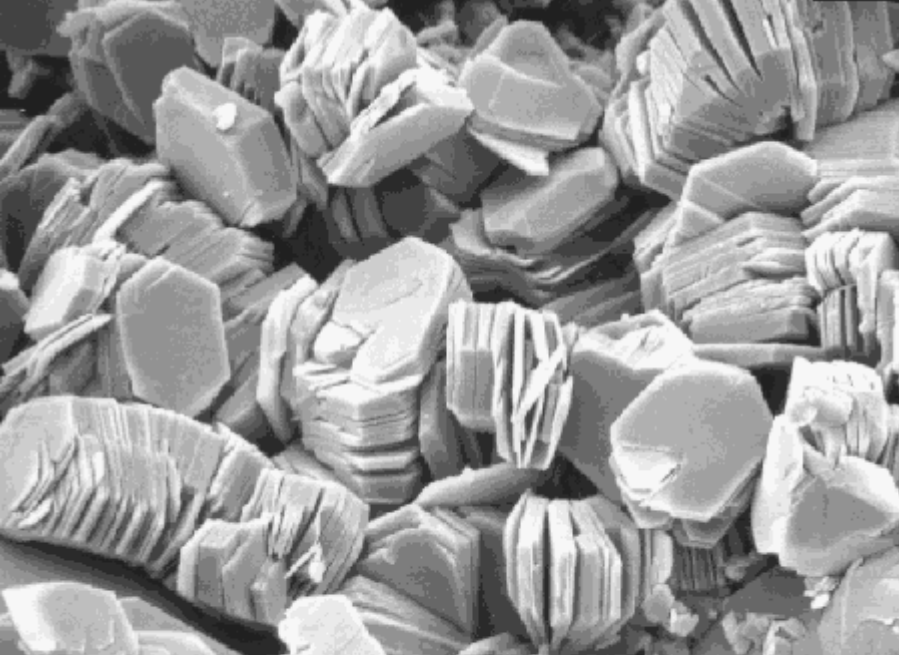


flogopita

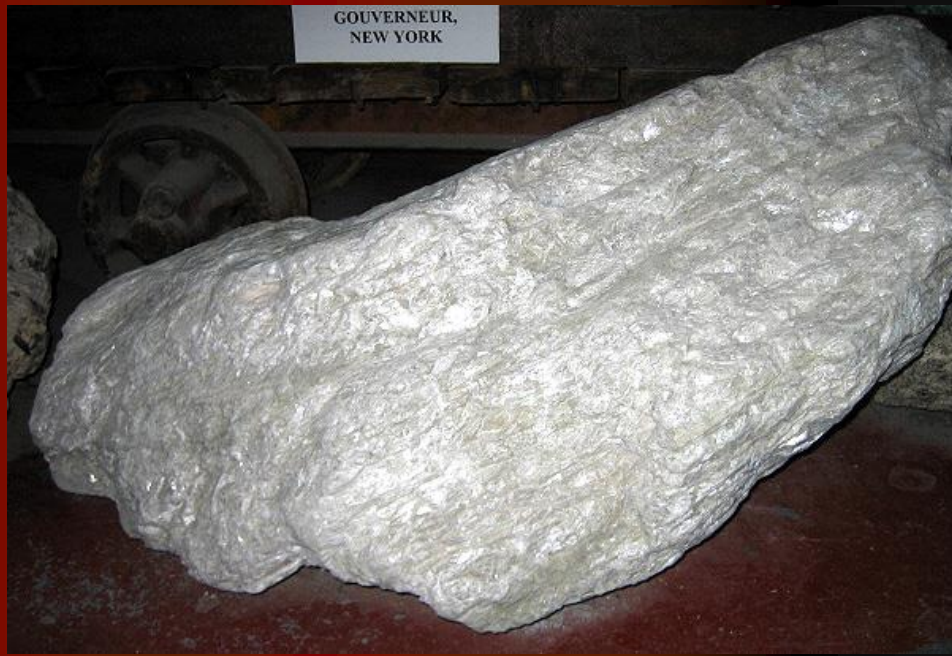




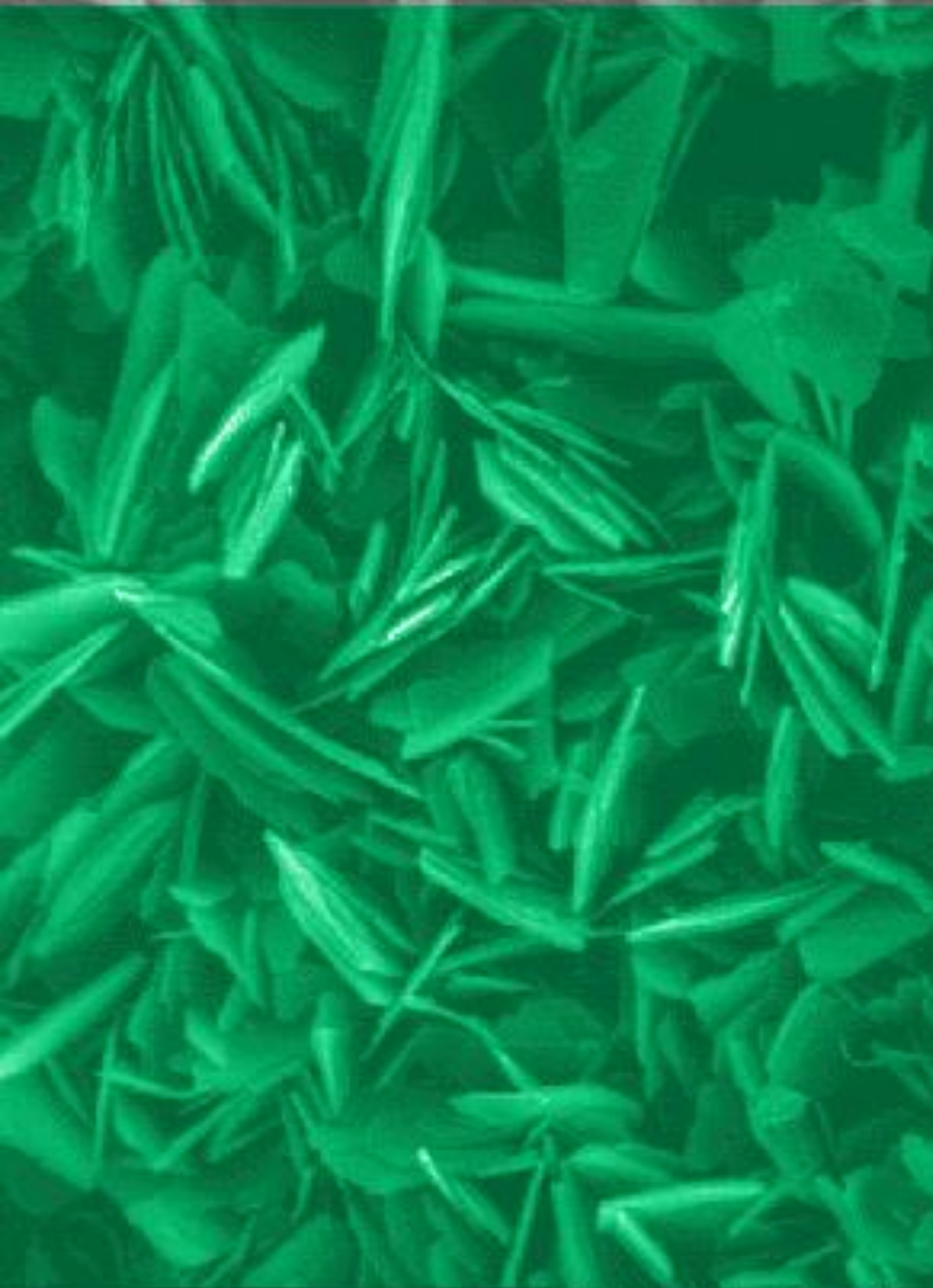
serpentina



