

[17:02] <Doos> maybe we could talk about things that you have difficulties with while studying

[17:02] <Frank> well the cats walk all over the paper

[17:02] <MoDo> ☹️ LOL I know that feeling!!

[17:02] <Doos> tell them not to do that

[17:02] <Doos> usually that works

[17:03] <Riniel> so....we're starting from the beginning?

[17:03] <Frank> dunno it was just a suggestion

[17:03] <Riniel> ok...

[17:03] <MoDo> ☹️ What is the beginning?

[17:04] <Doos> or maybe we could talk a bit about natural versus synthetic amethyst

[17:04] <Riniel> ok

[17:04] <Frank> I'm running out of things to put forward to chat about

[17:04] <Frank> ok we can do that doos

[17:04] <Doos> or have we covered that already?

[17:05] <Frank> it has come up and there was a good thread on the subject

[17:05] <Doos> yes there was

[17:05] <Frank> but it's still a good subject

[17:05] <Frank> we could talk about retardation plates (mine)

[17:06] <Riniel> ?

[17:06] <Doos> I still need some twinned synthetics to play with .. hard to find

[17:06] <Frank> I doubt they're disclosed as synth if they are twinned

[17:06] <Doos> have you been playing with it?

[17:07] <Frank> yes but not sure I know what I'm looking for / at

[17:07] <Doos> the changing of the colours

[17:07] <Frank> the whole thing changes colour

[17:07] <Doos> do you have a polariscope?

[17:08] <Frank> yes and I have a bit of rough aquamarine that sits on the polariser with the optic axis straight up so no problem finding the character

[17:09] <Frank> you put a little black dot on the plate...I take it this is the handle end

[17:09] <Doos> with the conoscope .. can you see the four quadrants of the interference figure?

[17:09] <Doos> yes

[17:09] <Frank> yes very clearly

[17:10] <Doos> ah okay

[17:11] <Doos> if you slide the plate between the conoscope and the stone .. the colours in the quadrants change

[17:11] <Doos> that is what you are looking for

[17:11] <Frank> If I remember correctly (ok I had a few beers that night) but when turning yours 45 degrees the colour seemed to shift

[17:12] <Doos> yes

[17:12] <Frank> with this one if I rotate the plate through 45 deg then I get an extinction

[17:12] <Doos> but use it in one particular way .. anyway you prefer .. but stick to that

[17:12] <Doos> can be confusing otherwise as the opposite colours appear in the quadrants

[17:14] <Frank> I've been putting the plate between analyser and conoscope...not conoscope and stone

[17:14] <Doos> it should be just above or just below the stone

[17:15] <Frank> it'll have to be above then as the stone is sat on the glass table

[17:15] <Doos> if you have trouble holding it steady .. just lay it on the polariser  
[17:15] <Frank> but before the conoscope?  
[17:15] <Doos> yes before the conoscope  
[17:15] <Frank> ok I'll try that  
[17:15] <Frank> I was holding it above the conoscope  
[17:16] <Frank> does it make a difference which face is up on the plate?  
[17:16] <Doos> no that doesn't matter  
[17:16] <Frank> ok I'll try again thanks  
[17:17] <Doos> look at the figures 2 and 3 on this link:  
[http://users.skynet.be/jm-derochette/Conoscopy/Uniaxial\\_minerals\\_3.htm](http://users.skynet.be/jm-derochette/Conoscopy/Uniaxial_minerals_3.htm)  
[17:21] <Frank> Ok I've just tried it with the plate between the stone and conoscope and I get the same result as the picture with the top left and bottom right quadrants turning blue  
[17:21] <Doos> from which side are you inserting the plate?  
[17:22] <Frank> from the right  
[17:23] <Doos> that should indicate a negative optic sign  
[17:23] <Doos> is it beryl?  
[17:23] <MoDo> Hey, guys ... since I don't know what you're talking about, and I have stuff to take care of, I'm going to sign out. Perhaps I can come up with a subject for next week.  
[17:23] <Doos> ok MoDo, bye for nw  
[17:23] <Frank> ok...sorry to bore you modo  
[17:23] <Doos> now  
[17:24] <Riniel> bye  
[17:24] <MoDo> Not a problem, Frank. You and Doos go ahead! Bye!  
[17:24] <Frank> yes it's an aquamarine rough  
[17:24] MoDo (~MoDo@70.35.249.220) left irc: MoDo  
[17:24] <Frank> bye  
[17:24] <Doos> well congratulations then :)  
[17:24] <Doos> see how easy it is  
[17:24] Crystal (~Crystal@216.98.174.176) joined #go.  
[17:25] <Crystal> Woo Hoo, I made it back!  
[17:25] <Riniel> hello!  
[17:25] <Doos> and with spaces  
[17:25] <Crystal> Had trouble getting the wireless one connected but finally!  
[17:25] <Frank> yes :)...and if the top right and bottom left turn blue it's uniaxial positive?  
[17:25] <Frank> wb crystal  
[17:26] <Doos> indeed .. makes you wonder why not everyone is using it huh?  
[17:26] <Crystal> thanks Frank  
[17:26] <Frank> yes very quick test...providing you can find the optic axis quickly  
[17:27] <Doos> immersion can help to find it more quick, but some practise should do the trick  
[17:27] <Frank> the other pics on the page you linked to...are these taken using monochromatic light sources?  
[17:27] <Doos> and sometimes it is of great help .. especially on rough where you can't get a refractometer reading  
[17:28] <Doos> yes  
[17:28] <Doos> plus it is just fun todo  
[17:28] <Frank> yes...some of the pics farther down the page look almost biaxial  
[17:29] <Crystal> I'll have to wait for you to post the chat to know what we're doing here

