

# **Standard Operating Procedure: Staining with Uranyl Formate / Acetate**

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## **General Cautions**

1. Uranium salts are highly toxic and emit beta radiation. Always wear eye protection, gloves and lab coat when handling.
2. Limit wet-work to designated negative-stain bench to limit possible spread of material.
3. Use only designated pipetmen for handling liquid solutions.
4. If you are unsure of any procedure, consult with EMG staff.

## **SOP**

1. Any weighing of dry powder should be done in fume hood. You should wear a face mask to prevent inhalation of fine powder.
2. Always wear goggles when handling liquids, particularly when filtering solutions.
3. Before beginning experiment, be sure all required materials (pipettes, gloves, Whatman paper, paper towels, grids, grid box, forceps) are on hand. Be sure waste container is not overflowing.
4. Discard filter paper used to blot stain in regular lab waste (biohazard bags).
5. Discard tips in tip waste for eventual disposal with sharps.
6. Discard excess uranyl acetate/formate into designated liquid waste container. Do not mix uranyl salts with other hazardous salts (e.g. lead, osmium, etc).
7. Use pH paper to measure pH. Dispose in lab waste.
8. When experiment is completed, discard all waste. Do not leave a messy bench for the next user.