Caulinita



Talco



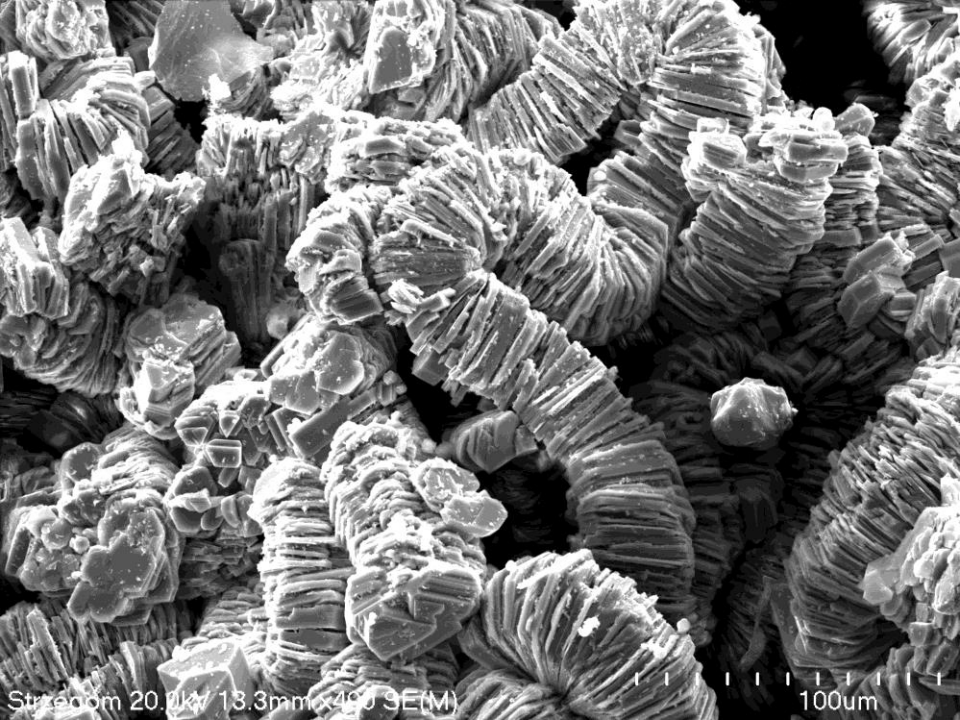
#33



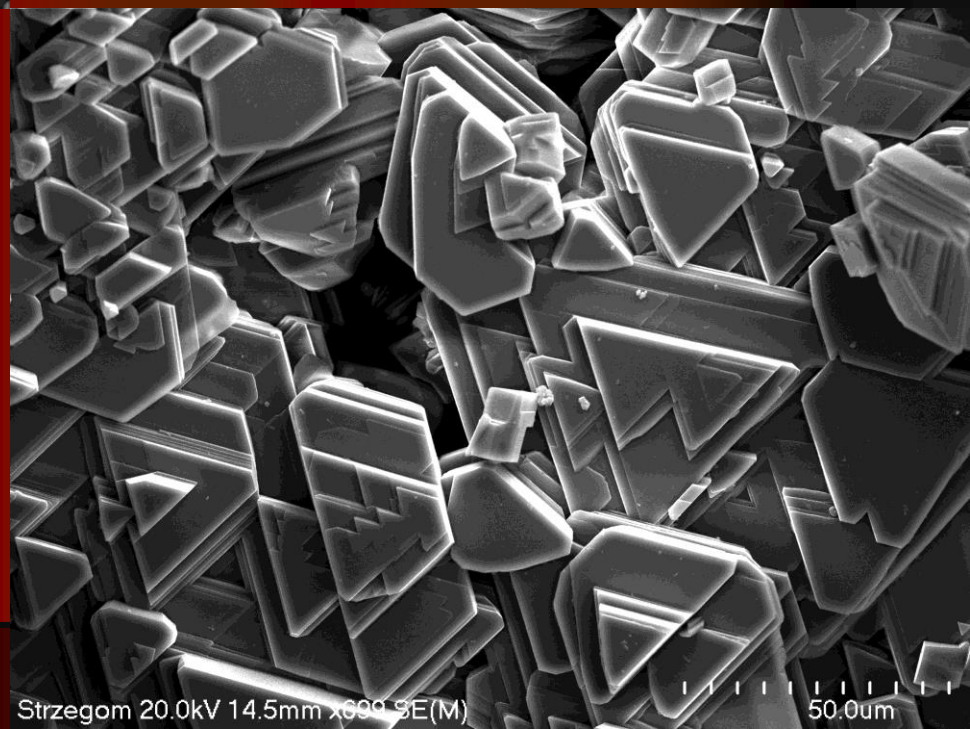
Chlorite



000051 10KV X4.00K 7.5um

