<table>
<thead>
<tr>
<th>Lab(s):</th>
<th>Room 345 SSMB, College of Charleston</th>
<th>Date Training Initiated:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI Name:</td>
<td>Kate Mullaugh</td>
<td></td>
</tr>
<tr>
<td>Student Name:</td>
<td>Student ID #</td>
<td></td>
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</tbody>
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<table>
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<tr>
<th>Activity</th>
<th>Description</th>
<th>student initials</th>
<th>date</th>
<th>PI initials</th>
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**Mandatory training**

**Safety and Industrial Hygiene**
- Location of safety shower, eyewash, fire extinguisher, spill kit, first aid kit, safety glasses
- General departmental research training completion
- Incident reporting guidelines and procedures
- Monthly lab review and audit procedure
- Knowledge of training records and guidelines location, and auditing

**Environmental**
- Waste disposal guidelines for silver including location and record keeping
- Spill remediation and disposal
- Incident reporting guidelines and procedures

**Securing lab for night and weekend operation**
- Notifications, precautions, and reporting
- Review of lab staffing requirements for different operations and work alone policy
- Equipment shutdown

**Housekeeping**
- Glassware cleaning and drying
- Acid baths for trace metal analysis
- Lab organization, equipment location, and cleanup protocols

**Chemical storage**
- Acid and base storage locations and containment
- General reagent storage

**Student and technique training on specific operations - not all mandatory**

**Lab techniques**
- Centrifuge operation
- Dilution of strong acids
- Operation of compressed nitrogen tank
- Syringe filtration
- Ultrafiltration
- Analytical balance operation and quantitative weighing
- Acid volatile sulfide method
- Preparation of analytical standards (silver and/or sulfide)
- Synthesis of silver nanoparticles
- Preparation of carbon paste electrodes
- Preparation of saturated calomel reference electrodes

**Instrumental**
- pH, ISE and/or DO sensors and meter
- Potentiostat and cell stand
- UV/vis
- Dynamic Light Scattering
- Zeta potential
- HPLC (quant lab)
- FAAS for the determination of silver