Iconic chemical dictionary

Chemical formulas and graphical molecular structures have, over time, replaced written words to form a specialized yet universal language for chemists. This is a point made more than a decade ago by Chemistry Nobel Laureate Roald Hoffmann and chemist-writer Pierre Laszlo [Angew. Chem. Int. Ed., 30, 1 (1991)].

A set of papers in the Nov 9, 2004, issue of the Royal Society of Chemistry journal Organic & Biomolecular Chemistry adds new thoughts to this topic. The papers were published ahead of an RSC symposium held in December at the University of Cambridge to discuss how chemical knowledge affects chemical language, and vice versa. The symposium examined how chemists now handle the vast amount of chemical knowledge that is available, a field known as molecular informatics.

Some wiseacres have taken poetic license with the chemists’ vernacular and created witty or nonsensical ways to use formulas and structures to serve as icons for words. For example, Ba(Na) stands for banana and (pus), for octopus. A six-membered ring of iron atoms is a Ferris wheel.

Another structural example is an ethylene molecule with the word “nun” in the trans positions (on opposite sides of a double bond from each other), representing the word transistor. A benzene ring with the symbol of a die in the two para positions is paradise. Similarly, “M.D.” substituents in the ortho positions represent the word orthodox.

A host of other “cis” and “trans” words or “ortho,” “meta,” or “para” words have been created. A few other examples are shown on this page. These word witticisms, in fact, could be used to create an entire iconic dictionary, which no doubt someone is probably already compiling.

Chemistry puns

In the same vein as iconic symbols, chemists have come up with an array of alternative uses for element names in everyday language. Some obvious examples: what someone uses to press clothes: an iron; a police officer: copper. The descriptors that correspond to the element names in these cases seem well suited to be used as clues in crossword puzzles or as questions for television game shows. But they could be sprung anytime on any unsuspecting someone.

Here are a few examples, compiled from various sources:

Funny prisoner: silicon
Bathroom or kitchen fixture: zinc
To grab someone; you cesium
Before branding a cow: europium
What one does in a play: actinium
Essential element of politicians: tungsten
When everything is normal: it’s bismuth as usual
When someone leaves: they argon
What physicians do to patients: curium or helium
What happens if a patient dies: barium
Beautiful mountains: arsenic
To divide something into two parts: hafnium
What two hafniums make: a holmium
Birthday gift from an aunt: antimony
Wrestler’s hold: neon

What to do if you are a dark cloud: uranium

Jokes for chemists

Following up on the above wordplay, we have a few jokes to liven up a party or to break a kill in a lab conversation while waiting for a reaction to finish.

Q. Why does hamburger have less energy than steak?
A. It’s in the ground state.

Q. How many atoms are in guacamole?
A. Avocado’s number

Q. What is H₂O²?
A. Drinking, cooking, and bathing.

Q. Where can you find a chemist when you need one?
A. Chemistry.

This week’s column was written by Steve Ritter. Please send comments and suggestions to newscripts@acs.org.