



Guidance Document

Unattended Processes

The overnight or unattended operation of laboratory equipment or conduction of experiments is strongly discouraged. If lab operations are carried out with no person present, it is the responsibility of the worker to design experiments to prevent accidental releases of materials and to avoid damage. Special attention must be paid to unattended operations in areas not normally visited by lab personnel. Consideration must be given to the possible interruption in such utility services as electricity, cooling water, and inert gas. Proper experimental design would ask "What if?" in great detail. [What if my flask runs dry because of no water supply to the reflux condenser? What if I lose stirring during an electrical outage? What if the supply of inert nitrogen is interrupted?]

If there is any damage which results from negligence, carelessness, ignorance or lack of planning, the lab will be expected to bear some or all of the cost to repair or remediate the damage. In addition, any fines assessed by outside authorities may be borne by the lab. The specifics of such penalties for the lab will be addressed on a case-by-case basis. The lab could be shut down pending a review of safety procedure as part of a comprehensive incident investigation.

If you are a lab worker, do not leave processes unattended unless you have done the following:

- Obtain the approval of the authorized lab supervisor or faculty advisor.
- Check water lines to ensure that connections are tight. Carefully adjust flow rates. Provide appropriate drainage for any running water. Consider the benefits of a water bath which recirculates the coolant, instead of the reliance on continuous, once-through water.
- Check heat sources for proper settings.
- Check power stirrers, pumps and other moving equipment. Such apparatus should be secure and properly lubricated.

- Consider the storage of apparatus and chemicals in close proximity to the unattended process. Consider the possibility of fire, explosion or unintended reactions.
- If appropriate, make arrangements with other lab workers to periodically check the unattended operation.
- Fill out a sign ([click here for a form](#)) which describes the unattended process and which provides phone numbers for the responsible parties. Obtain the signature of the authorized lab supervisor or faculty advisor on the form. Post the sign in a prominent location near the process or equipment. In most case the sign would be posted on the outside of the exterior lab door.