

[00:03] <Sara> http://www.minerals-n-more.com/Silicates_Class.html#Cyclosilicate
[00:03] <Sara> Tourmalines are in there....somewhere
[00:03] <Doos> did you do some reading?
[00:04] <Sara> under Cyclosilicate Subclass
[00:04] <Sara> Me? Don't ask me that
[00:05] <Doos> we hardly use strunz classes in gemology, but it's good that you are aware of them
[00:05] <Frank> Thats a heavy list on that page Sara
[00:05] <Sara> Well, I like mineralogy
[00:05] <Doos> that's good
[00:05] <Sara> I know frank, but at the top you can click cyclosilicates
[00:06] <Sara> and it'll scroll down for you
[00:06] <Sara> I think
[00:06] <Frank> lol...yes did that
[00:06] <Doos> but then again, knowing some mineralogy is good for an overall understanding
[00:06] <Sara> buying minerals is much friendlier on the wallet then gemstones
[00:06] <Doos> if you know more than you should, knowing what you should becomes easier
[00:07] <Doos> or understanding rather
[00:07] <Sara> gem people and mineral people are both nuts in their own way
[00:07] <Sara> usually I like mineral people better
[00:07] <Doos> thank you, you may go now
[00:07] <Frank> lol
[00:07] <Sara> call me gem tree tacky
[00:07] <Sara> *my
[00:08] <Doos> heh
[00:08] <Doos> payback huh?
[00:08] <Sara> it's a bitch, isn't it?
[00:08] <Doos> yah
[00:08] <Sara> you're picky
[00:08] <Doos> in home decorating yes
[00:08] <Sara> they are simple in the way that they appreciate habit and structure
[00:08] <Sara> you just want a pretty cut, if I do dare so
[00:09] <Sara> say
[00:09] <Doos> a bad one is okay aswell, as I can learn something from it
[00:09] <Sara> ok, on to tourmalines
[00:10] <Sara> we've procrastinated long enough
[00:10] <Doos> Annie, I did some reading and the only reference to the "kerez effect" was in Gemmology by Read
[00:10] <Doos> interesting
[00:10] <Annie> yes
[00:11] <Doos> shall we do practical of tourmaline by Annie?
[00:11] <Frank> yes please
[00:11] <Sara> if you log this, I want you to edit my spelling
[00:11] <Annie> I thought we were finished
[00:12] <Sara> Doos couldn't go on without you
[00:12] <Doos> no Annie, we only really did inclusions
[00:12] <Annie> oh no.. Doos is my master, he is good - better than me
[00:12] <Sara> that's what he says about you
[00:12] <Doos> not on the practical side
[00:12] <Frank> you have a larger hard drive Annie :)
[00:13] <Doos> that aswell

[00:15] <Doos> Annie, could you start with the nice weird refractometer readings one may find in tourmaline

[00:21] <Doos> let's discuss Kerez, I found that very interesting

[00:22] <Doos> I googled for him and all I could find on him is that he is a geologist from Venezuela

[00:23] <Doos> neither Webster nor the Gem-A courses have any mention of him

[00:23] <Doos> where did you learn that Annie?

[00:23] <Frank> I never heard of him...should I go get my copy of Read

[00:23] <Doos> yah

[00:23] <Annie> if you test green tourmalines, this may be evident

[00:24] <Annie> the guy was a doctor

[00:24] <Annie> it creates sort of 4 lines of shadow edges especially in greens

[00:25] MoDo (~MoDo@70.35.248.85) joined #go.

[00:25] <Doos> hi MoDo, sit in we just started

[00:25] <Annie> Hi Modo

[00:26] <MoDo> Don't know how long my service will last!

[00:26] <Frank> Hi Modo

[00:26] <MoDo> Hi, All

[00:26] <Doos> Annie, do you have any other references other than Read's book?

[00:26] <Annie> my reference is the tests

[00:26] <Annie> if you have enough green tourmalines - you may want to do this

[00:26] <Annie> it's not written much

[00:27] <Annie> but we do try to show students here

[00:27] <Annie> as it can get a little confusing with 4 shadow edges

[00:27] <Doos> Read describes it as caused by overheating during the polishing process

[00:27] <Sara> is there an ideal cut to see this?

[00:27] <Annie> yes, it is believed due to this

[00:28] <Annie> because tourmalines have the special property for heat

[00:28] <Sara> the soot thing!

[00:28] <Annie> this creates this phenomena

[00:28] <Doos> have you seen it in other colours as well?

