



# Chemistry software is now available for use in Eiche Library.

## Basic chemistry review

*Interactive Chemistry Multimedia Courseware* is a set of 12 CD-ROMs that cover the following topics:

1. Introduction to Chemistry
2. Formulas, Equations, & Stoichiometry
3. Naming Chemical Compounds
4. Periodic Table & Trends
5. Atomic Structure
6. Bonding I: Ionic, Metallic, & Covalent Bonds
7. Bonding II: Molecular Bonding, Shape, & Intermolecular Forces
8. Electronic Structure
9. Chemical Reactions
10. Properties of Acids, Bases, & Salts
11. Chemical Equilibrium
12. Solutions
13. Solubility and Precipitation
14. Reaction Rates
15. Gases and Their Properties
16. States of Matter (to be added)

To use this software, simply ask a librarian for the disk (by number) you wish to use and a set of headphones. Mention that these materials have been put on reserve by the Learning Resources Center.

Take the disk and instructions packet and headphones to one of the last two computers in the row of computers on the left wall of the library (if you are facing the windows). The next-to-last computer is a PC; the last computer is a MAC. These are the two computers with the software installed.

We are keeping track of how many students use the software (not who they are). If there is a lot of usage, we can purchase additional software; if students do not seem to be interested in using tutorial software, we can put our money into other options.



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## Modeling programs

*PC Spartan Plus* and *MacSpartan Plus* are molecular modeling programs. These programs will help students

- Calculate reaction energies and activation energies.
- Determine equilibrium geometries.
- Determine transition-state geometries.
- Calculate vibrational frequencies.
- Establish lowest-energy conformers.

To use this software, simply ask a librarian for the modeling program packet for either PC or MAC (whichever you prefer); these have been put on reserve by the Learning Resources Center. Take the packet to the one of the last two computers in the row of computers on the far left wall of the library (if you are facing the windows). The next-to-last computer is a PC; the last computer is a MAC. These are the two computers with the software installed. Of course, you must use the PC packet with the PC and the MAC packet with the MAC.

Please check out the directions each time you use the software for two reasons:

1. Having the directions at hand will help you use the software.
2. We are keeping track of how many students use the software (not who they are). If there is a lot of usage, we can purchase additional software; if students do not seem to be interested in using tutorial software, we can put our money into other options.

Each of the packets has three books in it:

1. *Tutorial*
2. *User's Guide*
3. *A Brief Guide to Molecular Mechanics and Quantum Chemical Calculations*

Begin by following the directions in the *Tutorial* book.



## Chemistry software directions

### *Interactive Chemistry Multimedia Courseware*

1. Log on to one of the two machines with software installed. These are the next-to-last and last machines in the row to the left of the windows (if you are facing the windows). There are signs on both of these computers.
2. Put the disk into the CD-ROM drive.
3. Click on the icon, "CyberEd folder."
4. Select the topic for the disk you are using.
5. If this is your first time using the software, click on "help" for an overview.
6. Select either "Presentation" or "Pretest." Hint: When watching the presentation, select "manual" so you can control the pace of the slide show.
7. After watching the presentation and/or pretest, complete the interactive lessons, and/or take the post-test.
8. Click on "main folder" at the bottom of the screen to quit. (Click on "quit" at the bottom of the main folder.)
9. Close the CyberEd folder.
10. Remove the disk from the CD-ROM drive, and put it in the jewel box in the envelope.
11. Log off. (Make sure you do this, so no one else can use your account.)
12. Return the packet to the circulation desk.

Questions? Comments? Contact Paula Ford at [pxf3@psu.edu](mailto:pxf3@psu.edu) or 949-5112.