

## **Ph.D. Preliminary Examination Requirements UW-Madison Environmental Chemistry and Technology Program**

Ph.D. candidates in the Environmental Chemistry and Technology (EC&T) Program are required to successfully pass a preliminary examination before reaching the status of a dissertator. Ph.D. candidates are required to successfully pass their preliminary examination before end of their fifth semester as a Ph.D. student in the EC&T Program. The EC&T Preliminary Examination Committee must comprise of five committee members that meet the requirements of the UW-Madison Graduate School, and the committee must include at least three members of the EC&T Faculty Committee. The remaining committee members may be members of the EC&T Faculty Committee or other tenure-track or tenured faculty members of other departments at UW Madison. One of the five required committee members may be a tenured or tenure-track faculty member at another university or qualified researcher, scientist or engineer that is not a tenure-track or tenured member of the UW-Madison faculty. The requirements for the non-UW Madison tenure or tenure-track Ph.D. committee member is defined by the UW-Madison Graduate School. If warranted by the subject matter of the preliminary examination, committee members beyond the required five may serve on the committee at the discretion of the faculty advisor as a non-voting member.

The EC&T Ph.D. Preliminary Examination has written and oral components. The written component consists of an original research proposal written by the Ph.D. candidate in the format of a National Science Foundation (NSF) proposal. The written proposal should be provided to the EC&T Preliminary Exam Committee at least two weeks prior to the exam. The student should make a 30-40 minute oral presentation to the committee and be prepared to answer questions about the proposal, the student's doctoral research and thesis plans, as well as background in environmental chemistry and technology.

Ph.D. candidates should work with their advisor to select an appropriate topic for their EC&T Preliminary Exam. EC&T Preliminary Exams topic should fit within one of the two categories:

*Thesis Research Proposal:* A *thesis research proposal* would cover the proposed research that would be pursued as part of the candidate's doctoral thesis and should be completed after the candidate's thesis plans are developed and some preliminary data are generated by the candidate. The timing of a *thesis research proposal* should be before the student has completed their first publication on research included in the candidate's thesis.

*Future Research Proposal:* A *future research proposal* would cover research that would build on the candidate's thesis research but does not include the research planned to be conducted as part of the candidate's thesis. The concept of the future research proposal would be the research a candidate would like to pursue after completing their thesis. The timing of the *future research proposal* exam should be after the candidate's first completed doctoral manuscript is submitted for publication or published.

A Ph.D. candidate is responsible for making sure the EC&T Preliminary Examination Committee understands the requirements of the preliminary examination and the relationship of the proposal to the candidate's doctoral research. In addition, the Ph.D. candidate is responsible for working with the EC&T Student Services Office to request a warrant for their EC&T Preliminary Examination. The warrant

request for the preliminary examinations should be made to the EC&T Student Services Office at least four weeks before the exam and after an exam date and committee has been selected.

Required Elements of the EC&T Preliminary Examination Written Proposal: In general, the proposal should meet the general requirements for those submitted to the NSF, as indicated in the NSF webpage:

<http://www.nsf.gov/cgi-bin/getpub?gpg>

The proposal should **not** be submitted using the NSF Fastlane system. The budget and administration requirements will be simplified. The proposal should not include a formal NSF Cover Page but should include a cover sheet with the proposal title, Ph.D. candidate's name, committee members' names, and the date of the preliminary examination. In addition, the proposal should not include Current and Pending Support Forms. All other aspects of the proposal with respect to formatting and organization should follow the instructions from the web page.

NSF requires that proposals explicitly address the **intellectual merit** and the **broader impacts** of the proposed project. These aspects of the proposal should be explicitly addressed in the project summary and proposal main text.

The basic outline of the proposal should be as follows:

- Cover Sheet (1 page maximum)
- Project Summary (1 page maximum)
- Table of Contents (no specific format)
- Project Description (15 pages maximum)
- Reference Cited (no page limit)
- Biological Sketch (PI only, which must be Ph.D. candidate)
- Proposed Budget (budget for each year and a cumulative budget);  
The NSF Budget Form 1030, can be found at:  
<http://www.nsf.gov/pubs/2000/00form1030/00form1030.pdf>
- Budget Justification (1 page maximum)

For the proposal budget, specify the time required for each investigator. Estimated salary rates should be consistent with those set by UW-Madison. Do not include faculty for salary; the PI salary should UW-Madison graduate student rate. Consider analytical and equipment maintenance costs. Fringe benefits, tuition remission, and indirect charges (overhead) must be included and are also specified by UW-Madison. Note: the Cover Page and Facilities, Equipment and Other Resources normally required for an NSF proposal are not required for the EC&T Ph.D. Preliminary Examination Written Proposal

Additional information on preparing a budget can be obtained from the UW-Madison Research and Sponsored Programs (RSP) budget preparation webpage:

<https://www.rsp.wisc.edu/forms/budgettools.html>

Please note that this webpage contains a budget preparation spreadsheet that you can download.

Current Research Assistant (RA) rates can be found at the following website:

<http://www.bussvc.wisc.edu/bursar/remista.html>