[00:28] <Annie> no

[00:29] <Annie> the others are pretty consistent

[00:29] <Doos> I wonder why only the greens

[00:29] <Frank> what percentage of the green stones show this Annie

[00:29] <Annie> especially in the darker ones

[00:30] <Frank> does this imply that the RI of a green tourmaline sample can be changed by heating?

[00:30] <Doos> so either Iron or Titanium is the cause of that, or also the chrome tourmalines?

[00:30] <Annie> yes, it can give you a biaxial readings

[00:31] <Annie> and the darker ones can look very much very dark green to brownish

[00:31] <Annie> and can be confused - a lot of people have identified them as andalusites

[00:32] <Doos> could you give some hints on how to get the correct readings?

[00:33] <Annie> well, if any of you are using the polaroid disk between your light portal and the instrument

[00:33] <Annie> or the front polaroid on your eyepiece

[00:35] <Annie> what you need to do is

[00:35] <Annie> lift back your polaroid disk a little off the ground - say about 10 %

[00:35] <Annie> this eliminates at least 2 shadow edges

[00:36] <Annie> and you are left with the other 2 whilst taking the readings

[00:36] <Annie> if you take the reading of the last shadow edge
[00:37] <Annie> and continue to do do that all the way
[00:37] <Annie> it will be near to be correct
[00:37] <Annie> not perfect,
[00:37] <Annie> as this will have a little discrepancy
[00:37] <Doos> I don't have a polaroid between the lightsource and the refractometer, just on the eyepiece
[00:38] <Annie> the BR will still be high as up to 0.020 between the high and lower readings
[00:38] <Annie> well Doos, are you using the little front eyepiece polaroid
[00:38] <Doos> yes
[00:39] <Annie> thats similar - just turn your round polaroid a little anti clockwise
[00:39] <Annie> it should do the same
[00:39] <Frank> Annie if both lines are observed down the same axis then will both lines move in parallel as you turn the stones (ie will the difference between them stay the same)
[00:39] <Doos> aha
[00:40] <Annie> it a process of elimination of the other shadow edges, so Yes
[00:40] <Frank> ty
[00:41] <Annie> does that make sense - so far
[00:41] <Frank> yes
[00:41] <Annie> is there any questions
[00:41] <Doos> yes
[00:41] <Frank> how many greens show this effect Annie...Is it common?
[00:42] <Annie> Frank, i don't know how many - but it is pretty generally common thing that you do keep that at the back of your mind
[00:42] <Frank> Ok thanks
[00:43] <Doos> Annie, when you say "lift them about 10% from the ground" .. did you mean tilt the polarization filter?
[00:43] Guest (~Guest@24.9.35.174) joined #go.
[00:43] <Doos> hi Guest
[00:43] <Frank> hi guest
[00:43] <Guest> hi
[00:43] Nick change: Guest -> neil
[00:43] <Annie> Hi Gus,
[00:43] <Doos> hey neil
[00:43] <Annie> sorry, Hi guest
[00:43] <Annie> Ohh , Hi Neil
[00:43] <neil> Hi. there's a crowd here.
[00:43] <Annie> sorry, i should have used tilting, yes
[00:44] <Annie> tilt back
[00:44] MoDo (~MoDo@70.35.248.85) left irc: Ping Timeout
[00:44] <Doos> ok, now I get it
[00:44] <Doos> I never used one of those refractometers
[00:45] <Annie> Hi Neil, so good you could join us
[00:45] <Frank> Are we speaking of dialdex here?
[00:46] <neil> I have a dialdex that I got at a going out of business deal. I've never used it. Is it worth the trouble to learn?
[00:46] <Frank> we've been discussing the Kerez effect Neil
[00:46] <Sara> I found a good tourm site, but I don't know what key words to look for
[00:47] <Annie> some people are happy to use dialdex - it should work on the same principles

[00:47] <Frank> four lines on a refractometer when testing green
tourmaline...are you familiar with it...I just heard of it tonight

[00:48] <Frank> wasn't the dialdex designed for doing cabs by the distance
method?

[00:48] <Doos> I thought that was the GIA one

[00:49] <Doos> what kind do you use Annie?

[00:49] <Annie> yes, and you can use it to take a full readings

[00:49] <Annie> I like my german brand eikhorst

[00:49] <Doos> the modular ones?

[00:50] <Annie> sorry, just gotta go to the loo

[00:51] <Frank> ok me too

[00:51] <Frank> brb

[00:52] <neil> I saw an interesting rock yesterday. Synthetic fosterite/YAG
doublet sold as Tanzanite.

[00:53] <Doos> ah nice

[00:53] <Doos> clear YAG?

[00:54] <neil> Purple/blue. It was slightly different color than the top and it
gave a really good imitation of the pleochroism.

