

# Rules and Tips for the Microscope Operation

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1. Turn on the Microscope (following the orders):
  1. Arc Lamp Power.
  2. Shutter/Filter Wheels Controller.
  3. Halogen Shutter (Uniblitz, on the backside).
  4. Cascade Camera (on the backside).
  5. Zeiss Microscope (on the right side).
  6. Computer
  
1. Shut off the Microscope (following the orders):
  1. lower the objective, rotate the objective inside
  2. take out the samples
  3. raise the objective again
  4. Clean the Oil Objectives (if any).
  5. Make sure the Objective is in Up position.
  6. turn off Computer.
  7. turn off Zeiss Microscope (on the right side).
  8. turn off Cascade Camera (on the backside).
  9. turn off Halogen Shutter (Uniblitz, on the backside).
  10. turn off Shutter/Filter Wheels Controller.
  11. turn off Arc Lamp Power

## **Others:**

1. If you used oil objectives, please make sure to clean it.
  1. cotton swabs + 70% Alcohol
  2. Lens Papers + Lens Cleaning Solution
  3. Dry Lens Papers
2. Kohler Alignment
  1. Focus on the specimen using low magnification
  2. Close Field Diaphragm
  3. Adjust Condenser up and down until a sharp hexagon is observed
  4. Center the hexagon if needed with the two knobs

5. open the diaphragm until the hexagon touches the field edge simultaneously.
3. Components to adjust for DIC images.
  1. Polarizer (second ring filter on top)
  2. DIC Prism in the Condenser (e.g. 100X Objective, should choose DIC III on LCD display)
  3. Turn the prism under Objectives (Slide in to be functional).
  4. Polarizer in the Motorized Diachroic (Analyzer, DIC).
4. To get a focus, use 10x objective first, focus, hit the "objectives" button to switch the objective to higher magnifications, fine adjust the focus to get a better view.
5. If using low voltage/intensity for Halogen Lamp and seeing yellow color, put the First ring filter in position to balance the color.