

[22:32] <@Spauwe> let's talk some tourmalines

[22:34] <@Spauwe> tourmaline is a family like we know garnets and feldspars to be

[22:34] <@Spauwe> but, we hardly encounter much differentiation in gemmo books

[22:34] <@Spauwe> why do you think is that?

[22:35] <@Spauwe> with garnets it's a big deal to label 'em properly

[22:35] <@Spauwe> spess, pyrope etc

[22:35] <doos> want me to wait?

[22:35] <@Spauwe> we hardly ever see tourmalines being labeled as dravite or elbaite

[22:35] <@Spauwe> no chip in

[22:35] <doos> ok

[22:37] <doos> because most tourmaline is of the elbaite species, with some traces ...

[22:37] <doos> most gem material tourmaline\*

[22:37] <@Spauwe> yesh, that as well but a lot of greens aren't elbaite

[22:38] <@Spauwe> but still I didn't get taught to differentiate between the two by the Gemm. Ass.

22:38] <@Spauwe> I wondered why...

[22:38] <@Spauwe> and my best guess to an answer is that it's very tricky to make the calls

[22:39] <@Spauwe> it's not as down to earth as with garnets

[22:39] <@Spauwe> RI-SG-colour

[22:39] <@Spauwe> anybody of you ever seen the chemical make up of tourmalines?

[22:39] <DragonStek> yes

[22:39] <Crystal2> no

[22:40] <doos> yes at the local beauty parlor last week

[22:40] <@Spauwe>  $(\text{Na,Ca}) (\text{Mg,Li,Al,Fe}^{2+})_3 \text{Al}_6 \text{B}_3 \text{Si}_6 (\text{OH})_4$

[22:40] <@Spauwe> nice and easy to remember ey...

[22:41] <@Spauwe> A generic formula for the entire Tourmaline group is:

[22:41] <@Spauwe>  $\text{X}_1 \text{Y}_3 \text{Al}_6 \text{B}_3 \text{Si}_6 (\text{OH})_4$

[22:41] <@Spauwe> X = Na and/or Ca

[22:41] <@Spauwe> Y = Mg, Li, Al, and/or Fe<sup>2+</sup>

[22:41] <doos> may we refer to it as "a complex boro silicate"?

[22:41] <@Spauwe> exactly

[22:41] <@Spauwe> that's how we are taught: a complex boro silicate with isomorphic replacements

22:42] <@Spauwe> it's to damn hard so we just simplify it

[22:42] <@Spauwe> and stop differentiating

[22:43] <@Spauwe> as a reference for the interested check out the following link:

[22:43] <@Spauwe> <http://www.minerals.net/mineral/silicate/cyclo/tourmali/tormform.htm>

[22:44] <@Spauwe> today we'll briefly discuss five main species of interest to us

[22:44] <@Spauwe> elbaite

[22:44] <@Spauwe> liddocoatite

[22:44] <@Spauwe> dravite

[22:44] <@Spauwe> chromdravite

[22:44] <@Spauwe> and schorl

[22:44] <@Spauwe> first up: the most important member

[22:44] <@Spauwe> elbaite

[22:45] <@Spauwe> why is it called elbaite?

45] <DragonStek> after where it was found

[22:45] <@Spauwe> yesh

22:45] <doos> After the name of the island in the mediteranean

[22:45] <@Spauwe> elba, italy

[22:46] <@Spauwe> the isle where napoleon was sent after losing his battle

[22:46] <doos> lol

[22:46] <@Spauwe> how is that for a punishment

[22:46] <doos> first time that is

[22:46] <@Spauwe> yesh

2:46] <DragonStek> history ? gemstones

[22:46] <DragonStek> lol

[22:46] <@Spauwe> imagine being punished by being sent to a gem locality

[22:47] <doos> everestite

[22:47] <@Spauwe> but let's get on (dragon doesn't like history)

[22:47] <DragonStek> no

[22:47] <DragonStek> go ahead

[22:47] <@Spauwe> what would be the most expensive elbaite around at the moment?