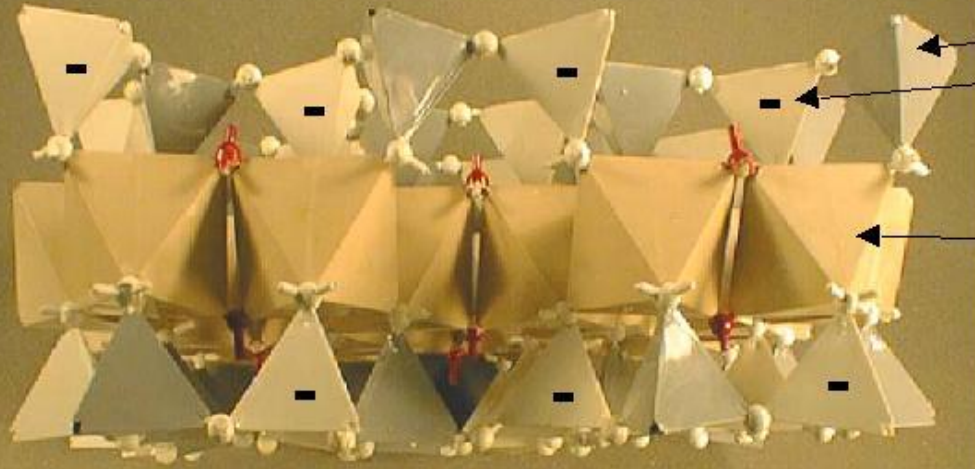


Clorita





Vermiculite



Si⁴⁺ Tetrahedra

Al³⁺ Tetrahedra

Al³⁺ Octahedra

Le bouturage, c'est facile!