[00:55] <neil> Blue with purple flash. Very nice looking stone.

[00:55] <Doos> convincing enough?

[00:55] <Sara> a garnet is convincing?

[00:55] <Frank> What does it look like under the chelea?

[00:56] <neil> Pretty much. They bought it in the caribbean and they had it
loose so it wasn't all that hard to tell but if it had been mounted it would
have been a bitch.

[00:56] <neil> I didn't look. :(

[00:56] <Annie> back,

[00:57] <Doos> can you ask the client back in?

[00:57] <neil> They were pissed off that it wasn't reall and were anxious to get
out of my office.

[00:57] <Doos> I guess that answered it

[00:57] <Sara> I would imagine

[00:57] <Annie> Neil, did the purple flashes and pleoc made your alarm bells go
off

[00:57] <neil> Maybe. My guess is that they rang up the dealer and returned it
immediately.

[00:57] <Frank> lol...it's always the gemmologists fault

[00:58] <Sara> when did kerez make these findings?

[00:58] <neil> They may havefound some jeweler who will tell them that it's
worth \$800.ct.

[00:58] <neil> The weight is what triped the alarm bells. It was really a very
convincing look.

[00:58] <Frank> how big was it?

[00:58] <Doos> nice topic for on the forum

[00:58] <neil> No glue line at all. I'm not sure how this was done but I'm told
that the new UV curing clues work really well.

[00:59] <neil> 4.5 cts.

[00:59] <Frank> Sara...the book "Read's" doesn't say

[00:59] <Sara> damn reads

[00:59] <Doos> I could drop him an e-mail

[00:59] <Frank> at least he mentions it...more than the others do

[00:59] <Sara>

<http://www.geol.lsu.edu/henry/Research/tourmaline/TourmalineToday.htm>

[00:59] <Annie> yes

[01:00] <Sara> I was looking there

[01:00] <Sara> but kerez it too abstract
[01:00] <Annie> Sara, it doesnt get mentioned what year this came about
[01:00] <Sara> you'd think another geology guy would have something
[01:01] <Frank> you can be that guy Sara
[01:01] <Doos> I'll e-mail Read and ask
[01:01] <Sara> That's nice of you, Alain
[01:01] <Sara> Ok, I'll be that guy
[01:01] <Doos> I want to know aswell
[01:02] <Annie> that will be interesting
[01:02] <Doos> okay back to tourmaline practicals
[01:02] <Frank> yes
[01:02] <Annie> Sara, maybe we can email this darryl guy
[01:02] <Annie> as well
[01:02] <Doos> what else should we be doing wen suspecting tourmaline Annie?
[01:02] <Annie> regardless, one should look out for high BR and doubling
[01:03] <Annie> and other such as SG
[01:03] <Annie> thats the give away bit
[01:04] <Annie> if you are confused about your readings, consult your good old
SG not only gives you at least above 3.10
[01:04] <Doos> other stones that fall in the same RI range are Apatite, Topaz,
Andalusite and Danburite
[01:04] <Annie> whereas your SG of andalusite is up to 3.03
[01:04] <Annie> and double check the calculations
[01:05] <Annie> even it its out by 0.02 or 0.03 in values can be the
distinugiushing factor.
[01:05] <Doos> SG of anda = 3.18
[01:06] <Annie> apatite and topax is problably more colour factor that alarms
bell should give you a wake up call
[01:06] <Sara> Yes, we ought to email that guy
[01:06] <Annie> green apatites are sometimes lighter
[01:06] <Annie> Sara, if you don't believe, please email the guy , by all means
[01:06] <Annie> or ask the forum, there are more knowledgeable people there
[01:06] <Doos> apatite is the only other uniaxial stone in that RI range
[01:07] <Doos> who is Darryl?
[01:07] <Annie> yes aapatite has BR up to 0.12
[01:07] <Sara> No, Annie ... I meant to ask him for some aid in directing me in
the right direction on his site
[01:07] <Annie> ok
[01:07] <Frank> Doos called it "the great deceiver"
[01:07] neil (~Guest@24.9.35.174) left irc: neil
[01:08] <Frank> Apatite I mean
[01:08] <Sara> D is the petrology guy
[01:08] <Doos> ah ok
[01:08] <Annie> oh Neil left
[01:08] <Doos> apatite is the only other uniaxial stone in the RI range of
tourmaline but has much less DR
[01:09] <Annie> yes
[01:09] <Annie> you have your constants there
[01:09] <Doos> Topaz has a maximum DR of 0.010 while tourmaline starts at 0.014
[01:09] Guest (~Guest@24.9.35.174) joined #go.
[01:09] Nick change: Guest -> neil
[01:09] <Doos> Topaz and Andalusite both have larger SG than Tourmaline
[01:10] <Frank> Which is generally more expensive Apatite or tourmaline (if all
other factors colour, weight, clarity etc are equal)?
[01:10] <Sara> wb neil