[22:48] <DragonStek> paraiba

[22:48] <doos> mozambique paraiba

[22:48] <@Spauwe> yesh

[22:48] <@Spauwe> let's keep it to paraiba, marketing will mess gemmology up

[22:49] <doos> well the miners in Brazil import it from Mozambique

[22:49] <@Spauwe> so, elbaite with the chemical formula:  $\text{Na (Li,Al)}_3 \text{Al}_6 \text{B}_3 \text{Si}_6 (\text{OH})_4$

[22:49] <doos> and sell it as "mined" in paraiba

22:49] <@Spauwe> of course they do

22:50] <doos> that was a joke btw

[22:50] <@Spauwe> let's have the 'scams' come last

[22:50] <@Spauwe> I dunno if that is a joke...

[22:50] <@Spauwe> seems very plausible

[22:50] <doos> me neither now I think of it

[22:50] <doos> heh, too funny

[22:50] <DragonStek> i didnt think you were joking

[22:51] <@Spauwe> but let's keep going

[22:51] <doos> I really was

[22:51] <@Spauwe> what other colours of elbaite are getting around?

[22:51] <@Spauwe> name all hues and secondaries

[22:51] <@Spauwe> ghehehe

[22:51] <@Spauwe> and wake me up when you done

[22:52] <doos> all

[22:52] <@Spauwe> basically: all yes

[22:52] <DragonStek> its over 100

[22:52] <@Spauwe> I'm not sure if I know a 100 colours

[22:52] <doos> sure you do

[22:53] <@Spauwe> but those colours are they idiochromatic or allochromatic?

[22:53] <@Spauwe> check formula above

[22:53] <@Spauwe> any transition elements in it?

[22:54] <doos> ask me when you are done waiting

[22:54] <@Spauwe> let the girls answer this one

[22:55] <Crystal2> idiochromatic

[22:55] <DragonStek> red rubelite, indicolite blue , verdelite green , siberite reddish-violet, watermelon , bi-tri color

[22:55] <Crystal2> sorry, takes the computer a while to catch up

[22:55] <@Spauwe> nice cut and paste from GP dragon

[22:55] <DragonStek> ah no i typed it

[22:55] <DragonStek> thats where my notes are from

[22:56] <@Spauwe> could have saved you the effort, that's the GP to the word

22:56] <@Spauwe> so are mine :) that's how I know

[22:56] <DragonStek> oh didnt know

[22:56] <Crystal2> need coffee; brb

[22:56] <@Spauwe> kewl

[22:56] <@Spauwe> how was annie's little way of remembering things again

22:56] <@Spauwe> idiots think they don't need help

[22:57] <doos> the GP is an unfinished project, so it should not be used as an ultimate resource

[22:57] <doos> yes

[22:57] <DragonStek> i know but its good stuff on GP

[22:57] <@Spauwe> it is

[22:58] <DragonStek> and allos take help

[22:58] <@Spauwe> so but is there any transition elements present in elbaite's basic chemical formula?

[22:58] <DragonStek> no its colorless

[22:58] <@Spauwe> dragon?

[22:58] <@Spauwe> exactly

[22:59] <@Spauwe> so it takes help

[22:59] <@Spauwe> next family member: liddicoatite

[23:00] <@Spauwe> Ca (Li,Al)<sub>3</sub> Al<sub>6</sub> B<sub>3</sub> Si<sub>6</sub> (OH)<sub>4</sub>

[23:00] <@Spauwe> named after?

23:00] <doos> mister Taddy?

[23:00] <DragonStek> the minerologist ?

[23:01] <@Spauwe> yesh

[23:01] <doos> after mister Taddy?

[23:01] <@Spauwe> you guys know more about this species?

[23:01] <doos> no

[23:01] <@Spauwe> you want me to ask who mr Taddy is doosie?

[23:02] <@Spauwe> well I know nothing about it either to be honest

[23:02] <doos> no not really

[23:02] <@Spauwe> it has calcium as a component instead of Na

[23:03] <@Spauwe> but I've never laid eyes on a piece that was represented as such

[23:03] <@Spauwe> (that I can remember)

[23:03] <@Spauwe> then there is dravite and chrom dravite

[23:04] <DragonStek> my info is its a complex multi-colored zoning uncommon from madagascar

[23:04] <@Spauwe> Na Mg<sub>3</sub> Al<sub>6</sub> B<sub>3</sub> Si<sub>6</sub> (OH) and Na Mg<sub>3</sub> Cr<sub>6</sub> B<sub>3</sub> Si<sub>6</sub> (OH)<sub>4</sub>

23:04] <@Spauwe> what colour do you associate with these two?

