



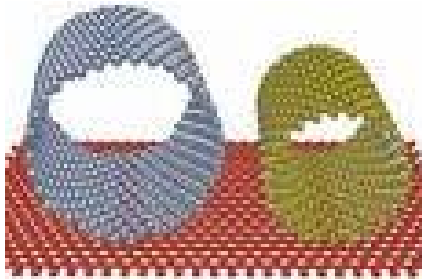
Florida State University Environmental Health and Safety **LAB GUARDIAN**

Fall, 2006

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Nanotechnology Survey for FSU Researchers

Nanotechnology research is commonly defined as the manipulation of particles or materials between 1 and 100 nanometers. EH&S has designed a survey tool to obtain information regarding the amount and type of nanomaterials that are currently being used at Florida State University (FSU). By completing this survey, the Department of Environmental Health and Safety (EH&S) will gain a better understanding regarding the use of nanomaterials among FSU researchers, and identify any potential safety risks that may be associated with this type of research. If you have any questions about this survey, please contact the Laboratory Safety Office at 644-8916.



If you are using nanomaterials in your laboratory, please fill out the survey at <http://www.safety.fsu.edu/nano-survey.html>.

What's wrong with this picture?

WIN A STARBUCKS GIFT CARD!



Identify each safety or compliance violation illustrated in the photo and win a \$10 Starbucks Gift card. FSU students or staff may send an e-mail to Janice Dodge by 8/31/06 at jddodge@admin.fsu.edu listing the safety and compliance deficiencies illustrated in the photo to the left. Include your name, e-mail address, and phone number. If more than one correct

answer is received, we will randomly select the winning response from all correct responses.

—Starbucks gift card was graciously provided by Fisher Scientific, Inc.

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Over the next year, FSU laboratories will be provided with standardized lab emergency postings, which will list emergency contact information as well as hazards within the laboratory. Emergency contact information generally includes the name and FSU contact phone number for the Principal Investigator (PI) or Laboratory Manager, the departmental Facilities Manager(s), and other primary lab personnel. The Hazards Present section identifies hazards within the laboratory, such as lasers, UV, radioactive materials, biohazardous materials, cryogenics, and hazardous chemicals, etc.

This information will permit FSU personnel and students both inside and outside the lab to identify hazards within the lab during an emergency, and provide the information needed to notify appropriate response personnel. No home phone numbers will be provided on these postings without the express permission of the

PI. Alternate contacts to the PI may include Post-docs, lab managers or senior graduate students who are knowledgeable about the activities and hazards within the laboratory.

To date, these postings have been provided to the Biomedical Research Facility, Conradi, Bio Unit I and the NHMFL.

Information provided on the lab postings is derived from a number of sources, but may not be complete. After your laboratory has been posted, please review the information provided, and contact EH&S to advise of any corrections by calling 644-5374 or 644-8916.

Building: _____ Room: _____

In Case of Emergency Call 911

Laboratory Information

Laboratory Contacts



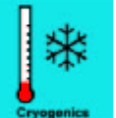


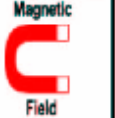










	Name	Office phone	Emergency contact number
Principal Investigator:	_____	_____	_____
Alternate contact:	_____	_____	_____

Additional Contacts		Safety Equipment	
Area	Phone number	Type	Location <small>(to be filled in by lab)</small>
Facility Manager	_____	Fire alarm pull station	_____
Biological Safety Office	644-5374	Fire extinguishers	_____
Chemical Safety Office	644-7682	First-aid kit	_____
Radiation Safety Office	644-8802	Biohazardous spill kit	_____
Laboratory Safety Office	644-8916	Chemical spill kit	_____
EH&S Main Office	644-6896	Safety shower	_____
		Eyewash	_____

ADMITTANCE TO AUTHORIZED PERSONNEL ONLY

- Permission required for entry.
- Review laboratory standard operating procedures on proper personal protective equipment use.
- Remove all personal protective equipment and wash hands before exiting.

HAZARDS PRESENT

 Water Reactive	 Poisons	 Cryogenics	 Oxidizers	 Radioactive Materials	 Magnetic Field
 Rotating Machinery	 Flammable Liquids	 Corrosive	 Explosives	 Carcinogen	 Teratogens
 Noise Hazard	 Compressed Gases	 Laser	 Biosafety Level 2: HIV		

Safety Posting 1x125006
Lab posting version.doc

Reporting an Injury

The Department of Environmental Health & Safety, Office of Risk and Insurance serves as the liaison between you, the Division of Risk Management, and Corvel Corporation to insure that you are receiving the best treatment within the guidelines of the Florida Statutes if you are involved in a work related injury.