①

On commence avec une feuille bien ferme.



On rabat la tige avec un couteau bien aiguisé.

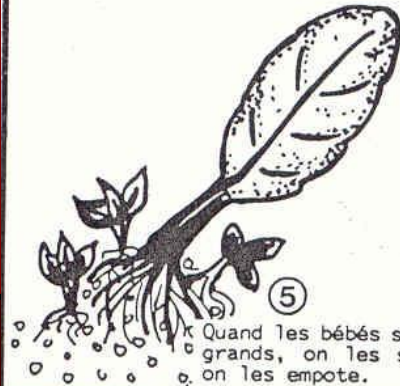
②

③ On place la feuille dans un petit pot de vermiculite qu'on peut laisser tremper dans $\frac{1}{2}$ " d'eau la première semaine seulement. (Bien identifier)



④

La vermiculite doit rester humide. Les bébés apparaissent.



⑤

Quand les bébés sont assez grands, on les sépare et on les empote.



⑥

On emploie du terreau à violette africaine.



用意するもの



パーミキュライト
S75-6270



脱脂綿でも同様の
実験ができます。
脱脂綿 (500g)
S75-4255-02

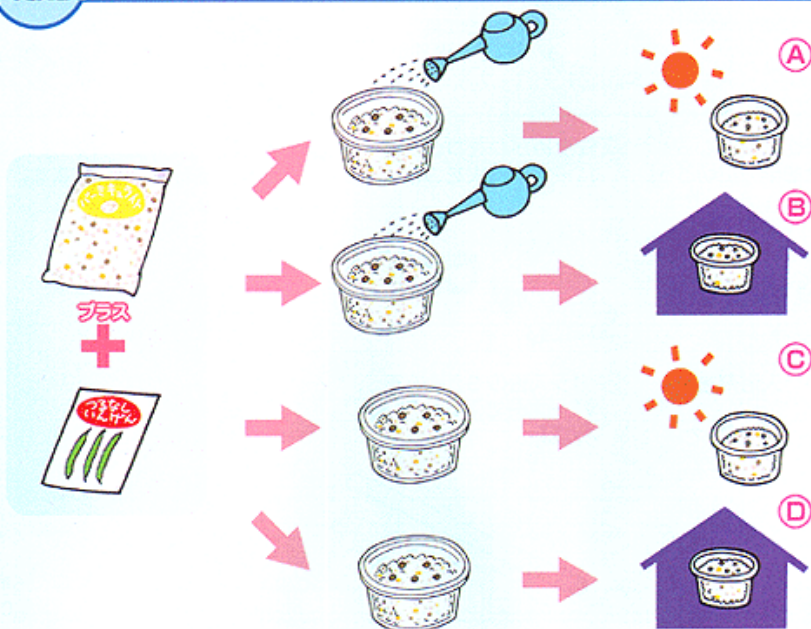


透明プラスチック
カップ (10個組)
S75-4133

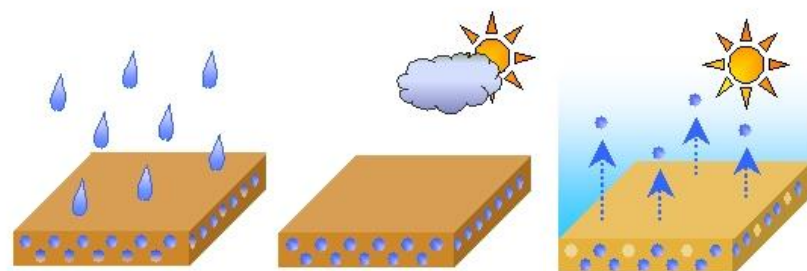


つるなし
いんげんの種
L55-7902-34

実験例 日光の有無、水の有無で発芽のちがいを調べてみよう



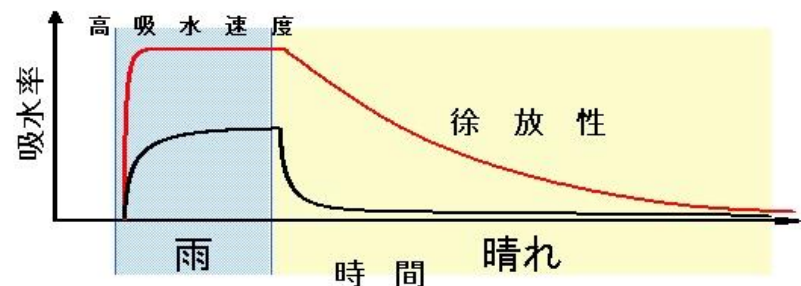
どのカップから発芽するかな？



高吸水率
高吸水速度

保水材

蒸発熱による
温度上昇抑制



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Mineral enriched food for domestic and farm animals

Vermiculite contains as
mineral a lot of trace
elements in their natural
appearances...