[17:29] <Frank> were talike about retardation plates crystal...doos gave me one to play with and I've been playing  
[17:29] <Doos> we are talking about a nice little gadget known as a retardation plate  
[17:30] <Doos> heh  
[17:30] <Frank> but I was needing assistance on technique  
[17:30] <Crystal> never heard of it but don't go back to square one for me - I'll read the whole chat later  
[17:30] <Frank> actually the whole explanation is on one of the polariscope chats we did before  
[17:31] <Doos> with a quartz wedge (or a plastic imitation one) it is also very suitable for biaxial stones  
[17:31] <Doos> you can buy one for \$7,50 or so  
[17:32] <Doos> it's the same plastic in which the OPL spectroscope is shipped  
[17:32] <Crystal> I've had modem trouble for 1 1/2 months now, and must've missed it. I'm on what the phone company says is a dead modem now - but they just don't want to dig up my lines and repair them.  
[17:32] <Doos> so you can dismantle the box and have one for free  
[17:32] <Doos> that chat was about a year ago or so  
[17:33] <Frank> lol...or sell it on to recover some of the spectroscope costs  
[17:33] <Crystal> I may have it in my file then :)  
[17:34] <Frank> re twinned synth amethyst....can't you write to one of the manufacturers and ask for some?  
[17:35] <Frank> I'd think it would be the only way to be sure  
[17:35] <Doos> yes I have the phone number of someone in germany who may help me get some  
[17:36] <Doos> reminds me .. still need to phone Dr. Kerez  
[17:36] <Crystal> How can I get a crystal retardation plate?  
[17:36] <Frank> I have a nice study amethyst I got from hehheh...it has tiger stripes, soapy water and the nicest healed fracture I've ever seen outside books  
[17:37] <Doos> you can order a simulated quartz wedge from mikon-online.com  
Crystal ... they will probably have it shipped from Dr. Hanneman  
[17:37] <Frank> googlr them crystal...I think they are around nowadays  
[17:37] <Crystal> Thanks Doos  
[17:38] <Doos> Hanneman himself is on the move again .. so hard to get a hold of him .. maybe he will do a chat with us soon, together with Hodgekinson  
[17:38] <Riniel> that's cool!  
[17:38] <Crystal> I did a search on it but it's coming up in German  
[17:38] <Frank> that would be nice...two giants for the price of one  
[17:39] <Riniel> lol  
[17:39] <Crystal> cool!  
[17:39] <Doos> yes Mikon-online is in Germany .. but for american clients they ship from hanneman I believe  
[17:39] <Crystal> I did see a link to translate the page so hopefully I can get one from them  
[17:39] <Doos> both are a bit lazy .. so may take a while  
[17:41] <Frank> it's a shame in a way not to have them one at a time ...so much knowledge they must have to share  
[17:41] <Doos> but you would also need a polariscope and a conoscope Crystal .. in case you dont have one  
[17:42] <Crystal> we'll just have to go twice as long :)  
[17:42] <Frank> lol yes crystal  
[17:42] <Crystal> I have a homemade polariscope plus a handheld one, and a conoscope  
[17:42] <Doos> that works just as well

