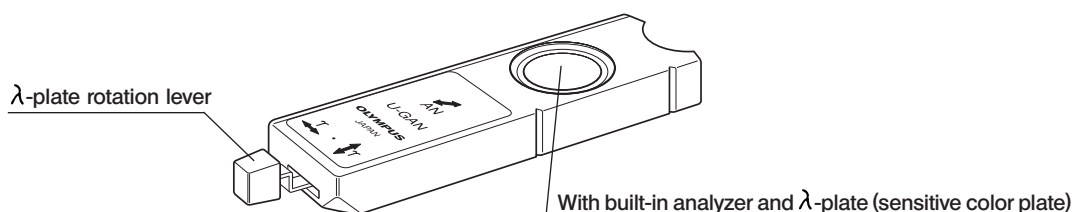


This analyzer employs a UIS (Universal Infinity System) optical design. By attaching the analyzer in a slider-compatible revolving nosepiece, examination for urate crystals can be performed by operating the lever.

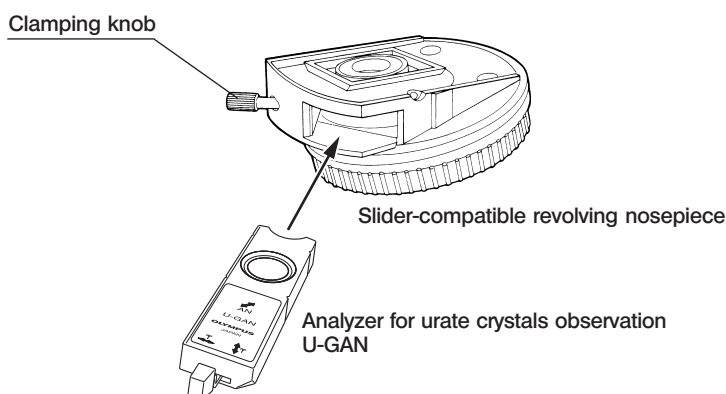
Applicable revolving nosepieces: U-D7REA, U-D7RES, U-D6RE, U-D7RE, U-D6REM, U-D5BDRE, U-D5BDREM, U-P4RE, U-P6RE

1 External view

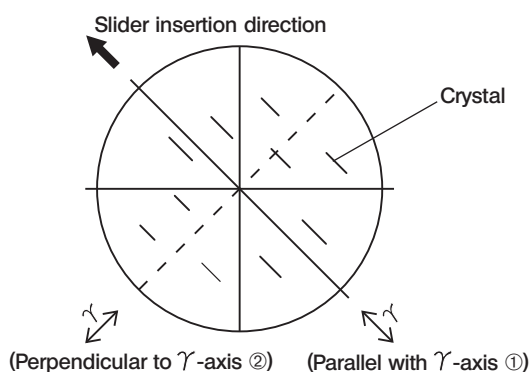


2 Installation

1. Loosen the clamping knob on the revolving nosepiece and remove the inserted slider or dummy slider.
2. Hold the U-GAN analyzer for urate crystals observation with the labeled surface up, insert it all the way, and tighten the clamping knob.
3. Engage the U-POT polarizer or a polarizer with built-in condenser in the light path.



3 Examination for urate crystals procedure



1. Engage the 40X objective in the light path.
2. If the condenser in use is equipped with a top lens, engage it in the light path.
3. Set the λ -plate rotation lever of the U-GAN to the center position (•). Look into the eyepiece and rotate the polarizer to the darkest position.
4. Rotate the stage or specimen so that the longitudinal direction of the crystals is in parallel with the γ -axis ①. At this time, the γ -axis direction of the λ -plate should be identical to the longitudinal direction of crystals.



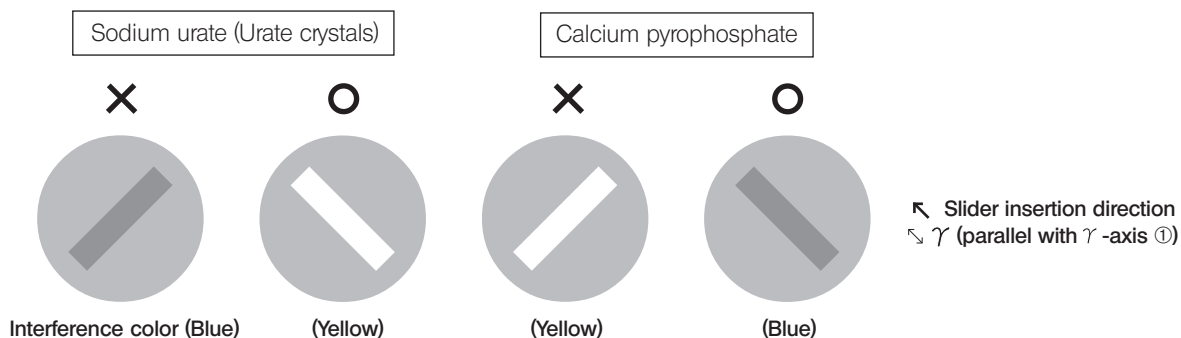
5. Rotate the λ -plate rotation lever of the U-GAN fully counterclockwise ($\uparrow \gamma$) and examine the urate crystals.

Crystals are yellow \Rightarrow Sodium urate (Urate crystals)
 Crystals are blue \Rightarrow Calcium pyrophosphate

6. Rotate the λ -plate rotation lever of the U-GAN fully clockwise ($\downarrow \gamma$) so that the longitudinal direction of crystal is perpendicular to the γ -axis $\textcircled{2}$. The examination result can be confirmed by referring to the reversal of the color.

Note on determination

When the λ -plate rotation lever is rotated fully counterclockwise ($\uparrow \gamma$)



When the longitudinal direction of crystal is in parallel with the γ -axis, correct determination is possible — sodium urate (urate crystals) turning yellow and calcium pyrophosphate turning blue. However, when the longitudinal direction of crystal is perpendicular to the γ -axis (position marked \times), the result will be opposite. So be careful.

4 Other observations

Brightfield observation

Loosen the clamping knob of the revolving nosepiece clamping the U-GAN, pull out the U-GAN and stop at a click position. (Tighten the clamping knob there.)

Now the λ -plate is disengaged from the light path so brightfield observation is available.

Other

Set the λ -plate rotation lever of the U-GAN to the center position (\bullet) for simple polarized light observation. However, the contrast of the observed image may be poor because of the presence of the λ -plate.