It is very important that all injuries are reported to the supervisor and the following forms are completed and forwarded to our office: Notice of Injury and Supervisor's Investigation Report. If the accident is severe enough to require medical treatment of a non-urgent nature, the supervisor should report the injury to Corvel Corporation at 1-866-352-7915. Corvel Corporation will provide directions on how to seek medical treatment. **If your accident requires emergency medical treatment, call 911, we can deal with the paperwork later.**

Please remember, just because an incident occurs at work does not always mean it will be considered work related and will be covered under Workers' Compensation. Untimely reporting of an accident could jeopardize your entitlement to receive Workers' Compensation Benefits.

Environmental Health & Safety, Office of Risk and Insurance is always available to assist you. Please contact LeAnne Hotchkiss, Coordinator, Workers' Compensation Claims at 644-6895.

Protect Your Feet Despite the Heat

Gerred Pogge recently joined the EH&S research support safety team. This incident occurred on his first day of work.

Recently I started a job here on Florida State campus as a Sr. EH&S Specialist. I perform lab safety inspections in the Environmental Health and Safety department. When a researcher retires, we help clean out the chemicals he/she may leave behind in their lab. On my very first day of my job, the EH&S department was asked by a retiring researcher if we would dispose of the chemicals left in his lab. When we got to the lab, we observed shelves full of brown bottles. Some of the labels looked as old as I am. We removed the bottles and put them into transport bins that had an absorbent material at the bottom to absorb spills and leaks from the bottles.

We filled up carts full of containers and loaded down our van. In the fume hood, we found a desiccator filled with a brown oily substance. Two of us carefully removed it from the fume hood to prevent it from spilling and placed it on top of the desk. Both of us tried to remove the top so we could determine what the container contained. No matter how hard we tried, we could not remove the top.

We finally gave up trying to pry off the lid and moved the container to the back of the desk so it would not get spilled. As we slid the desiccator across the desk, the lid came flying off like a Frisbee and the top-heavy container spilled oil down the back of the desk, and made a large puddle on the floor. It didn't look too bad at first, so we moved the desk and a cart that was in the way. In the process, the oil dripped onto my pant leg and shoe. Although the container wasn't labeled, the substance was clearly oily, so we didn't believe it was harmful, but one of my colleagues detected a burning sensation on her skin.

One of our staff left to obtain a spill kit which included a chemical absorbent used for corrosive chemicals. The absorbent contains an indicator, which would alert us to the presence of a base or acid. We got the

Marie and Pierre Curie

Maria (Sklodowska) Curie and Pierre Curie met fortuitously, simply because of her need for access to a laboratory, during the spring of 1894. They were married in the summer of 1895 and helped each other continue their scientific pursuits and the attainment of their doctoral degrees. They conceived two daughters, Irene in 1897 and Eve in 1904. Throughout this time they toiled to pay living expenses by teaching, and still managed to perform research that would lead to a Nobel Prize in Physics in 1903. This research required them to perform tedious and laborious chemical separations, usually under terrible environmental conditions that purportedly had quite a negative affect on their health. Pierre died tragically after slipping under a horse-drawn carriage in 1906. Madame Curie persevered as a newly widowed mother while continuing her work as a scientist and lecturer. She became the first person to receive two Nobel prizes, with a second given for Chemistry in 1911 for her discovery of radium and polonium. Their bodies were exhumed and re-entombed in a place of honor at the Pantheon in 1995.



The Curies' eldest daughter, Irene Joliot-Curie, also received a Nobel Prize in Chemistry as a result of work done with her husband Frederic Joliot, in 1935. Earlier in her life, soon after her 18th birthday, Irene had volunteered with her mother, equipping mobile and fixed military hospital facilities with x-ray apparatus and training young women to operate them during World War I. When Eve was older she was similarly involved with humanitarian efforts, and became a Special Advisor to the Secretary General of NATO. Soon thereafter, she traveled the world with her husband, Henry R. Labouisse, in support of his work with United Nations Children's Fund missions.



The lives of all the Curie's, especially that of Marie, are too interesting to possibly be covered in a short article. Biographies, lectures and movies have been produced that cover this subject in much more detail. Some of these can be found at <http://www.aip.org/history/curie/> and http://nobelprize.org/nobel_prizes/physics/laureates/1903/marie-curie-bio.html (above photos were taken from the Nobel Prize website).

Protect Your Feet Despite the Heat

mess cleaned up and were able to determine that the substance was very acidic. Later that day I noticed small holes that had burned into my pants. Then I started looking at my shoes and realized that everywhere the oil had dripped had eaten holes in my shoes. This incident vividly illustrates the importance of wearing proper protective shoes and equipment.

It is summer in Tallahassee and I usually wear flip-flops because it is so hot. However, safety may be sacrificed for comfort and style when we don't stop and think about the risks and dangers in our working environment. If you are more comfortable wearing flip-flops, then leave a good pair of shoes in your lab to wear when you are working. I am glad that I wear thick leather boots because I would have gotten a chemical burn if I had been wearing sandals.

The summer will be over soon and flip-flops will be put away until next year. Knowing when to wear protective shoes will keep you from missing out on summer fun.