23:05] <DragonStek> brown n black, green

[23:05] <@Spauwe> yesh

[23:06] <@Spauwe> and with chrom dravite we finally have an idiot

[23:06] <@Spauwe> the chromium component is seen as an essential part of it's make up

[23:07] <@Spauwe> and since the rich green is caused by it we have an idiochromatic stone

[23:07] <@Spauwe> last family member that is probably the most common :

[23:07] <@Spauwe> schorl

[23:08] <@Spauwe> Na Fe<sub>2+3</sub> Al<sub>6</sub> B<sub>3</sub> Si<sub>6</sub> (OH)<sub>4</sub>

23:08] <@Spauwe> the black opaque variety

[23:09] <@Spauwe> but since we can't really tell 'm apart with our basic tools (except for that chromdravite) we don't use these names a lot

[23:09] <@Spauwe> what we do see everyday of the week is the color varieties

[23:09] <@Spauwe> achroite: colorless

[23:09] <@Spauwe> rubellite: red

[23:09] <@Spauwe> indicolite: blue

[23:10] <@Spauwe> verdilite: green

[23:10] <@Spauwe> the GP states the coloring elements as well

[23:10] <@Spauwe> Fe and Mn for rubellite

[23:11] <@Spauwe> Fe for indicolite

[23:11] <@Spauwe> Fe and Ti for verdilite

[23:11] <@Spauwe> and doos, what's up with the siberite?

[23:11] <@Spauwe> never heard of it before

[23:11] <doos> dunno

[23:12] <DragonStek> reddish violet one

[23:12] <@Spauwe> where did you find that?

[23:12] <doos> its just a tradename, like the rest

[23:12] <@Spauwe> webster?

[23:12] <doos> probably

[23:12] <@Spauwe> yep, ok

[23:12] <@Spauwe> well these names get used a whole lot more

[23:12] <@Spauwe> why?

[23:12] <doos> if I could remember all I wrote, I would not be sitting here

[23:13] <@Spauwe> because we can tell 'm apart a whole lot easier

[23:13] <@Spauwe> just our eyes will do

[23:13] <@Spauwe> ow yeah I forgot about paraiba

[23:13] <@Spauwe> neon green and blue caused by cu and mn

[23:14] <@Spauwe> if I could remember all I wrote, I would not be sitting here <---- ghehe, where then?

[23:14] <Crystal2> anyplace that would let him in :p

[23:14] <doos> heh

[23:15] <doos> so not the states

[23:15] <@Spauwe> further names that we run into all the time are water melon, bi-colour and tri-colour

[23:15] <Crystal2> lol

[23:15] <@Spauwe> these speak for themselves

[23:16] <@Spauwe> now... in id-ing tourmalines where do we get our diagnostics from?

[23:16] \* doos raise hand

[23:16] <@Spauwe> go

[23:16] <doos> +s somewhere

[23:16] <doos> candy colour

[23:16] <@Spauwe> ghehe

[23:16] <doos> really

[23:17] <doos> especially in cabochons

[23:17] <@Spauwe> not to be considered diagnostic by Tim Spauwen FGA

[23:17] <doos> they look like artificial candy

[23:17] <DragonStek> SG , RI , BIREFRINGE , INCLUSIONS

[23:17] <@Spauwe> now that is what we want to hear

[23:17] <DragonStek> they do look ike candy

[23:17] <doos> ty DragonStek

[23:17] <DragonStek> i think that everytime i see one

[23:18] <Crystal2> they look yummy to me

[23:18] <@Spauwe> they have a distinct look to them and a bit of experience may do it there

[23:18] <doos> indeed

[23:18] <@Spauwe> ask dave fortier...

[23:18] <DragonStek> lol'

[23:18] <@Spauwe> ghehe

[23:18] <DragonStek> never trust your eyes only your tools

[23:18] <Crystal2> lol

[23:18] <@Spauwe> davejimchee for those that don't know his full name

[23:19] <doos> trust your eyes first

[23:19] <@Spauwe> so indeed, I rather like my tools

[23:19] <DragonStek> he used his eyes for an id

[23:19] <DragonStek> not his tools

[23:19] <doos> they are the windows to your mind

[23:19] <@Spauwe> when I trusted my eyes I misID-ed that light coloured andalusite as yellow tourmaline doosie

[23:20] <@Spauwe> remember that one

[23:20] <doos> maybe because you are not allochromatic Spauwe

[23:20] <@Spauwe> but an idiot...

