Standard Operating Procedure:

Laboratory Information

Department:	
Principal Investigator(s):	
Laboratory Manager/Supervisor (or designated laboratory-specific chemical hygiene officer):	
Laboratory **emergency contact** (name and phone):	
Laboratory phone:	
Designated area (s) of these procedures with chemicals(s): (building and room):	
Agent storage location (building and room) and specifics regarding location/container/cabinets:	

Chemical Information

Chemical Name(s), including CAS No: 	Acrylamide (multiple CAS)

GHS Classification and Hazard Statements (see SDS sheet provided by the chemical's manufacturer):
Example: *Ethanol: H225: Highly Flammable liquid and vapor [Danger Flammable liquids]; H319: Causes serious eye irritation [Warning Serious eye damage/eye irritation]*

OSHA Permissible Exposure Limit (PEL) 0.3 mg/m3 for an 8-hr workday.
ACGIH Threshold Limit Value (TLV) 0.03 mg/m3 (0.01 ppm).

Toxic if swallowed.
Harmful in contact with skin or if inhaled.
Causes skin irritation. May cause an allergic skin reaction.
Causes serious eye irritation.
May cause genetic defects.
May cause cancer.
Suspected of damaging fertility or the unborn child.
Causes damage to organs (Peripheral nervous system) through prolonged or repeated exposure if swallowed.
Harmful to aquatic life.

Signs and symptoms of exposure or release	Numbness, tingling, and tenderness to touch. Symptoms can be delayed several days to weeks, and if exposure continues (even in small quantities), other symptoms may arise including excessive sweating, blue-reddish skin, peeling of skin, and weakness in limbs.
Routes of exposure	Inhalation, skin contact, eye contact, and ingestion
Required engineering controls: (i.e., chemical fume hood, biological safety cabinet, glove box, temperature control, humidity control, shielding, luer-lock syringe, in-line HEPA filter,etc.)	Must be handled within a certified chemical fume hood
Personal Protective Equipment (PPE) required for procedures:	Fully buttoned lab coat Nitrile gloves (ensure gloves cover cuff of lab coat to avoid skin exposure). When working with solutions, choose gloves compatible with the solvent! Safety glasses If risk of splash / working with large amounts, ADD: Butyl gloves, or doubled nitrile Chemical splash goggles and face shield Tyvek sleeves and/or a chemically resistant gown
Known incompatibilities with chemical(s):	Metals, oxidizers, reducing agents, acids, bases, and peroxides
Special storage and handling considerations:	Store in secondary containment in a well-ventilated area, away from heat and flame. Store away from metals and do not store under the sink. Store below eye level but not on the floor. Keep containers closed when not actively dispensing acrylamide. Keep away from heat and flame.
Please list the approximate amount(s) of chemical(s) utilized in all procedures	

Please describe, in a stepwise fashion, the work practices and procedures involved in the handling and utilization of this agent. **Please be clear and complete in the description of procedures (i.e., measuring, weighing, pouring, mixing, injection, mixing, transporting, administration to animals, heating, etc.).** **Be sure to include any precautionary safety steps undertaken during these procedures.** **Please submit additional pages, if necessary.**	*• Use bench pads to cover areas that may become contaminated with acrylamide powder or suspensions for easy clean-up* *• Change gloves regularly (at least every 2 hours) and wash hands at the time of glove change.* *• If weighing dry acrylamide powder, place balance in chemical fume hood OR* *1. Tare (pre-weigh) an empty container with a lid.* *2. Go to chemical fume hood, add powder to the empty container, and close the lid.* *3. Go to the balance to weigh the container.* *4. Return to chemical fume hood to make solution or manipulate powder.*

Waste collection and disposal procedures:	Waste chemicals shall be collected in a secured area. The area shall be free from evidence of spills. A Hazardous Waste label shall be affixed to the collection container and components shall be listed on the label as they are introduced into the container. **Do not date containers until the day of scheduled pickup**. Additionally, the container shall be marked with the hazard class of the chemical waste (i.e., Ignitable, Toxic, Reactive, Corrosive). When the container is no more than 2/3 full, date the container and submit a pick-up request in the UK E-trax system: https://etrax.chematix.com/Chematix/
Spill procedure: Lab Specific Notes on Spill Response: Where powdered acrylamide is spilled, wipe down with a cloth dampened with water and wipe dry with paper towels.	**Major spills of stock solution**: Leave the area and notify others not to enter. Report the spill to the UK Environmental Quality Management Department (EQMD)at (859) 323-6280 (M-F 8am-5pm) or after hours by dialing 911 from any on-campus phone or by contacting the UK Police at (859) 257-UKPD (8573). **Minor spills of manageable amount:** If necessary, contact EQMD for guidance. Consult manufacturer's SDS for instructions and compatibilities for your chemical (Be aware of any materials such as paper towels or water that could be incompatible with your spilled chemical!
Response procedures in the case of an incident or injury:	UK Employees: • After receiving first aid (refer to the chemical's SDS), report the occupational exposure to a hazardous chemical to UK Worker's Care at 1-800-440-6285. • If needed, an appointment will be made for the employee at UK UHS. • For severe emergency or injury, call 911 or proceed to the UK Chandler Hospital Emergency Department UK Students: • Call UHS at (859) 323-APPT to report an occupational exposure to a chemical hazard. • If needed, an appointment will be made for the employee at UK UHS. **For severe emergency or injury, call 911 or proceed to the UK Chandler Hospital Emergency Department** **Additional Lab-Specific Emergency Procedures:**

A copy of the manufacturer's SDS for this agent and the PI approved SOP shall be kept in the lab's Chemical Hygiene Plan (CHP). The CHP shall be stored in a location known to all laboratory personnel and is accessible during work hours.

Personnel Training

- Prior to conducting any work with (name of the chemical), designated personnel must be provided training specific to the hazard involved in working with the substance.
- The PI must provide his/her lab personnel with a copy of the SOP and a copy of the SDS provided by the manufacturer. Any further training materials must be documented and stored in the lab's Laboratory Safety Manual and available to internal UK or external oversight agency inspectors.
- The PI must ensure that his/her lab personnel have completed the initial and the consecutive annually required Chemical Hygiene trainings and Hazardous Waste training.

The undersigned have read and understood the content of this SOP and the SDS for: **Acrylamide**

Lab personnel performing procedures with this agent (typed name)	Date of hands-on training for this agent	Name of person who provided the agent specific training (typed name):	Signature of Lab Personnel

SOP Reviewed and Approved by:

PI: (typed name)	
PI: (signature and date)	
Lab Manager/Supervisor (typed name)	
Lab Manager/Supervisor (signature and date)	