

University of Arizona
Chemical Synthesis Facility
Service Policies

The University of Arizona Chemical Synthesis Facility located in CSML 538 was established to provide synthetic expertise in support of research to the University community. Requests are welcome for the services the Chemical Synthesis Facility can provide; however, to help maintain reasonable turnaround times for service requests and to ensure the safety of individuals within the facility, these policies must be abided:

1. Requested compounds cannot be routinely commercially available. The facility is not permitted to compete with private vendors for business; however, the facility can consider the further purification of commercial materials as a project.
2. Requested compounds should be stable and should not pose unusual safety or toxicological hazards. Please indicate on the submission form if there are any physical or chemical hazards associated with the materials or with the method. Also, note if there are special waste disposal needs.
3. Please attach the synthetic procedure of the compound to the Service Request form. The procedure may be from a publication or from a laboratory notebook. The facility does not have the resources presently to engage in basic research studies for the syntheses of novel compounds (new chemical entities). See the note in 10. below regarding procedures.
4. If a procedure is not submitted or if the submitted procedure is unclear or incomplete, a literature search can be performed to fulfill your service request. If you want a literature search, please note this option on the form. Unless a literature search is requested, the facility will contact you prior to conducting the search. Time will be charged for the literature search.
5. Please be sure to state the quantity of material needed. The minimum quantity will be dependent on the feasibility of the procedure. If the reaction scale is deemed unmanageable due to the scale being too large or too hazardous, the facility cannot fulfill the request. Scale up work may require process development studies to identify safety and feasibility issues. Time will be charged for the process development studies.
6. It is assumed the purity and quality of the material obtained from the procedure will be sufficient to fulfill your service request. In order to fulfill requests for higher purity, there will be additional charges for time and for purchase of any necessary special equipment.
7. Unpublished notebook procedures may be submitted; however, be sure to indicate all pertinent experimental details including: 1) reaction conditions such as quantities, times, temperature, and solvent; 2) product and intermediate characteristics; and 3) in process checks such as TLC etc. Notebook procedures may require additional study should unforeseen problems arise. You will be contacted if there are procedural issues. If the procedure provides the desired product as a minor component in a mixture, the time charges will reflect the additional work necessary to isolate the product from the mixture, if the separation is feasible.
8. Routine laboratory supplies are included within the basic time costs. Such supplies include disposable pipettes, washing solvents, common glassware, etc. Additional and incidental charges will include the following: literature search time; starting materials and reagents; special solvents; special reaction equipment; and special safety equipment. The cost of analytical support services, e.g., NMR, MS,

combustion analysis etc., analytical materials and specialized equipment will be billed as part of the total cost. Please indicate if you have a preference for specific vendors for reagents and starting materials.

9. The facility will provide a reasonable good faith estimate of costs and time for project completion based on the synthetic procedure and materials availability. While we will do everything reasonable to stay within the range of the estimates, these estimates cannot be contractually binding in lieu of unforeseen problems. Issues that will affect the estimates include: variations in prices for chemicals; actual availability of commercial materials; time charged to troubleshoot unforeseen problems; vendor's materials not meeting specifications; and significant cost overruns.
10. Not every synthetic procedure in the scientific literature is reproducible as published. The synthetic procedures published in scientific journals and patents are typically *not* subject to rigorous check by peers; therefore, there may be details some authors may omit due to a presumed obviousness. The best source for a rigorously checked procedure is *Organic Syntheses*. The optimal procedure would be one where the requestor is familiar with the project details and can provide some guidance when problems arise. The facility understands that this situation will not always be the case and will make decisions after discussion with the requestor.
11. Be assured the synthesis facility will put forth the best effort to complete every project it accepts; however, in the event the project cannot be fulfilled, the requestor will still be billed for the time, materials and services completed.