[23:20] <@Spauwe> ghehe

[23:20] <@Spauwe> yesh

[23:20] <@Spauwe> but back to the positive ID

[23:21] <@Spauwe> usually you'll find a RI of 1.62 to 1.64

[23:21] <@Spauwe> although 1.610 to 1.698 is possible

[23:22] <@Spauwe> the birefringence of tourmaline lies around the 0.019

[23:22] <@Spauwe> but again may be as big as 0,039

[23:22] <@Spauwe> now, there's only one other mineral that may cause confusion here: i experienced that once: andalusite

[23:23] <@Spauwe> but while taking your readings that should be obvious instantly...

[23:23] <@Spauwe> whay?

[23:23] <doos> because you are blind

[23:23] <@Spauwe> ghehe

[23:23] <Crystal2> lo

[23:24] <DragonStek> sg is 3.03, tri colors

[23:24] <@Spauwe> what should I have seen?

[23:24] <@Spauwe> just the refractometer here dragon

[23:24] <DragonStek> opps

[23:24] <@Spauwe> but that tri colours bit is a clue

[23:25] <@Spauwe> think optic signs

23:25] <doos> character

[23:25] <DragonStek> optic sign +

[23:25] <@Spauwe> character indeed

[23:26] <@Spauwe> tourmaline crystallizes in the trigonal system and is therefore automatically uniaxial

[23:26] <@Spauwe> andalusite is biaxial

[23:27] <@Spauwe> so I would have two shadow edges moving instead of one

[23:27] <@Spauwe> sow... actually an easy call that would be obvious straight away (if you can see that is)

23:28] <@Spauwe> onto the next test: the feared SG

[23:28] <@Spauwe> sg=3

[23:28] <@Spauwe> but way more definite is the microscope

[23:29] <@Spauwe> the inclusions in tourmaline are pretty much an open book

23:30] <@Spauwe> the so called trichites are an easy way to tell a piece is tourmaline

[23:30] <doos> or ..

[23:30] <@Spauwe> spess

[23:30] <doos> yes

[23:30] <@Spauwe> but that being singly refractive

[23:30] <@Spauwe> no confusion there

[23:30] <doos> no

[23:31] <DragonStek> the tubes runs parallel to the c axis

[23:31] <doos> that aswell DragonStek

[23:31] <DragonStek> hehe youe notes

[23:32] <doos> but he is talking about the trichites

[23:32] <DragonStek> aren't they parallel to the c axis

[23:32] <@Spauwe> the trichites go all ways dragon

[23:32] <@Spauwe> no distinct orientations there

[23:33] <doos> google for images of a trichite and you'll understand where the name comes from

[23:33] <@Spauwe> the hollow straight tubes that are found in many pieces do so

[23:34] <@Spauwe> further inclusions that are common in tourmalines are two and three phase inclusions

[23:34] <@Spauwe> often somewhere along the network of trichites

[23:35] <@Spauwe> thus telling us that the trichites are made up out of liquid filled slender cavities

[23:35] <@Spauwe> buy a couple of \$1,- tourmalines from some Thai vendor

[23:36] <@Spauwe> there'll be trichites in 'm

[23:36] <DragonStek> i have some

[23:36] <@Spauwe> isn't there any in that pale colored piece you bought from dave?

[23:36] <@Spauwe> yes

[23:37] <@Spauwe> so you familiar with 'm dragon?

[23:37] <DragonStek> yup

[23:37] <@Spauwe> owkeej

[23:37] <@Spauwe> now then: imagine

[23:37] <@Spauwe> you are all in a classroom and have a polariscope with conoscope at your disposal

[23:38] <@Spauwe> you are all given a green emerald cut tourmaline

[23:38] <@Spauwe> the teach instructs you to go look up the optic sign

[23:38] <doos> character

[23:39] <@Spauwe> what's wrong with sign?

[23:39] <doos> I'll shush

[23:39] <DragonStek> is that the proper word

[23:39] <@Spauwe> no tell me, I thought that would be the proper name...