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CANCER INSTITUTE

THE NATIONAL CENTER
for VERMICULITE and
ASBESTOS-RELATED CANCERS

FRAMEWORK SILICATES

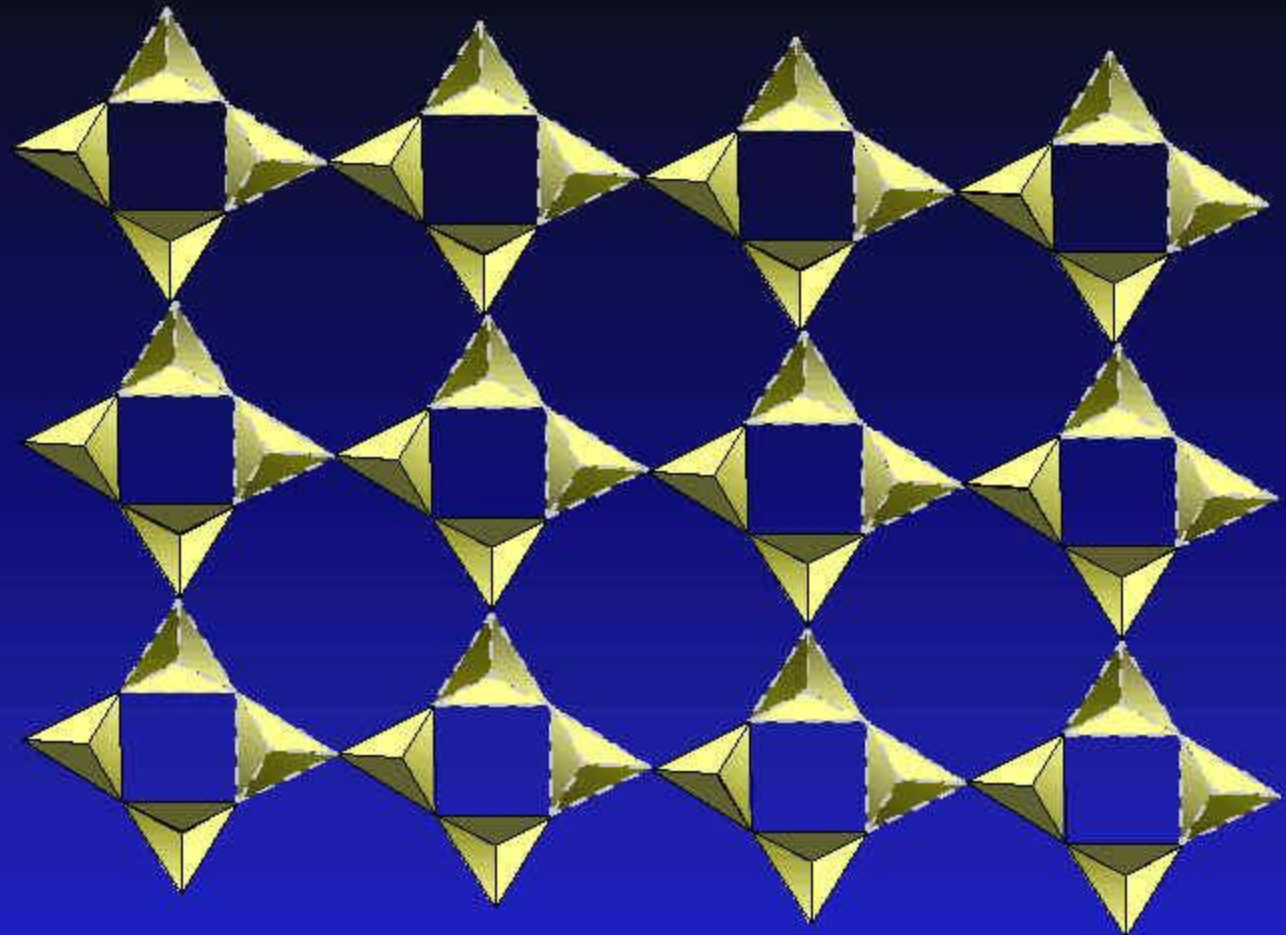


SILICA

TETRAHEDRA



POTASSIUM

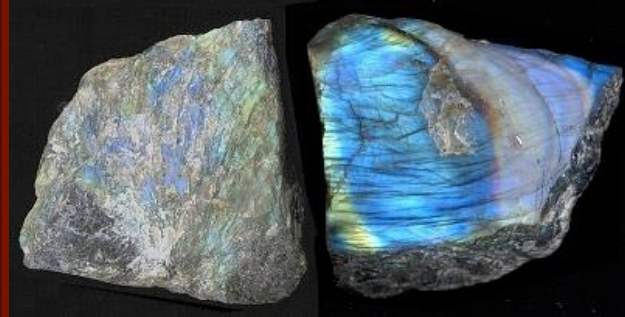


FELDSPAR STRUCTURE
(ORTHOCLASE)





