#1 CONTACT INFORMATION:

<table>
<thead>
<tr>
<th>Procedure Title</th>
<th>HPLC Column cleaning and preparation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedure Author</td>
<td>Allison Fabino</td>
</tr>
<tr>
<td>Date of Creation/Revision</td>
<td>9/8/2015</td>
</tr>
<tr>
<td>Name of Responsible Person</td>
<td>Victor Ryzhov</td>
</tr>
<tr>
<td>Location of Procedure</td>
<td>RW 423</td>
</tr>
<tr>
<td>Approval Signature</td>
<td></td>
</tr>
</tbody>
</table>

#2 THIS STANDARD OPERATING PROCEDURE (SOP) IS FOR A:

- [x] Specific laboratory procedure or experiment
- [ ] Generic laboratory procedure that covers several chemicals
- [ ] Generic use of specific chemical or class of chemicals with similar hazards

#3 PROCESS OR EXPERIMENT DESCRIPTION

Installation and cleaning procedure before the use of an HPLC column.

Frequency:

- [x] daily
- [ ] weekly
- [ ] monthly
- [ ] other: ________________

Duration per Expt: ___________ minutes; or _______ hours

#4 SAFETY LITERATURE REVIEW & HAZARD SUMMARY

For assistance with this form contact NIU Environmental Health and Safety, 815-753-0404.
<table>
<thead>
<tr>
<th>ITEM</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory Fume Hood/Glove Box or other Ventilation Control</td>
<td>Location: FW 423</td>
</tr>
<tr>
<td>Eyewash/Safety Shower</td>
<td>Location: FW 423</td>
</tr>
</tbody>
</table>

3. Column Installation
- Unscrew bottom cap
- Screw in the top of the column
- Let a few drops of solvent run through the top of the column before unscrewing and opting - screw on the bottom Flows the same direction as the column specifications

4. Cleaning
- Clean with solvent according to column type and manufacturer’s instructions
- Maintain a flow rate such that the column back pressure does not exceed manufacturer recommendations
- Keep solvent pH in the appropriate range for column

- Methanol and acetonitrile must be discarded into Organic Waste and the container properly labeled
- Water and most butters can go down the drain (verify with SDS sheet first)

6. Clean up work area and lab equipment.
- Cap the ends of the column to avoid exposure to air
- Store column at room temp
- Clean up any spills in LC area

7. Remove PPE and wash hands.

#7 WASTE DISPOSAL

MeOH/ACN → organic waste

#8 TRAINING REQUIREMENTS

General Training (check all that apply):
- General Safety & Emergency Preparedness

For assistance with this form contact NIU Environmental Health and Safety, 815-753-0404.
NIU Standard Operating Procedure Template

☐ Chemical Safety for Laboratories
☐ Radiation Safety
☐ Biosafety training
☐ Other: ____________________________

Location Where Records Maintained:

Laboratory-specific training (check all that apply):
☐ Review of SDS for other chemicals involved in process/experiment
☐ Review of this SOP
☐ Other: ____________________________

Location Where Records Maintained:

#9 PRIOR APPROVALS

Prior approvals are required by the following University Committees:

Radiation Safety Committee: Radioactive material,
  http://www.ehs.niu.edu/ehs/lasersafety/RAM/index.shtml
Radiation Safety Committee: X-Ray machines
  http://www.ehs.niu.edu/ehs/lasersafety/XRay/index.shtml
Laser safety: Laser producing equipment Class 3b or above.
  http://www.ehs.niu.edu/ehs/lasersafety/Laser/index.shtml
IACUC: Animal use in research
  http://www.orc.niu.edu/orc/animal_research/index.shtml
IBC: Recombinant DNA, potential pathogens, human tissue/body fluids
  http://www.orc.niu.edu/orc/biosafety/niupolicy.shtml

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