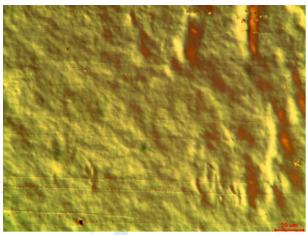
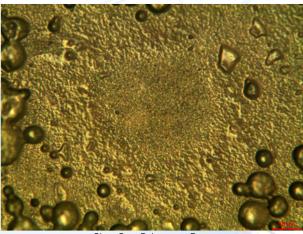
## Microvision LABORATORIES, INC.

## Nomarski/Differential Interference Contrast Imaging

Thin films or manufactured materials which are translucent or transparent are applied to metallic or semi-conductor substrates. These materials leave a reflective or semi-reflective surface underneath the image making them difficult to image. Commonly, variations in thickness affect the ability to document thin films and manufactured materials with either optical or electron imaging. Namarski/Differential Interference Contrast Imaging is an effective alternative imaging method accentuating differences in thickness, density, or optical index in a sample. This imaging is performed by creating interference colors produced by destructive interference from two, similarly aligned beams in an optical microscope. This enhances and highlights subtle features with brilliant color gradients, all captured with our high resolution digital PLM imaging suite.



Adhesive Mastic Material



Clear Coat Polymer on Paper

## Advantages:

- Thin films can show process defects or impact damage that would be difficult to observe with traditional imaging
- Depth can be easily observed in patterned structures such as microlithography or thick film deposition samples
- Point faults or shifts in crystalline or highly ordered materials are easily highlighted by change in optical index
- Metallic or glass samples can show mechanical faults, scratches, or
- Surface contaminants illustrate depth, size, and adhesion using color to enhance fine features

## **Application Fields:**

- Semi-Conductor/Electronics
- Paint and Coating Technolgies
- Print Processing
- Filtration Technologies
- **Environmental Analysis**
- **Ceramics and Composite Materials**
- **Polymer Engineering**



Clear Polymer Coating without DIC

Clear Polymer Coating with DIC imaging

Learn more at <a href="http://www.MicroVisionLabs.com">http://www.MicroVisionLabs.com</a>