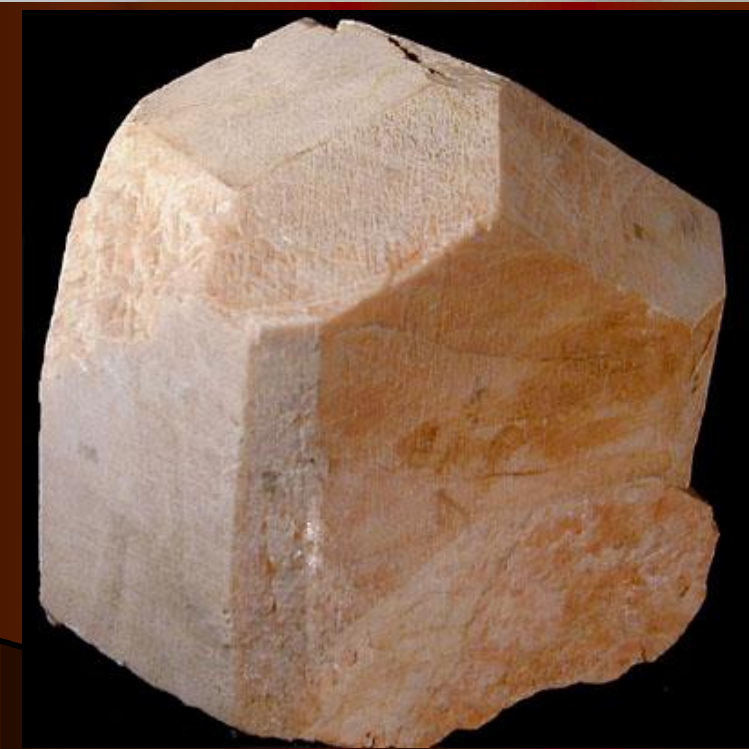
FELDSPAR	FORMULA	CATION CHARGE	CATION SIZE	SUBSTITUTIONS
ORTHOCLASE	KAlSi_3O_8	K^{+1}	1.33 \AA	Charges ok, but size difference too large for substitution Sizes ok, but charges must be balanced for substitution. Done with Al and Si substitution
SODIUM PLAGIOCLASE	$\text{NaAlSi}_3\text{O}_8$	Na^{+1}	0.95 \AA	
CALCIUM PLAGIOCLASE	$\text{CaAl}_2\text{Si}_2\text{O}_8$	Ca^{+2}	0.99 \AA	