Is Your Lab Ready for a Hurricane?

The time to prepare for a severe weather event is now to ensure that valuable data, laboratory samples and specimens are protected during power outages or water or wind intrusion. EH&S recommends that all researchers take the following measures to protect their work spaces when threatened by severe weather:

- Protect your data with backup files
- Turn off and unplug all nonessential equipment
- Cover and move equipment to a secured location away from windows and off the floor
- Check to make sure all chemicals and wastes are labeled and capped
- Move all containers to appropriate storage locations inside cabinets, if possible. No chemicals or other hazardous materials should be stored on the floor or on high shelving
- Make sure that all water reactive chemicals are enclosed in secondary containers
- Ensure refrigerators containing critical temperature-sensitive research materials are plugged into the emergency power (red) outlets. Turn refrigerators and freezers to the coldest acceptable setting
- Close fume hood sashes completely
- Ensure that all gas fixtures are in the off position
- Follow emergency shut down protocols for storage of hazardous materials
- Make sure that no equipment or hazardous materials are stored near windows or on the floor
- Close and lock all laboratory doors
- Do not block exits
- Update and post emergency contact information
- Determine if critical experiments can proceed – contact your facilities manager to assess power supply
- Check the FSU information website for further instructions



Flooded office and shop in basement of KRB after water pipe break not related to weather events

Lab, Chemical & NHMFL Safety Personnel Changes

Florida State University
Environmental Health and Safety
945 W. Jefferson Street
Tallahassee, FL 32306-4191

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Several new employees have recently joined EH&S. Donna Koson has been hired as Training Coordinator. She will be assisting researchers by scheduling required training. She can be reached at 645-2279.

Gerred Pogge is the new Sr. Environmental Health and Safety Specialist in Lab Safety. He will assist researchers by coordinating and performing lab inspections and providing assistance to researchers in addressing various safety issues. He can be reached at 644-0818.

Lab Safety Resource Team

Assistant Director	Paul Burress	644-8800	pburress@admin.fsu.edu
Chemical Safety	Renee Murray	644-7682	rmurray@admin.fsu.edu
	Andrew Davis	644-0971	akdavis@admin.fsu.edu
Biological Safety	Richard Le	644-5374	rle@admin.fsu.edu
	Amy Hicks	644-9117	ahicks@admin.fsu.edu
Laboratory Safety	Janice Dodge	644-8916	jjdodge@admin.fsu.edu
	Gerred Pogge	644-0818	gpogge@admin.fsu.edu
Radiation Safety	Jason Johnson	644-8802	jjohnson@admin.fsu.edu
	Nicole Lilly	644-8801	nlilly@admin.fsu.edu
NHMFL Safety	Angela Sutton	644-6955	sutton@magnet.fsu.edu
	Carl Green	644-0233	green@magnet.fsu.edu
CAPS Safety	David Knoll	645-1181	knoll@caps.fsu.edu

www.safety.fsu.edu

Lab Safety Reminders

- Remember to check and restock First Aid kits periodically. Additionally, restock spill kits as needed.
- To dispose of empty reagent bottles, please deface the label or write "EMPTY" across the label, rinse bottle, and discard into regular trash. If empty bottles once held highly toxic materials, triple rinse into chemical waste containers before discarding.
- Red Sharps boxes are provided by the Biological Safety Office. Biology researchers can obtain them from the Biology stockroom, Chemistry researchers from the Chemistry stockroom, COM researchers from the College of Medicine stockroom, Psychology researchers from Stan War-math, or call the Biological Safety Office at 644-5374. Red sharps boxes should be used strictly for razor blades, needles, syringes and scalpel blades.
- Broken glass, glass slides, pasteur pipettes and other uncontaminated fragile glass or sharp objects should be placed in a box that has been lined with a trash bag and labeled "sharps" or "broken glass". After boxes are filled (never overfill), they should be taped shut, labeled "sharps trash" and placed in the hallway for removal by the custodial staff. Be sure that large boxes are not used...when filled, they may be too heavy.
- Be sure that all equipment is working properly before starting any experiment. Before beginning an experiment, check the certification labels on fume hoods and biological safety cabinets. A quick check of airflow can be made with a kimwipe. Centrifuges must be carefully balanced, and rpm should not exceed safe levels for rotors or centrifuge tubes. If using a Geiger counter, check the battery strength and be sure audio is on. The "chirping" is a indication of a functioning meter. Contact EH&S to obtain certification of fume hoods, biological safety cabinets or Geiger counters.
- PI's are responsible for ensuring that all lab members receive required safety training. A number of training courses have been set up for the fall semester. These can be accessed at the calendar section of <http://www.safety.fsu.edu/training.html>. More training courses will be scheduled. For questions regarding training, please contact Donna Koson at 645-2279. Information regarding safety training that may assist researchers in understanding FSU policies and developing safe laboratory practices are also available.