[23:40] <doos> no go ahead

[23:40] <DragonStek> so its optic character if positive or negative

[23:40] <@Spauwe> I'll look that up again, things are leaving my head a bit

[23:40] <Crystal2> please explain because it's always confused me which one to call each one

[23:40] <@Spauwe> there you go...

[23:40] <Crystal2> I thought the character was what you saw in the conoscope

[23:41] <@Spauwe> doos: the difference between optic sign and character is....

[23:41] <Crystal2> and the sign was positive or negative

[23:41] <doos> please go ahead Spauwe, I'll explain after

[23:41] <Crystal2> why wait?

[23:41] <@Spauwe> yesh I need smoke rolling time anyway

[23:41] <Crystal2> lol

[23:41] <doos> ok then

[23:42] <doos> the "character" means either uniaxial or biaxial

[23:42] <doos> the "sign" means either + or -

[23:42] <doos> thats it

[23:42] <@Spauwe> what crystal said

[23:42] <@Spauwe> ok

[23:42] <doos> basucally yes

[23:42] <DragonStek> ok i got it backwards

[23:42] <DragonStek> i corrected my notes thanks

[23:42] <@Spauwe> and you can get the sign with a polariscope and conoscope but you need retardation plates?

[23:43] <Crystal2> Whew! Thanks

[23:43] <@Spauwe> them slices of mica

[23:43] <doos> indeed Spauwe

[23:43] <@Spauwe> okidokie

[23:43] <@Spauwe> all freshed up that knowledge

[23:43] <@Spauwe> so:

[23:43] <@Spauwe> classroom

[23:44] <@Spauwe> polariscope and conoscope

[23:44] <@Spauwe> green emerald cut stones

3:44] <Crystal2> where to get those retardation plates?

[23:44] <@Spauwe> teach asking for the optic character

[23:44] <@Spauwe> I may not be able to answer the teach

[23:44] <@Spauwe> why?

[23:45] <Crystal2> heheh, no retardation plate?

[23:45] <@Spauwe> character

[23:45] <@Spauwe> no plate needed

3:45] <doos> no need for a retardation plate on that

[23:45] <doos> heh

[23:45] <Crystal2> I was trying to be funny :)

[23:45] <Crystal2> saawy

[23:46] <DragonStek> kerez effect

<@Spauwe> the kerez effect has got nothing to do with the polariscope

[23:46] <DragonStek> i dont know then

[23:46] \* doos raise hand

[23:47] <doos> +s somewhere

[23:47] <@Spauwe> what property (that no other stone has to my knowledge) can get in the way here?

[23:47] \* doos raises hand

[23:47] \* doos raises hand

[23:47] \* doos raises hand

[23:47] <Crystal2> if no other stone has it, how would we know about it?

[23:47] <doos> teach teach

[23:47] <doos> I know

[23:47] \* Crystal2 slaps doos hand

[23:47] <@Spauwe> go ahead

[23:48] \* doos cries and points at Crystal2

[23:48] <Crystal2> don't call him no goathead

[23:48] <doos> she slapped me

[23:48] <doos> now I'm not going to answer

[23:48] <@Spauwe> not hard enough

[23:48] <doos> assholes

[23:48] <DragonStek> oh hugs doos

[23:48] <@Spauwe> ok dragon and crystal you do know the answer

[23:48] \* doos cuddles up to DragonStek

[23:49] <DragonStek> br high

[23:49] <@Spauwe> what do we need to find to observe the optic character?

[23:49] <@Spauwe> in between crossed polars using a conoscope?

[23:49] <@Spauwe> we turn the stone untill....

[23:49] <doos> brb

[23:49] <Crystal2> it goes dark

[23:49] <DragonStek> it blinks

[23:50] <@Spauwe> we see interference colours

[23:50] <@Spauwe> which indicates that we are now looking straight down the optic axis

[23:50] <Crystal2> but it has to be dark

[23:50] <@Spauwe> which is in the c axis in tourmaline

[23:50] <doos> back

[23:50] <Crystal2> front

[23:51] <doos> ontop

[23:51] <@Spauwe> the dark bit will occur not just on the c axis

[23:51] <@Spauwe> so I would go for the interference colors

[23:51] <@Spauwe> but...