[17:42] <Crystal> never have found an optic figure with it  
[17:43] <Frank> keep trying crystal...it's a great feeling when you see your first one  
[17:43] <Crystal> which is why I'm interested in the quartz wedge  
[17:43] <Doos> start trying with a uniaxial one .. much easier to find  
[17:43] <Crystal> I keep trying, Frank, but with nobody around to help it's really frustrating  
[17:43] <Crystal> ok, I'll try that Doos  
[17:43] <Frank> yes  
[17:44] <Doos> Crystal, most natural sapphires have the figure on the table .. try that  
[17:44] <Crystal> That's very helpful to know - I'll try that today.  
[17:45] <Doos> search for a flashing colour (very small usually) .. then insert the conoscope  
[17:45] <Doos> colours rather  
[17:45] <Crystal> you touch it to the stone, right?  
[17:45] <Doos> I Hoover it just above  
[17:45] <Crystal> ok, thanks  
[17:46] <Doos> but you can move towards/from the stone slightly to get the clearest image  
[17:46] <Frank> like adjusting the focus  
[17:46] <Frank> on a camera  
[17:46] <Doos> JB has good results doing it with a loupe instead of a conoscope ... that way you get higher magnification  
[17:47] <Crystal> ok. I thought I had one at the top of an amethyst briolette, but it wasn't clear. I'll try that one again too  
[17:47] <Frank> I've tried it with a loupe but not very successfully  
[17:47] <Doos> never tried it  
[17:47] <Crystal> I'll try that, too. I'm just worried it's been so long and I'm not finding them  
[17:47] <Doos> I use the microscope  
[17:47] <Crystal> how do you do that? without the polariscope?  
[17:48] <Frank> brb  
[17:48] <Doos> insert the polarizers between the lightsource and the microscope pod  
[17:48] <Crystal> pod?  
[17:48] <Doos> the head  
[17:48] <Crystal> ok  
[17:49] <Crystal> can I use darkfield lighting?  
[17:49] <Doos> so instead of just the stone .. I insert a filter above and below the stone .. same thing as a polariscope  
[17:49] <Doos> just use brightfield lightning  
[17:49] <Crystal> I didn't know it would work with the light from above!  
[17:49] <Doos> uhm that is light from below  
[17:50] <Doos> do you have darkfield?  
[17:50] <Crystal> my brightfield is shining down from next to the head or so. I have darkfield  
[17:51] <Crystal> I'll have to investigate the scope to see if I can light from below without the darkfield  
[17:51] <Doos> you can use the darkfield then .. or slide the darkfield plate to the side .. then you have brightfield from below  
[17:51] <Crystal> it's a removable unit and I don't know if the plate is removable - never thought to try it  
[17:51] <Doos> there should be a dark plate over the light, right?  
[17:51] <Crystal> yes

[17:52] <Crystal> but it's all attached in one unit  
[17:52] <Doos> usually there is a knob that you can turn so the plate slides away  
[17:52] <Crystal> I'll go get it - brb  
[17:52] <Doos> ok  
[17:52] <Frank> back  
[17:54] <Crystal> I don't see any way to remove it so I can use the movable diaphragm to put the stone on - so maybe I shouldn't use that?  
[17:54] <Frank> so what do you think of going back to the start?...  
[17:54] <Frank> ...it's what my course notes are doing, going over it all with more depth  
[17:54] <Frank> ...cept the chats always had the depth anyway  
[17:55] <Crystal> I'm been upset not to be able to get to these chats because they're so informative  
[17:55] <Crystal> did you see me try to get into the chat last week?  
[17:55] <Doos> Crystal, lay a polarizing filter on top of the darkfield and one taped just below the head of the microscope .. should work  
[17:56] <Crystal> a weird screen popped up and I didn't think I was in, but either way, my modem disconnected me every few seconds because it was raining  
[17:56] <Doos> Frank, sound fine to me .. tell me where to start from  
[17:56] <Crystal> I'll try that today, Doos. You're a goldmine of help for me today!  
[17:56] <Frank> gemstone formation  
[17:56] <Doos> ah yes  
[17:56] <Crystal> cool  
[17:57] <Frank> I missed the first few chats anyway so it'll be a first time for me too  
[17:57] <Doos> heh  
[17:57] <Doos> ok then  
[17:57] <Frank> I joined up half way through jen's ctystallography chats  
[18:03] <Frank> Crystal how does the current time suit you?  
[18:03] <Frank> and you doos?  
[18:03] <Crystal> Great!  
[18:03] <Doos> good  
[18:03] <Frank> any word from Annie?  
[18:03] <Crystal> as long as the computer will cooperate - or rather, the weather so the phone lines are working  
[18:04] <Doos> not on the chats Frank  
[18:04] <Crystal> it was raining last week so I kept getting knocked offline  
[18:04] <Frank> Speaking of Jen...didn't she have satellite broadband?  
[18:04] <Doos> satellite atleast  
[18:04] <Frank> lol  
[18:05] <Frank> will you be able to make this chat time once you get back home Riniel?  
[18:06] <Riniel> i don't think so  
[18:06] <Frank> :(  
[18:06] <Riniel> i'll just read the logs :(