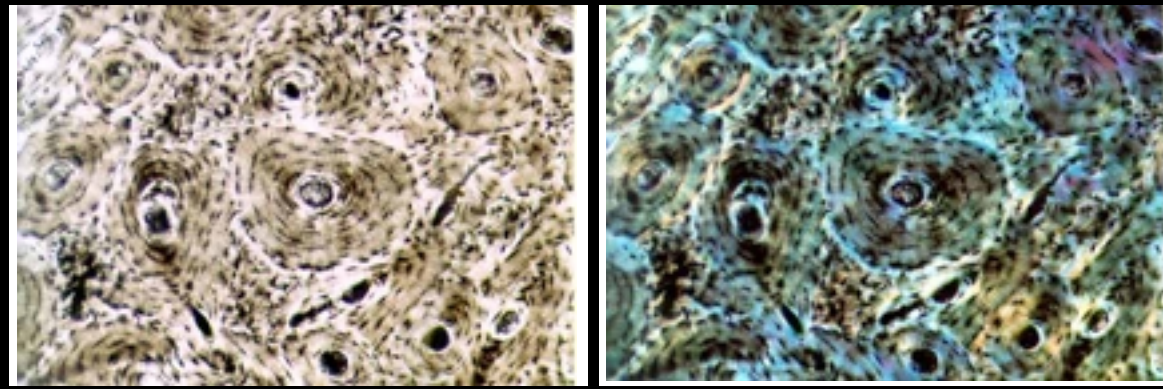


## BIO 322 MICROSCOPE PHOTO PROJECT

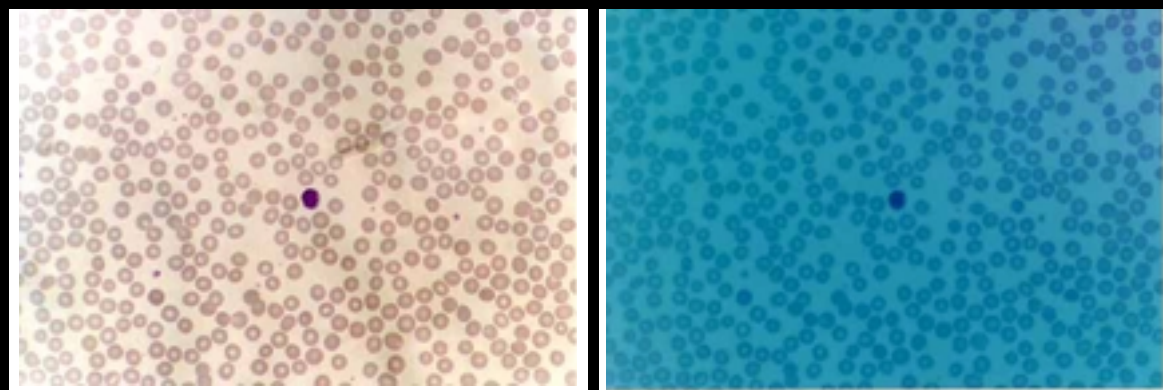
### Ground Bone (Prepared Slide).

In this photo the differences between brightfield microscopy (left) and Nomarsky interference contrast microscopy (right) can be seen in the accentuation of the concentric lamellae. The blue filter under the Nomarsky method allows the observer to see greater contrast in viewing the lamellae and individual osteocytes. The Nomarsky method also allows one to more readily distinguish the entire Haversian canal system.



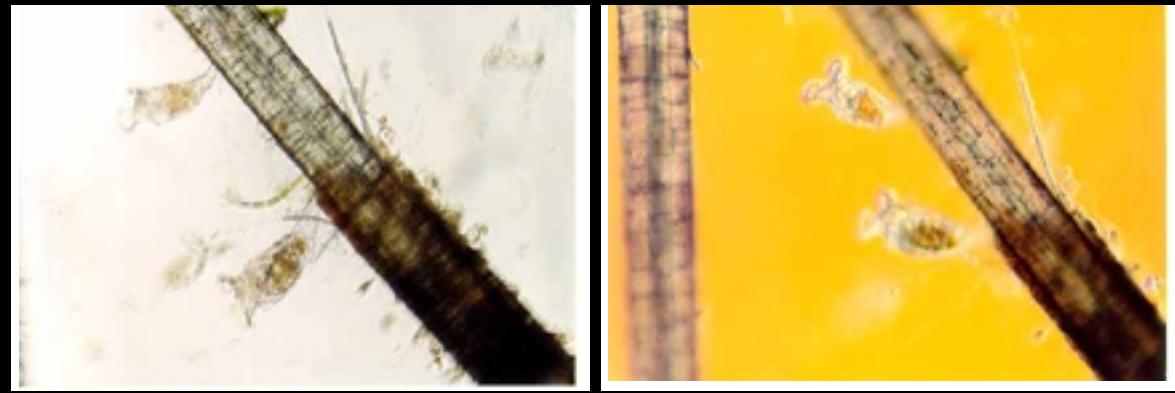
### Blood (Prepared Slide).