Feldspato



Feldspato





Nefelina



Sodalita



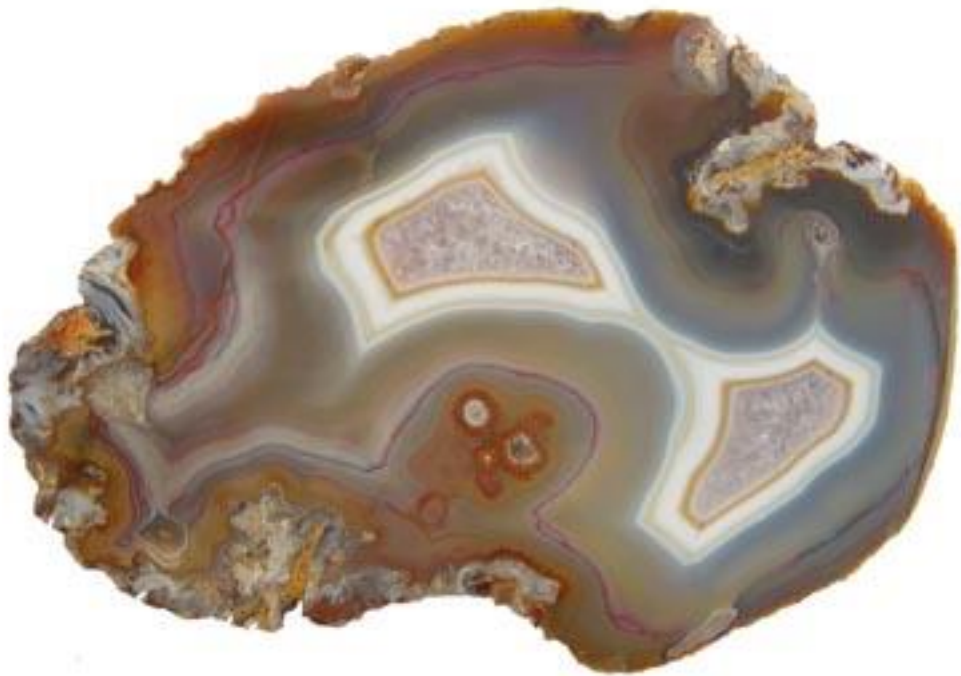


Quartzo

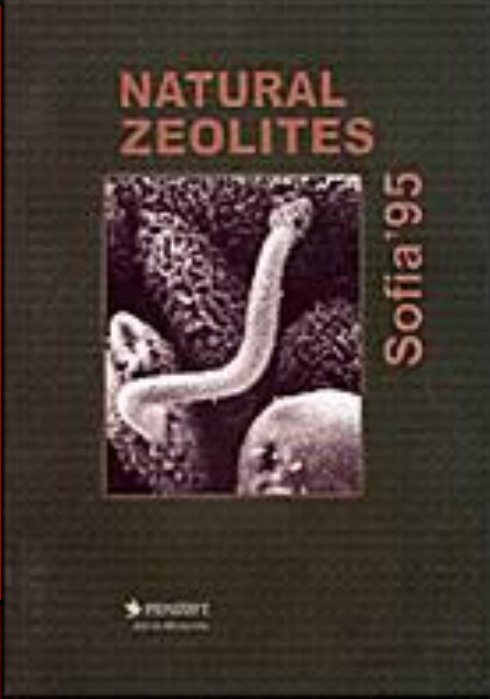




Quartzo



Quartzo





Zeolite A

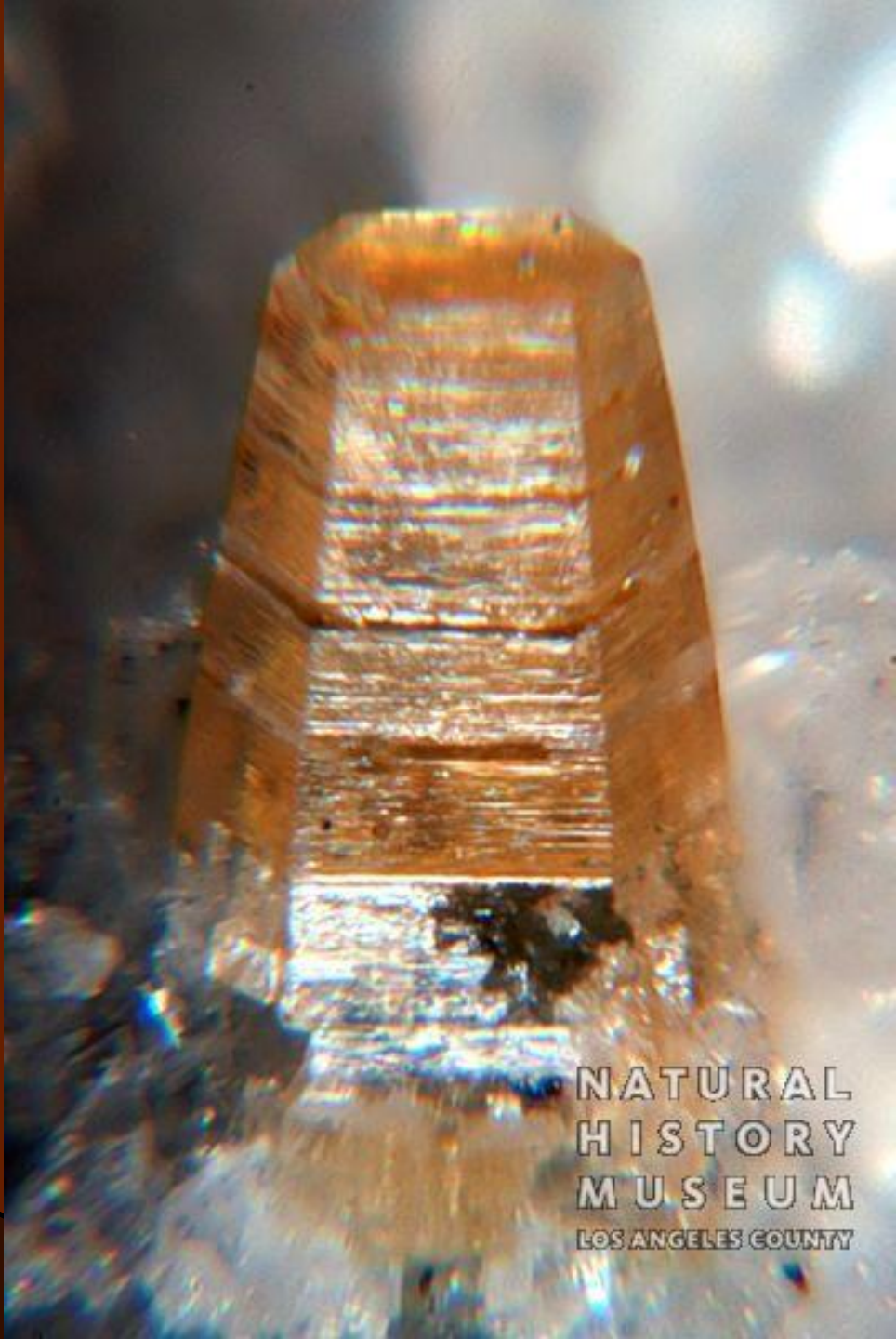
1. As amostras de minerais observadas nas vitrinas do museu foram distribuídas de acordo com algum critério científico. Qual seria este critério e porque ele foi adotado?

