



Greening Up The Lab: *Resource Management*

Cutting waste can be achieved by both reducing the amount of material used, and finding alternatives to disposal such as sharing, redistribution and recycling.

Good resource management helps to avoid redundancies and unnecessary purchases, as well as reducing the chance surplus substances will eventually find their way to the waste stream.

Inventory systems should be in place to allow researchers to know what materials are on site and how they are earmarked for use.

Don't purchase more of a chemical than you expect to use in the foreseeable future; researchers should strive to practice "just in time" purchasing of reagents.

Remember, disposal of large surpluses of unused or unwanted chemicals will certainly outweigh any savings associated with bulk purchases. Scale down experiments to a practical minimum to reduce the total amount of waste generated.

Substitution

Tracking of hazardous substances opens the possibility of substitution of hazardous materials with

Fun Fact

Professor Paul J. Chirik of Princeton University received the 2016 Presidential Green Chemistry Challenge Academic Award for his work identifying industrial catalysts that can substitute for platinum, potentially reducing the mining of many tons of ore.

less- or non-hazardous alternatives. This can include cleaning materials, catalysts and reagents.

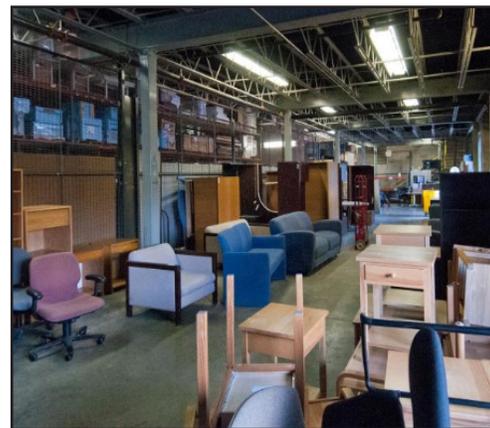
EHS offers specific guidance on alternatives to minimize or eliminate the use of hazardous materials when cleaning, sterilizing, dehydrating and rinsing equipment. Consult with us to learn more about hazardous material substitution.

To learn more, visit our website at ehs.princeton.edu/laboratory-research/green-labs/waste-minimization/cleaning-alternatives

Exchange and Reuse

A strategy increasingly used by universities is setting up exchange programs for surplus laboratory resources. At the University of Michigan, a campus-wide reuse initiative, the ChEM Reuse Program (ehs.umich.edu/haz-waste/chem-reuse-program) includes 239 labs sharing unused and unexpired chemicals, equipment and other materials.

Princeton's surplus program, recently renamed Resource Recovery (facilities.princeton.edu/services/resource-recovery-program), is a great source for furniture, office equipment and electronics.



Resource Recovery is located at 755 Alexander Road