

PROCEDURE FOR CRYSTAL EXAM

1. Set up microscope for crystal exam. The light should be at its brightest.
2. Set polarizer and analyzer in alignment. This should give maximum extinction (darkest field). Bring crystals into focus. Crystals will appear white.
3. If crystals are present – differentiate between uric acid and calcium pyrophosphate. To insure test is being done correctly, check a slide of known uric acid crystals.
4. Procedure:
 - a. Bring crystals in focus.
 - b. Introduce wave analyzer (rotating wave plate) into position.
 - c. Rotate dial to position with arrow facing up and down. In this position:

Uric acid	N-S crystals are yellow, E-W crystals blue
CA pyroph	N-S crystals are blue, E-W crystals yellow

- d. Rotate dial to position with arrow facing left and right. In this position:

Uric acid	N-S crystals are blue, E-W crystals are yellow
CA pyroph	N-S crystals are yellow, E-W crystals blue