[01:10] <Doos> Tourmaline
[01:11] <Frank> Ok...so it's not like getting lucky ...like with a kyanite in an amethyst parcel
[01:11] <Doos> glad you remembered the "deceiver" part Frank, kinda makes you remember the stone better
[01:11] <Doos> alas not
[01:11] <Frank> yes...I've just done the assignment on natural inorganic materials...it all came in very handy
[01:12] <Annie> Neilm, what are you thoughts on this
[01:12] <Annie> sorry, my typing is bad this morning
[01:12] <Doos> it's okay Annie
[01:13] <neil> I missed the beginning of this whole conversation.
[01:14] <Annie> we were discussing kerez effect tourmalines display -
[01:14] <Annie> and their RI readings
[01:14] <neil> And you're trying to separate from Apatite?
[01:15] <Doos> no the concept itself
[01:15] <Doos> the false biaxial readings in green tourmaline
[01:15] <Annie> no Doos, mentioned that it falls within the same range
[01:16] <Doos> somehow it makes live easier if you see that effect, like having "tourmaline" written on the table
[01:17] <neil> I don't usually find Tourmaline all that difficult a call. RI, Birefringence and I'm pretty confident.
[01:18] <Annie> ok, great, but for a beginner who is trying to come with crip of using the RI instrument efficiently and applying correct methods,
[01:18] <Annie> this would be off putting, not knowing which line to read
[01:19] <Annie> I have discussed the method of eleimination and applying techniques
[01:19] <Annie> maybe you can add to it
[01:19] <neil> I understand, I've just never messed with it so I'm not sure I can advise you anything like as well as Doos.
[01:19] <neil> He's smarter than me.
[01:19] <Annie> Thanks Neil, we are humbled by your presence, as I believe you have many years of expeirnce
[01:20] <Doos> so, anyone have any questions on tourmaline?
[01:20] <Doos> Sara, Frank?
[01:20] <neil> Thanks for the kind words. 30 years of experience is not the same as 1 year of experience 30 times.
[01:21] <neil> I've just been summoned to supper.
[01:21] <Doos> have a great meal
[01:21] <Annie> thanks for coming, Neil
[01:21] <neil> bye all.
[01:21] neil (~Guest@24.9.35.174) left #go.
[01:21] <Frank> No I'm pretty clear now on the Kerez effect and how to deal with it if it comes up....as you say it's like having Tourmaline shouted in your ear
[01:21] <Doos> oh neil, will you start a thread on the tanzanite fake?
[01:21] <Doos> too late
[01:23] <Doos> next week is the chat with Colin Winter
[01:24] <Frank> Yes I'm looking forward to that...is it still 5pm for us?
[01:24] <Doos> yah
[01:24] <Doos> he confirmed doing the chat today
[01:24] <Frank> did you ever get your promised present..doos...Annie?
[01:25] <Doos> no, you?
[01:25] <Frank> not yet
[01:25] <Annie> what present
[01:25] <Frank> from Robert

[01:25] <Annie> no, i never believed it anyway,
[01:25] <Annie> it was a way of sucking up
[01:26] <Frank> lol....well I won't spoil the chat by asking Colin
[01:26] <Doos> in the meantime I got 3 other books, one from India .. so i don't think it's a mail problem
[01:26] <Doos> better not Frank
[01:27] <Frank> don't worry I'll have enough serious questions for Colin
[01:27] <Doos> I know you have
[01:28] <Frank> I've been looking forwards to this chat for some time
[01:28] <Annie> Frank, Colin is your favourite, isn't it
[01:28] <Annie> i know you will have plenty of good questions
[01:28] <Frank> yes one of them (at least the subject matter)...the other I'd like to chat with is Dr Hanneman
[01:28] <Doos> I'll ask him again in a while
[01:29] <Annie> i am sure it can be arranged
[01:29] <Frank> but I really do love my spectroscope
[01:29] <Annie> i am excited to hear you love your spectroscope, not many people do
[01:29] <Doos> and don't forget we have Vincent doing a chat with us in January
[01:30] <Sara> I'm back
[01:30] <Annie> where did you go
[01:30] <Frank> yes he'll be just fine to listen to as well
[01:30] <Doos> with a little luck Hughes will sit in aswell
[01:30] <Frank> Vincents personal guru
[01:31] <Doos> yah great to see that he's living his dream
[01:31] <Frank> Yes it's an inspiration for all of us