12 CLASSES MINERAIS

- Elementos nativos
- Sulfetos
- Sulfossais
- Óxidos
- Halóides
- Carbonatos
- Nitratos
- Boratos
- Fosfatos
- Sulfatos
- Tungstatos
- Silicatos

- Minerais com mesmo radical aniônico apresentam propriedades físicas e morfológicas muito mais semelhantes entre si que minerais com o mesmo cátion
- Minerais com mesmo radical aniônico tendem a ocorrer associados na natureza, sendo originados por processos físico-químicos semelhantes
- Esta prática de classificação está de acordo com a nomenclatura de compostos utilizada na Química Inorgânica

2. Alguns minerais apresentam faces planas. São os chamados **cristais**. Observe essa característica e procure identificar quando superfícies planas nas amostras não são naturais.



NATURAL
HISTORY
MUSEUM
LOS ANGELES COUNTY







3. Liste pelo menos 5 “minerais gemológicos” que estão no museu e que você sabe que são utilizados para a confecção de joias. Quais são as características comuns a estes minerais?





4. Existem alguns minerais que, em grandes quantidades, tornam-se importante fonte econômica de elementos como S, Pb, Fe, Mn, etc. Estes minerais são denominados “minérios”. Você reconhece algum mineral desses entre os que estão no museu? Liste pelo menos 5 nomes de minérios e os elementos que eles fornecem.

Argentita: Ag_2S - para a extração de prata
Barita: BaSO_4 - para a extração de bário
Bauxita: para a extração de alumínio
Berilo: $\text{Be}_3\text{Al}_2(\text{SiO}_3)_6$ - para a extração de berílio
Esfalerita: ZnS - para a extração de zinco
Bornita: Cu_5FeS_4 - para a extração de cobre
Calaverita: AuTe_2 - para a extração de ouro
Calcopirita: CuFeS_2 - fundamentalmente, para a extração de cobre
Calcocita: Cu_2S - para a extração de cobre
Cassiterita: SnO_2 - para a extração de estanho
Cinábrio: HgS - para a extração de mercúrio
Cobaltita: $(\text{Co},\text{Fe})\text{AsS}$ - para a extração de cobalto
Cromita: $(\text{Fe},\text{Mg})\text{Cr}_2\text{O}_4$ - para a extração de cromo
Galena: PbS - para a extração de chumbo
Hematita: Fe_2O_3 - para a extração de ferro
Magnetita: Fe_3O_4 - para a extração de ferro
Molibdenita: MoS_2 - para a extração de molibdênio
Ouro: Au - associado ao quartzo e à pirita
Pentlandita: $(\text{Fe},\text{Ni})_9\text{S}_8$ - para a extração de níquel
Petalita : $\text{LiAlSi}_4\text{O}_{10}$ - para extração de lítio
Rutilo: TiO_2 - para a extração de titânio
Pirolusita: MnO_2 - para a extração de manganês
Scheelita: CaWO_4 - para a extração de volfrâmio
Sperrylita: PtAs_2 - para a extração de platina
Uraninita UO_2 - para a extração de urânio
Volframita: $(\text{Fe},\text{Mn})\text{WO}_4$ - para a extração de volfrâmio

5. Diferentes tipos de meteoritos se encontram expostos no museu. Procure observar alguma diferença significativa entre eles.

Meteoritos



- Corpos metálicos ou rochosos caídos na superfície terrestre;
- Corpos pequenos que atingem a atmosfera com alta velocidade, sendo freados com o atrito com o ar;
- Calor produzido pelo atrito chega a fundir parcialmente as partes externas do meteorito, formando uma crosta de material vitrificado.

Cometa

Pequeno corpo sólido composto de rocha, gelo e gases congelados. Quando se aproxima do Sol exibe atmosfera e cauda.

Meteoróide

Pequeno "asteroide" ou fragmento de algum corpo sólido do Sistema Solar. Possui de microns a 1 metro de diâmetro.

Asteróide

Corpo rochoso ou metálico que vaga pelo espaço. Possui de 1 metro a centenas de quilômetros de diâmetro.

Meteoro (Estrela Cadente)

Efeito luminoso que ocorre quando um meteoróide ou asteroide entra na atmosfera terrestre.

Meteorito

Fragmento de um meteoróide ou asteroide que sobrevive à passagem pela atmosfera e chega até a superfície.





ROCHAS

ÍGNEAS



SEDIMENTARES



METAMÓRFICAS



Ciclo das rochas



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