Mercury (Hg)

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January 21, 2014
Mercury as an Element

- Chemical Symbol Hg
- Hg is for “Hydrargyrum”, which comes from Greek words for "water-silver" (hydr- means water, argyros means silver).
- The Only metal that is Liquid at Room temperature
- Mercury and all of its compounds are toxic.
Periodic Table of the Elements
Chemical Properties of Mercury - Amalgamation

- Mercury forms “Amalgams” with other metals. Meaning it binds to solid metals like gold, silver, zinc, copper.
- Common use of this feature in mining and dental fillings.
- Also used to “pick up” spilled mercury using powdered zinc or copper.
Mercury Videos

- Mercury is dense
- Mercury reaction with Aluminum
Toxicity of Mercury

- Mercury in any form is poisonous, with mercury toxicity most commonly affecting the neurologic, gastrointestinal (GI) and renal organ systems.

- Poisoning can result from mercury vapor inhalation, mercury ingestion, mercury injection, and absorption of mercury through the skin.

- Mad as a Hatter, or Mad Hatter - where did this phrase come from?
Mercury at Broussaue Hall

- It is detected in the external sumps
- Probably residing in plumbing traps, deadlegs and elbows as droplets, even microscopic droplets
- To remove it, we can take advantage of its chemical properties
Chemical Properties of Mercury - Formation of HgS

- Powder, easily mixed with water
- Can be poured down the sinks to flush out the traps
- Leave in traps to react over time and to intercept new mercury
- Flushed-out mercury can be collected at the sums
Mercury Safety

- Keep an eye out for mercury - it is present in many thing around us:
  - Fluorescent lamps
  - Old thermostats and tilt switches
  - Thermometers, manometers, medical equipment
  - Paint, pesticides and anti-fungal chemicals

- If found, we must collect it and dispose of it properly