

Concrete & Aggregate Lab Safety Policies

All students should note the following policies about SEAS Laboratory:

1. Ensure you are fully aware of your facility's/building's evacuation procedures.
2. Make sure you know where your lab's safety equipment; including first aid kit(s), fire extinguishers, eye wash stations, and safety showers is located and how to properly use it.
3. Know emergency phone numbers (**Public Safety: 202.274.5050**) to use to call for help in case of an emergency.
4. No person is permitted to work in the Laboratory area alone unless it is expressly authorized by the Department Chairman, Faculty, Research advisor, Mentor, or Lab Engineer. Hours of operation shall be established.
5. New students are not permitted to use any machinery and equipment without prior training and the presence of the Faculty, Research advisor, Mentor, Lab Engineer or experienced student. After some period, careful and responsible students may get more flexibility.
6. All students, new and old, should take safety training prior to the use Laboratory machinery and equipment.
7. **The Laboratory should be kept well organized and neat all the time.** Floors, machines, and other surfaces must be kept free of dirt, wood and metal chips, sawdust, oil and grease and other debris. Everyone must clean up after work and help arrange scattered things in proper places.
8. Identify risks and safety procedure for your project before you execute it. Research advisor, mentor, lab engineer or experienced students may give general direction but ultimately you are responsible for your own and Laboratory safety.
9. Absolutely "**No food and Drink**" is allowed in Laboratory.
10. **Safety glasses must be worn all the time when you are working in the Laboratory.** Hearing protection is highly recommended and may be required in some instances.
11. Water is used in this laboratory to condition aggregates and to cure concrete. Ensure that all water sources do not come into contact with electrical outlets or cords. Ensure that all electrical cords are maintained away from foot-traffic areas and are not frayed or bent.
12. **Personal Protective Equipment (PPE):** Students who use machinery and equipment and who are exposed to the hazards of falling, flying, abrasive and splashing objects, or exposed to harmful dusts, fumes, mists, vapors, or gases will be provided with the appropriate equipment needed by the Lab Engineer, to protect them from the hazard.
13. Moving mechanical equipment is utilized in this laboratory. Direct physical contact with machinery such as Concrete mixer, and Load frames should be avoided while it is operating.
14. The primary source of airborne particulates hazards in this laboratory are from dry sand, cement, and fly ash slag being moved about, particularly when introducing them to concrete mixers. Because these materials contain fine silica particles and trace heavy metals in the case of fly ash, an N-95 respirator should be worn when in the presence of airborne particles. A lid should be utilized on mixers until raw materials are sufficiently moistened by water to not become airborne.
15. If you are the last person to leave the lab, make sure to lock all the doors and turn off all ignition sources.
16. **Keep track of new changes and guidelines.**

CONTACT

Pablo E. Sanchez Guerrero, M.Sc.
Laboratory Engineer
Room 32 C01B
Office (202) 274-6419
Cell (202) 380-7366
E-mail : pablo.sanchezguerrer@udc.edu

Ludwig C. Nitsche, PhD
Associate Dean
Room 42 212-T
Office: (202) 274-5082
Email: Ludwig.Nitsche@udc.edu