

Data Acquisition Request Procedure
Center of Innovation for Flow through Porous Media
University of Wyoming
April 27, 2024

The multiuser instruments at the Center of Innovation for Flow through Porous Media (COIFPM) are available for use by all faculty and researchers at the University of Wyoming for research and educational purpose. These instruments can be used for one-time data collection for (1) exploratory research experiments to obtain preliminary data or (2) long-time use in grants and contracts. If the access to these instruments is needed for applying for a grant or obtaining an industry contract, additional project information is needed to ensure availability of sufficient instrument and staff time. Prices for the use of equipment will be charged for exploratory samples. Support for using the equipment may be available from the Research and Economic Development Division (REDD), College of Engineering and Physical Sciences (CEPS) and/or the School of Energy Resources (SER). The cost of equipment use in a long-term project must be included when a grant application is submitted, or an industry contract is negotiated. Prices are based on equipment depreciation, maintenance costs, supplies and materials, and technician compensation. Available multiuser instruments are:

- ETEM
- FIB-SEM
- QEMSCAN
- X-ray Medical-CT scanner
- X-ray Micro-CT scanner

New equipment owned by UW at the COIFPM will be added to the list of equipment available for use. The instrument list, access process, and use rates will be reviewed at least annually and revised based on changes in operational costs, demand, user feedback, etc.; potential users are encouraged to provide feedback to vpred@uwyo.edu and coifpm-business@uwyo.edu. However, rates will not be changed during the course of a project once agreed upon. Some multiuser instruments may have use limitations due to integration with other equipment such as high-pressure high-temperature flow apparatuses.

- **Step 1- Submit Request:** Individuals or entities needing access to the multiuser instruments, will submit their applications to: coifpm-business@uwyo.edu and vpred@uwyo.edu using the attached [COIFPM Data Acquisition Project Request](#) Form.
- **Step 2- Technical Review and Approval:** Within 2-3 business days, COIFPM's Equipment Access Team will conduct a technical review of the request for the appropriateness of the samples for use in the available multiuser instruments and contact the requestor with any follow-up questions. This team will then meet to develop their plan with a level of detail appropriate to the scope and document that plan for long-term uses in a brief COIFPM Data Acquisition Project Proposal. For short-term exploratory research experiments to obtain preliminary data a Project Proposal is not required. Within 1-2 business days of this step, the request and project proposal (if applicable) will be jointly reviewed by the COIFPM Director (or designee) and Vice President for Research and Economic Development (VPRED) (or designee) and approved (or returned for revision). If needed, VPRED will facilitate review by subject matter experts regarding the technical aspects of the project.

- **Step 3- Data Acquisition Scheduling, Execution, and Data Processing:** Once the request has been approved, the work will be scheduled, based on user, staff, and equipment availability. The work will be scheduled as quickly as possible. Following data acquisition, the Equipment Access Team will work together to complete any data processing, handling/storage of the samples, etc. When the scope of the request is delivered, the Equipment Access Team will formally close the project with notice to coifpm-business@uwyo.edu.

***Lab Floor Access Control:** Requestors and their Team Members are encouraged to be present for the execution of the work, but instrument operation will only be executed by authorized COIFPM workers. Requestors and their Teams are welcome on the lab floor during execution of the work, but until safety training is completed they will need to be escorted by a person with COIFPM lab access who can ensure their safety in compliance with COIFPM lab procedures. COIFPM is an access-controlled facility, primarily to ensure Employee safety, as medium and high hazard experiments are conducted in the facility. Un-escorted COIFPM lab access is granted only after COIFPM General Lab Safety Training is completed.

****Equipment and Staff Costing:** Charges billed to the Requestor's organization will be in accordance with the most updated COIFPM Rate Schedule, which includes by-instrument-system and by-role costing for data acquisition project work. One of the COIFPM members of the Project Team will be assigned to provide monthly reporting of costs, to be reviewed jointly with the requestor before submission to the COIFPM Business Office. The COIFPM Business Office will submit billing to the requesting department monthly.

*****Equipment Access Priority for timing of equipment access:** For a small number of exploratory samples, rapid access to data collection is feasible, subject to staff and equipment availability. For long term use of equipment, the following prioritization will be followed.

1. COIFPM-affiliated, UW researchers conducting work associated with COIFPM research grants, contracts, and subcontracts, and other COIFPM obligations that commit the use of the Center's capabilities and capacities.
2. UW faculty, research staff and students
3. All external individuals or entities

******Additional Information for Requesters:**

- a) In the future, as the instrument use requests increase, a scheduling software will be examined for implementation.
- b) There is one company that is located in COIFPM (Piri Technologies). **Piri Technologies has its own equipment that is separate from and in addition to those of COIFPM.** But when they need to access the multiuser instruments, their requests too will be handled according to the procedure. Piri Tech requests outside work associated with COIFPM research grants, contracts, and subcontracts, and other COIFPM/UW obligations that commit the use of the Center's capabilities and capacities will have 3rd priority (i.e., lower priority than other UW researchers as mentioned by the commenter). And they too pay for the use of the instruments.
- c) Selection of the submitted requests is simple and is based on feasibility of the study. It is affected only by factors such as instrument capabilities, sample conditions/appropriateness, experimental conditions being requested, and availability of appropriate materials/supplies. However, scheduling is subject to staff and equipment availability. For instance, if a given

requested study is feasible but instrument and/or staff are not available, then COIFPM will still work with the requester to schedule the work for the first available opportunity.

- d) Most of the multiuser instruments are seldom fully utilized and often there are openings in the schedule making it possible to plan for new studies. In other words, if a given multiuser instrument is utilized, it will be so only for the period that has been booked for and therefore other studies can be scheduled for subsequent periods. This will be done in a fully transparent manner so that the requester will receive clear timeline for the requested study.
- e) We will also provide an expected timeline for data access for each request. Shortly after the request is received and reviewed, COIFPM will be able to provide the requester with timelines to: (1) perform the study and (2) access the data. Expectedly this could vary for different studies and therefore there are no fixed timelines that can be listed here for all requests as they may be technically different from each other.
- f) The requestors and their team members **are encouraged** to be present for the execution of the work as clearly mentioned earlier in the document under the section titled 'Lab Floor Access Control'. However, it is important to note that in any given day, COIFPM affiliated researchers perform a large number of activities (related to COIFPM research projects) that frequently involve use of hazardous and flammable fluids at elevated pressure and temperature conditions and often utilize x-ray imaging platforms. Therefore, expectedly COIFPM is an access-controlled facility to ensure everyone's safety. But despite this, we will grant **un-escorted COIFPM lab access** after COIFPM General Lab Safety Training is completed. Training of the instruments can be provided as well except when: (1) the costs or time required is prohibitive, or (2) the expertise or skilled professional is unavailable.
- g) The skilled professionals at COIFPM responsible to operate the multiuser instruments have research project duties as well and therefore scheduling of requests shall be done such that they can properly attend to their research tasks too.