In this photo the differences between brightfield microscopy (left) and Nomarsky interference contrast microscopy (right) can be seen in the accentuation of the biconcave structure of the erythrocytes. The blue filter under the Nomarsky method allows the observer to see greater contrast in viewing the overall structure of individual erythrocytes. In contrast, the brightfield method is much more revealing in helping the viewer to distinguish the nuclei of the monocyte (located in the middle of the photograph) in much greater detail.



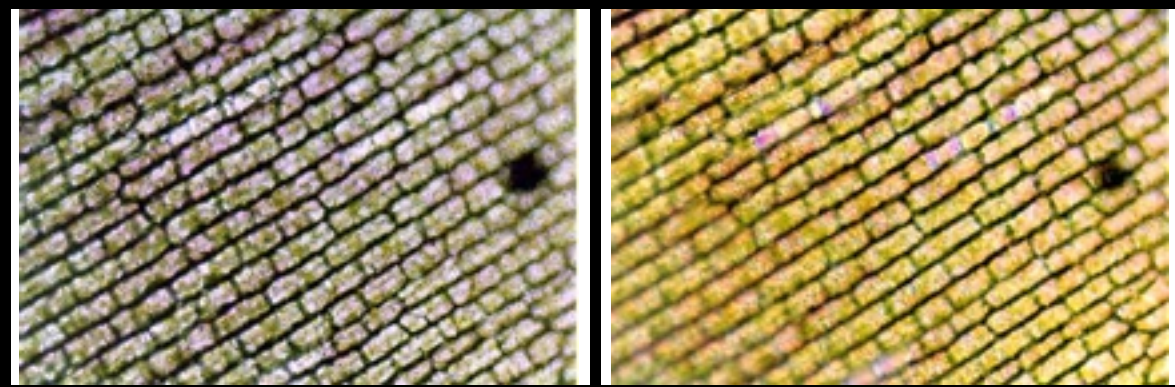
**Rotifers (Pond Water).**

In this photo the differences between brightfield microscopy (left) and Nomarsky interference contrast microscopy (right) can be seen in the accentuation of cellular organelles within the individual rotifers. The brightfield method allows the viewer to more easily distinguish the internal cellular organelles within the main body portion of the rotifer in the foreground. However, the Nomarsky method allows for greater resolution of the cilia projections aiding in the capture of food for the rotifer in the background.



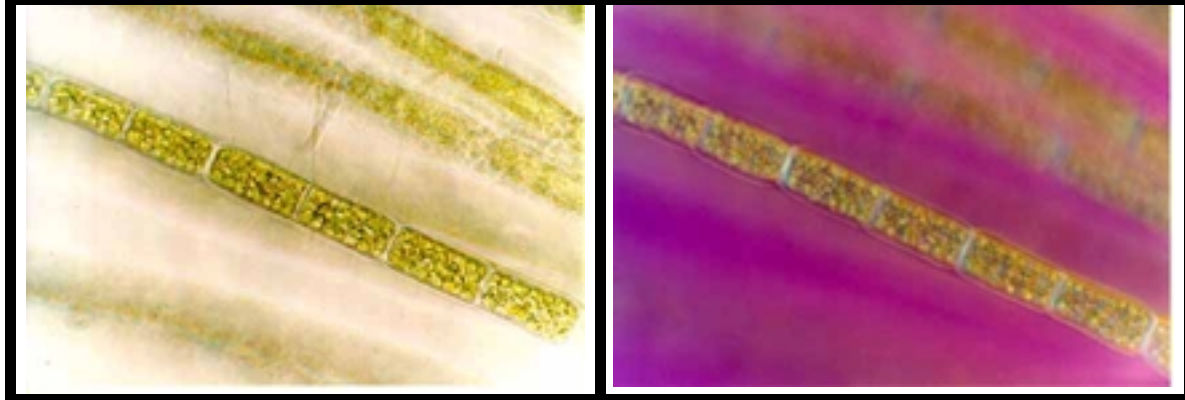
**Elodea (Pond Water).**

In this photo the differences between brightfield microscopy (left) and Nomarsky interference contrast microscopy (right) can be seen in the accentuation of the cellular organelles with the individual plant cells. The brightfield method allows the viewer to better distinguish chloroplast within the plant cell. However, the Nomarsky method allows for greater resolution of water vacuoles within the plant cells.



**Plant Stem. (Pond Water).**

In this photo the differences between brightfield microscopy (left) and Nomarsky interference contrast microscopy (right) can be seen in the accentuation of the cellular organelles within the individual plant cells. The brightfield method allows the viewer to better distinguish both the chloroplast and the water vacuoles within the plant cell. Although the Nomarsky does not allow for greater resolution of the cellular organelles, the red filter does allow the viewer to see greater contrast in cellular organelles.



**Amoeba, Monarch Scales, & Insect**

Left: Amoeba from prepared slide. Nomarsky interference  
Middle: Scales from Monarch Butterfly live specimen. Bright field.  
Right: Insect from pond water. Brightfield.

