

Lecture Demonstrations

Welcome to the new prep-room demonstration website!

What has changed?

- *Revised and new demonstrations*
- *Shorter, more concise procedures*
- *Each demonstration will take less than 10 minutes*
- *Video link library for last minute needs and examples of what the demonstration should look like*

If you would like to have a demonstration prepared by the prep-room, it is preferred that a request is sent to hansonp@email.arizona.edu ^[1] at least 48**weekday** hours prior to the demonstration. If a request is not sent at least 48**weekday** hours prior to the demonstration, there is no guarantee that it will be ready. However, I will always try my best to accommodate your needs.

If you would like to perform a demonstration that is not listed below, we will happily accommodate your needs. It is important to note that the prep-room may not have the chemicals and/or equipment required for your proposed demonstration. With proper notice however, the prep-room should be able find what is required.

In general, the demonstrations listed below are simple and should take less than 10 minutes. If you would like to practice any of the demonstrations before actually demonstrating them please contact hansonp@email.arizona.edu ^[1]. Practice sessions generally take less than 30 minutes.

As some of the demonstrations are hazardous, the prep-room is not responsible for the safety of the person performing it. The prep-room is also not responsible for any property damage that may (should not) occur. With this being said, every demonstration preparation includes all pieces of safety equipment necessary. It will either be delivered in person or left in a clear plastic tub that is on or to the side of the instructor bench.

[Demonstration Video link Library](#)^[2]

General Demonstration Links

1. Le Chatelier's Principle with Nitrogen Oxides ^[3]	10. Emission Spectra (Visible) ^[4]
2. Iron III Thiocyanate Ion Equilibria ^[5]	11. Nitrocellulose ^[6]
3. Expansion of Water into Steam ^[7]	12. Heat Capacity of Lead ^[8]
4. Catalysis Heterogeneous and Heterogeneous ^[9]	13. Conductivity of Solutions ^[10]
5. Chemiluminescence (Luminol) ^[11]	14. Lead Chloride Solubility K_{sp} ^[12]
6. Supercooled Liquid (Sodium Acetate) ^[13]	18. Catalysis by Cobalt(II) Ion ^[14]
7. Boiling H₂O at 50 Degrees Celcius ^[15]	19. The Oscillating Clock Reaction ^[16]
8. The Sacrificial Gummy Bear ^[17]	21. The Iodine Clock Reaction ^[18]
9. Making a "gold" Penny ^[19]	

[Demonstration Video link Library](#)^[2]

[Undergraduate](#)^[20]

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[UA NetID Login](#)

Links:

- [1] <mailto:hansonp@email.arizona.edu>
- [2] http://www.cbc.arizona.edu/lecture_demos/supercooled_liquid
- [3] http://www.cbc.arizona.edu/lecture_demos/emission_spectra
- [4] http://www.cbc.arizona.edu/lecture_demos/fe_iii_thiocyanate_ion_eq
- [5] http://www.cbc.arizona.edu/lecture_demos/airglow_demo
- [6] http://www.cbc.arizona.edu/lecture_demos/boyle's_law_qual
- [7] http://www.cbc.arizona.edu/lecture_demos/crookes_tube
- [8] http://www.cbc.arizona.edu/lecture_demos/boyle's_law_quan
- [9] http://www.cbc.arizona.edu/lecture_demos/cu-zn_battery
- [10] http://www.cbc.arizona.edu/lecture_demos/size_of_one_mole_of_gas
- [11] http://www.cbc.arizona.edu/lecture_demos/9-volt_battery
- [12] http://www.cbc.arizona.edu/lecture_demos/gas_diffusion_using_balloons
- [13] http://www.cbc.arizona.edu/lecture_demos/cu_ii_conc_cell
- [14] http://www.cbc.arizona.edu/lecture_demos/catalysis_by_cobalt_ii_ion
- [15] http://www.cbc.arizona.edu/lecture_demos/polarized_light_i
- [16] http://www.cbc.arizona.edu/lecture_demos/the_oscillating_clock_reaction
- [17] http://www.cbc.arizona.edu/lecture_demos/polarized_light_ii
- [18] http://www.cbc.arizona.edu/lecture_demos/the_iodine_clock_reaction
- [19] http://www.cbc.arizona.edu/lecture_demos/le_chatelier's_principle
- [20] <http://www.chem.arizona.edu/taxonomy/term/11>