

## S-104 Plant and Soil Analysis Shared Lab Facility Policies – 12/3/19

- The S-104 Plant and Soil Analysis Shared Analysis Facility is a shared resource of the Department of Plant and Soil Sciences. The facility consists of a laboratory equipped with fume hoods, reagents, glassware, balances, pipettes, ovens and other general laboratory equipment for general use. It also contains a number of analytical instruments that are available for general departmental use.
- Departmental support for the facility consists of salary support for the lab manager (Megan Combs). The faculty supervisor of the laboratory is Dr. Jason Unrine. All other expenses must be divided among the users according to use.
- The primary mode of access is to have staff and students be trained to perform techniques by the lab manager, followed by self-service analysis. For programs that do not have the capacity to perform laboratory functions, full-service analysis is available as time allows, will cost more (to pay for part time lab help), and may take considerably longer to complete.
- Priority is given to members of the Department of Plant and Soil Sciences. At this time, other UK personnel are not permitted to use the laboratory resources without permission of the faculty supervisor.
- Non-UK entities may have samples analyzed on a fee-for-service basis. These fees will cover the total costs of analysis. Outside entities should contact the faculty supervisor for a quote.
- All users are expected to have general laboratory safety training (chemical hygiene plan training), fire extinguisher training, and hazardous waste training. In addition, users must follow all instructions of the lab manager and only use equipment and procedures which they have been trained to use. Users are not to work alone in the lab outside of normal business hours (8 am – 5 pm). Users must treat other users and personnel with respect. **Failure to meet these expectations will result in lab access being denied.**

The following major instruments are shared use for any PSS member who is properly trained.

Technicon Flow Injection Analyzer

Varian AA

Agilent ICP-OES

Molecular Devices Plate Reader

Hot Block Digestion Systems

Shimadzu TOC+N analyzer

The following instruments are assigned to specific programs but can be made available to general users upon request with priority given to the assigned programs.

Lachat flow injection analyzer #1 – Brad Lee Program

Lachat flow injection analyzer #2 – Brad Lee Program

MARS Xpress microwave digestion system – Jason Unrine Program

### **Cost allocation for PSS users**

- Logs will be kept to track usage of the Varian AA, Agilent ICP-OES, flow injection analyzers, plate reader, MARS microwave digestion system, and Shimadzu TOC+N analyzer..
- Costs for consumables and gasses will be periodically divided among users according to use. PIs will be asked to provide valid account numbers for entry into the punchout system or pro-card vouchers.
- Costs for the service contract for the ICP-OES will be divided among users based on logged usage on an annual basis. Users will be asked for an account number around September each year.
- Users will be asked to provide their own reagents and disposable labware.
- Major repairs for instruments will require pooling resources among users. In these cases, the lab manager will inform all users of the instrument what the malfunction is and what the estimated costs of repair are. The group of users will then need to determine how to pay for the repairs.
- Contact the lab manager for estimated costs.

### **Data archival policy**

- The lab director will make every attempt to back up computers collecting data from instruments; however, users are responsible for retrieving data at the time of generation and archiving their own data.
- Spent samples need to be removed upon completion of analysis. They will be disposed of within a month if not removed.
- Sample preparation should be done elsewhere when possible
- Sample storage is not possible in this laboratory