[23:52] <@Spauwe> with this experiment there may be a problem

[23:52] <doos> come on girls .. you know this

23:52] <@Spauwe> cuase the c-axis may be black as the night

[23:52] <DragonStek> closed c axis

[23:52] <doos> finally

[23:52] <@Spauwe> tourmaline (greens) often have what cutters call a closed C axis

[23:53] <@Spauwe> yesh!

[23:53] <DragonStek> oh dop i knew that and erased it

[23:53] <@Spauwe> the material can be fully transparent through every direction except for the optic axis

[23:54] <@Spauwe> which has a few consequences for the orientation of cut

[23:54] <Crystal2> I thought I said that by saying you have to have the stone in the dark position to find the colors, and ultimately the optic character

[23:55] <@Spauwe> well with a closed c axis there will be no colors and it's impossible to determine the optical character that way then

[23:55] <@Spauwe> no light is getting through

[23:55] <@Spauwe> it's all absorbed

[23:55] <doos> yes you did Crystal2, but that holds true for all directions along the optic axis, tourmaline has an addition feature

[23:56] <@Spauwe> so that would be another diagnostic clue:

[23:56] <@Spauwe> find yourselves a stone that is opaque through just one direction and your done

[23:57] <@Spauwe> now what else can we discuss

[23:57] <@Spauwe> common treatments

[23:57] <doos> that is bit too optimistic, but getting there

[23:57] <Crystal2> ok, thanks

[23:57] <DragonStek> heat treatment

[23:58] <@Spauwe> yesh dragon

[23:58] <@Spauwe> apparently there was a thread in august on this

[23:58] <@Spauwe> I spotted that one 3 hours ago

[23:59] <@Spauwe> it was going on when I was waiting for my new internet provider to get his act together and missed it completely

[23:59] <@Spauwe> but it's done on a large scale

[23:59] <@Spauwe> and always seems to create the color to get lighter

[23:59] <@Spauwe> dark blues to neon blues

Session Time: Sun Oct 05 00:00:00 2008

[00:00] <@Spauwe> dark reds to pinks

[00:00] <@Spauwe> the heating is a low temp enterprise to about 400 something degrees and is basically undetectable

[00:01] <doos> call the jvc!

[00:01] <@Spauwe> I find that when stuff is undetectable it gets accepted by the trade straight away

[00:01] <Crystal2> lol

[00:01] <DragonStek> because you cant prove either way

[00:02] <@Spauwe> everybody shruggs and the best solution to something like that is to say: oh well, let's not have it influence price then

0:02] <doos> why shrugg?

[00:02] <@Spauwe> it's still a young science... it'll be interesting to see what's going on when I turn 60

[00:03] <@Spauwe> shrugg as in if we can't tell 'm apart let's do nothing then

[00:03] <doos> or accept it

[00:03] <@Spauwe> if there would be a way then i think it would affect price, don't you?

[00:03] <doos> shall I tell you a little story?

[00:03] <DragonStek> helping nature

[00:03] <@Spauwe> yesh!

[00:04] <DragonStek> yes doos

[00:04] <Crystal2> sure

[00:04] <doos> yesterday I went shopping

[00:04] <doos> for a blue lambwool sweater

[00:04] <doos> I asked the sales girl "is this natural lambs wool"

[00:04] <doos> yes she said

[00:05] <doos> "BUSTED"

[00:05] <@Spauwe> sheep aint blue

[00:05] <doos> have you ever seen a blue lamb?

[00:05] <DragonStek> hehe i see

[00:05] <doos> ssee

[00:05] <doos> -s somewhere

[00:05] <@Spauwe> a little story from me then

[00:05] <Crystal2> love it

[00:06] <DragonStek> ok good story time

[00:06] <@Spauwe> yesterday I went shopping as well

[00:06] <DragonStek> lol

[00:06] <@Spauwe> for a blue lambswool sweater

[00:06] <Crystal2> lol

[00:06] <@Spauwe> they have found these really rare smurf sheep in northern Holland recently

[00:06] <doos> heh

[00:06] <doos> lol

[00:06] <DragonStek> hehehe

[00:06] <Crystal2> roflmao

[00:07] <@Spauwe> so I'm asking this lady: 'is this blue sweater from those really rare sheep up north?'

[00:07] <doos> gawd I almost choked

[00:07] <@Spauwe> 'no' she says, 'this is died stuff from belgium'

[00:07] <Crystal2> :p

[00:07] <doos> should have thought of that

[00:07] <@Spauwe>' but why is it still 200000000 euros then I asked?'

