

**ANIMAL SCIENCE NUTRITION LABORATORY
STANDARD PROCEDURES AND SAFETY RULES
Up-dated October 2011**

I. Personnel using the facilities of the Laboratory are required to:

A. Read the **Laboratory Safety Section** of this manual and sign the document on page 26 signifying that you have read this portion of the manual and physically located the safety features in labs C118 and C119. The document must be on file in the supervisor's office (C119a) before you can begin working in the labs.

B. Receive, prior to beginning any activities in the Laboratory, instruction from the Laboratory Staff regarding location and proper usage of the following safety equipment:

1. **Emergency Shower**
2. **Eye Washes**
3. **Electric Power Panel**
4. **Fire Blankets**
5. **Fire Extinguishers**
6. **First Aid Kit**
7. **Hoods and Vents**
8. **Material Safety Data Sheets**
9. **Safety Glasses, Goggles, Face Shields, Protective Gloves, Aprons and Lab Coats**
10. **Telephone and Emergency Numbers**

C. Read and observe the following rules and procedures. Everyone using the facilities of the Laboratory is required to abide by these procedures.

II. Personnel using the facilities of the Laboratory area are required to demonstrate an understanding, and proficiency in, the use of any equipment and the conduct of any procedures within the premises prior to usage unless under direct supervision by the laboratory staff. Ask for proper instruction if in doubt about any procedure.

III. Personnel using the facilities of the Laboratory are required to be aware of the potential hazard involved in any procedure in which they may be engaged (fire, chemical burn, hot liquids, toxic fumes, poisons, electrical shock, etc.) Each person is required to read the Material Safety Data Sheets (MSDS) for each chemical used in any particular analysis. Personnel who initiate the use of any equipment, facilities, or chemical procedures that involve hazard, or that could become hazardous, are required to remain in that particular area until the procedure is properly terminated.

IV. It is not good practice to work alone in the Laboratory. Some other person should be present or within the range of voice when any potentially hazardous procedure is being conducted.

V. Absolutely **No Smoking** in any of the Ruminant Nutrition Labs or rooms.

VI. Flammables should only be used in appropriate places such as the solvent storage room (C118b) or hoods. In the case of using flammables in hoods outside of C118b, check to make sure the hood is on and there is no buildup of vapors. Sparking equipment should not be used unless the hood is functional and has recently been inspected.

- VII. Foods and drinks are prohibited in any area of the Laboratory except Room C119a. No chemicals are allowed in the areas designated for foods and drinks. Eating and drinking are prohibited for all persons during whatever period of time they are engaged in usage or handling of toxic or corrosive chemicals.
- VIII. Chemicals, equipment, and supplies are to be returned to proper storage immediately upon completion of usage. If chemicals or supplies are becoming depleted, write down what needs to be ordered on the chalkboard outside Room C118a and inform the lab personnel. The Laboratory Supervisor maintains a chemical inventory. The University requires that we maintain accurate inventories in case of fire. Therefore communication of chemical use to the Laboratory Supervisor is essential for accuracy. Desktops and work areas are to be kept free of "clutter". Work areas left "cluttered" are subject to being cleaned and samples discarded by Lab Personnel.
- IX. All materials, including samples, should be properly labeled. Make sure to use proper labeling tape and to write legibly. **Materials not properly labeled will be discarded.**
- X. Work in progress, which should not be disturbed, must be properly labeled. **Every effort must be made to clear ovens, desiccators, and related equipment as soon as possible so that others may use the facilities.**
- XI. **Everyone (undergraduate and graduate students) is responsible for properly washing his or her own glassware and returning it to storage.**
- XII. Please inform laboratory technicians if glassware is broken in order to:
- A. To keep a record of supplies needed in the Laboratory.
 - B. To instill a greater cautiousness in everyone working in the lab.
- XIII. **The Laboratory is not an open facility.** Permission to use the facility and its equipment must be obtained prior to use. In the case of proposed extended use of equipment, it is recommended that such use be scheduled, in advance, with the Laboratory Supervisor.
- XIV. Before any analytical work on samples is allowed:
- A. The individual in charge of the samples must make sure each sample has been **properly labeled with sample number or description, experiment number, date, and name or initials.** Each sample should be labeled with these numbers. (Includes tissue, blood, rumen, as well as feed, feces, etc.)
 - B. Samples should be adequately described and labeled. Analyses to be performed and project from which samples were derived should be indicated.
- XV. Experimental protocols should include the number and type of samples, what analysis is to be done and any special lab equipment or procedures required.