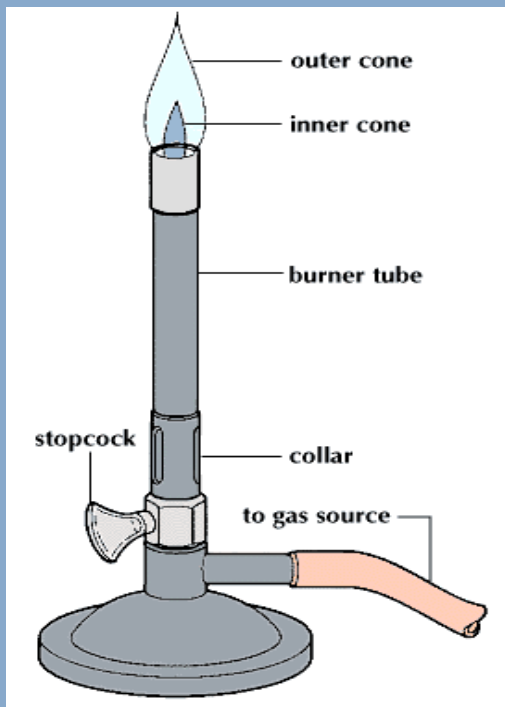
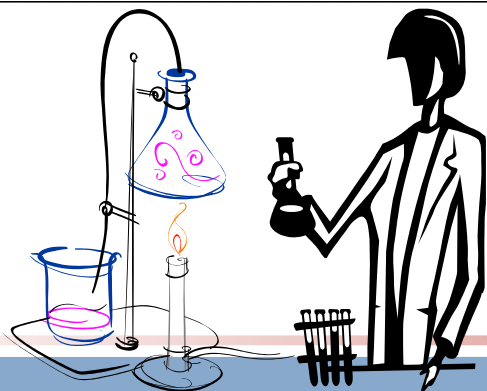


Bunsen Burner & Natural Gas Valve Safety



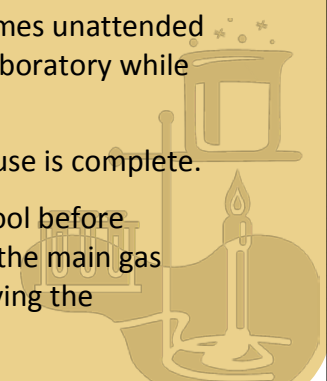
Bunsen burner setup

OVERVIEW

Bunsen burners present fire hazards. They produce an open flame and burn at a high temperature, and as a result, there is potential for an accident to occur. For the safety and convenience of everyone working in a laboratory, it is important that the following guidelines be observed. In case of a fire, activate the nearest fire alarm pull station, notify your fellow lab personnel, and evacuate the building.

PROCEDURE

- **Place** the Bunsen burner away from any overhead shelving, equipment or light fixtures by at least 12 inches.
- **Remove** all papers, notebooks, combustible materials and excess chemicals from the area.
- **Tie-back** any long hair, dangling jewelry, or loose clothing.
- **Wear** appropriate PPE (lab coat, eye protection, etc)
- **Inspect** hose for cracks, holes, pinch points or any defect and ensure that the hose fits securely on the gas valve and the burner.
- **Replace** all hoses found to have a defect before using.
- **Notify** others in the laboratory that the burner will be in use.
- **Utilize** a sparker/lighter with extended nozzle to ignite the burner. Never use a match to ignite a burner.
- **Have** the sparker/lighter available before turning on the gas.
- **Adjust** the flame by turning the collar to regulate air flow and produce an appropriate flame for the experiment (typically a medium blue flame).
- **Do not** leave open flames unattended and never leave the laboratory while the burner is on.
- **Shut off** gas when its use is complete.
- **Allow** the burner to cool before handling. Ensure that the main gas valve is off before leaving the laboratory.





REMINDERS

- Always turn off the burner by the gas source valve and not the control valve on the burner itself. This will ensure that the main gas line is shut-off after usage.
- Check gas line (hose) for entanglement or that it is not trapped under other equipment
- Regularly inspect all gas valves and report any potential malfunction to Facilities Management for repair/replacement.
- Verify that all potential users of natural gas valves know to fully close the valves when not in use and to report any problems or odors of natural gas immediately to the designated lab personnel (CHO or PI).
- Keep your work space neat and organized in order to provide a clear pathway to the gas valve control. This will allow users to use the valve for gas flow shut-off during an emergency or when work is completed.
- Do not leave the gas valve open unattended or after work is complete.
- Always double check the gas valves before you leave the lab at the end of the work day.



Gas valve stems in the off position

If you have questions or concerns about your Bunsen burner setup or gas valve outlets in your lab, please consult with your lab supervisor and/or PI.

If your gas valves appear to require maintenance (e.g. valve is sticking, fails to shut-off properly, or is not easily to open or close), please contact UK PPD.

For all concerns, please feel free to also contact the college safety officer @ 7-7728 or email:

Jay.Young@uky.edu