[00:08] <Crystal2> 'cause they can get away with it!!

[00:08] <@Spauwe> 'because we sell 'm for that price, not everybody asks the questions you ask,' she says

[00:08] <@Spauwe> aaahhhh

[00:08] <@Spauwe> now you see?

[00:09] <Crystal2> yeppers

[00:10] <DragonStek> but most sellers aren't gemologists

[00:10] <@Spauwe> if there was a way to differentiate between heated blue tourmaline and natural blue tourmaline it would be milked by the ones digging up the real deal

[00:10] <Crystal2> oh yeah

[00:10] <doos> now you ask .. what does this have to do with tourmaline?

[00:10] <@Spauwe> BUT: it's the same stuff the natural blues; mother nature heated it for us

[00:10] <Crystal2> like natural blue tanzanite

[00:10] <doos> indeed

[00:11] <@Spauwe> isn't it the same as with sapphires?

[00:11] <doos> who cares, as long as the product is great and the price is right

[00:11] <Crystal2> that's very true, doos

[00:11] <@Spauwe> there is nowhere near enough natural blues around to fuel the market

[00:11] <@Spauwe> so there's heated gueda's

[00:12] <@Spauwe> but: they sell for less

[00:12] <@Spauwe> because: they are not '100% natural'

[00:12] <DragonStek> cause you can tell

[00:12] <@Spauwe> and we can tell 'm apart (most of the time)

[00:12] <@Spauwe> yesh dragon

[00:12] <@Spauwe> that's the point I was trying to make

[00:13] <@Spauwe> my personal opinion on treatments is that it's fine, > if it brings bread on the table of miners let them...

[00:13] <doos> the problem with our industry is not that we do not care, but that we care too much

[00:13] <doos> do you ever go to a party and hear people complain that their sweater was dyed?

[00:14] <@Spauwe> nah

[00:14] <DragonStek> hehe depends on the group

[00:14] <doos> touche DragonStek

[00:14] <@Spauwe> ok briefly to be complete:

[00:15] <doos> but then again, I dont like cornflower snacks

[00:15] <@Spauwe> tourmalines can be irradiated as well

[00:15] <DragonStek> me either

[00:15] <DragonStek> but irradiation is not stable

[00:16] <@Spauwe> when irradiated the heat treatment is reversed basically

[00:16] <@Spauwe> it's used to darken colours

[00:16] <@Spauwe> that cobalt60 mob claims it is

[00:16] <@Spauwe> stable

[00:17] <doos> it is

[00:17] <doos> its not a mob

[00:17] <DragonStek> ok fixed notes

[00:17] <doos> they will let you in if you make an appointment

[00:18] <doos> really, there is no secret

[00:18] <@Spauwe> kewl

[00:18] <@Spauwe> should visit them once then

[00:19] <DragonStek> become a made man lol

[00:19] <@Spauwe> well that would be it on tourmalines from my side...

[00:19] <@Spauwe> any questions?

[00:19] <doos> yes

[00:19] <@Spauwe> shoot

00:19] <doos> whats up with that paraiba

[00:20] <@Spauwe> well, in the deep effort of coming up with a unique distinction between different tourmalines people messed up

[00:20] <@Spauwe> the paraiba sellers thought that the presence of copper made their material unique and therefore detectable

[00:20] <@Spauwe> but wrong

[00:20] <@Spauwe> African material had the same composition

[00:21] <doos> bummer

[00:21] <@Spauwe> and they wanted a piece of the pie as well so started selling their stuff for big dollars and the same name as well

[00:21] <doos> the brazilians?

[00:22] <@Spauwe> nope the people with access to the African material

[00:22] <@Spauwe> nowadays people have red tourmalines depicted as copper bearing or cuprian

[00:23] <doos> I'm confused, who are the crooks and who are the bad guys?

00:23] <@Spauwe> nobody is a crook

[00:23] <doos> ok

[00:23] <@Spauwe> just a wrong decision somewhere down the line

[00:23] <doos> by whom?

[00:24] <@Spauwe> i dunno, who came up with that copper bearing line?

[00:24] <@Spauwe> stating that the presence of copper added the big dollars led to people making the big dollar

[00:24] <@Spauwe> and now we have people pointing at each other calling each other crooks