

# UW/PNNL JOINT PROGRAM IN NANOSCIENCE

## Research Awards in Nanoscience

### Application

(Please type or print clearly)

### Awards For Collaborations In Nanoscience

#### Eligibility

Student applicants must have completed 9 months of graduate school at UW by the start of the award period. Other applicants must be full-time staff at PNNL or tenure-track faculty at UW. Renewal applications will be ranked together with new applications. Renewal applicants must submit a progress report together with a proposal (see details below).

These awards are increasingly linked areas where both UW and PNNL have significant research interests or see major opportunities. After FY04 the nature of PNNL support of the JIN will require greater involvement and commitment from PNNL mentors and appropriate contacts and discussions about this are an important part of the proposal development process. Applicants need to interact with PNNL mentors to determine the resources available

#### Award Categories

Awards will be in the form of student salary/tuition, postdoc salary, faculty salary, travel, or living expenses for periods of up to twelve months between September 16, 2004 and September 15, 2005.

Some awards will have a longer duration, and continuation depends upon making satisfactory progress and funding arrangements at PNNL. The graduate student awards (fellowships) will include the graduate student's stipend, benefits, and tuition/fees. Other awards will be for salary and benefits of postdocs or faculty, or travel/housing expenses. Several types of awards can be requested in a single application, but these should be separately listed in the budget. Please indicate the specific type(s) of awards being requested. Award types include:

1. Joint Institute Graduate Fellowships - These can be of two types
  - Joint Institute Graduate Fellowship for Thesis Research - Thesis research activity for UW graduate students involving collaborations between UW and PNNL-up to a three year period, any time at the start or later in the student career. (A student will normally propose these awards with project team support.)
  - Joint Institute Graduate Fellowship for Advanced Training - Research quarter(s) for UW graduate students at PNNL, not necessarily applied directly to thesis work, but designed to optimize the student's learning of advanced research techniques. Some of these fellowships may involve "apprentice" participation on a PNNL project during this learning period or working with Users in the EMSL. Could possibly serve as a "lab rotation" for degrees, which require them (such as the "Nanotechnology PhD Option"). (Proposed by student only.) JIN Graduate Fellowships for Advanced Training for a single quarter duration (non-renewable) can also be made at other times by submitting an informal request / justification / budget explanation letter to one of the JIN Co-Directors
2. Joint Institute Postdoctoral Fellowship - Full or partial salary support for postdoc for research activity in a collaboration involving both UW and PNNL. (Proposed by collaborators from both UW and PNNL, with potential postdoc candidate(s) identified, when known in advance, and appointment period specified.)

3. Joint Institute Faculty Appointments - Full or partial funding for faculty salary during summer or other quarter research visits to PNNL, or for time spent at either PNNL or UW which is clearly PNNL/UW collaborative research or proposal writing, designed to benefit both PNNL and UW. (Proposed by UW faculty and collaborator(s) from PNNL). Small Faculty salary requests (1 or 2 week) can also be made at other times by submitting an informal request / justification / budget explanation letter to one of the JIN Co-Directors
4. Joint Institute Travel Grant - Funding of travel to and partial support for housing/living expenses at the partner institution for those involved in joint UW/PNNL collaborations. (Proposed by anyone or group applying for any one of the above award types, or by those whose salary is already paid but for whom travel expenses for the collaboration are not readily covered.) Smaller travel awards can be requested at any time with an informal request / justification / budget explanation letter to one of the JIN Co-Directors.

### **Selection Criteria:**

Selection criteria will be as follows, in order of decreasing importance:

1. Quality of proposed research.
2. Expected enhancement of collaborations between PNNL and UW. The PNNL Nanoscience and Technology Initiative has identified focus areas in oxide nanostructures, soft materials interfaces, nanobiology, and computation. Projects linking these focus areas to subjects of importance to DOE Missions involving environmental, energy, fundamental science or national security topics are most useful. To some extent, this expectation of enhancement will depend on the estimated productivity of the individuals and teamwork involved.
3. Relevance to nanoscience.
4. Expected contribution toward opportunities for external funding of collaboration between PNNL and UW, and /or impact on other Joint Institute missions besides that in item 2 above (e.g., quick publications, etc.).
5. Previous academic and/or or research performance of individual to be funded and/or collaborators from PNNL and UW (new proposals only).
6. Performance in first funded period (renewals ONLY).

**Electronically submit this form, or send the signed original application with your transcripts and letters of recommendation to:**

Mack Carter, Program Coordinator  
Department of Chemistry, Box 351700  
University of Washington  
Seattle, WA 98195-1700  
Fax: 206-616-6250, phone: 206-616-9320  
carter@chem.washington.edu

**APPLICATION DEADLINE IS 5 p.m. September 1, 2004**

Note that applications for travel grants, single-quarter Graduate Fellowships for Advanced Training, and specific-purpose, short-term (1 or 2 week) faculty salary can be made at any time with an informal request / justification / budget explanation letter to one of the JIN Co-Directors..

# Application for Joint PNNL/UW Fellowships

## Type(s) of Award(s) Being Requested (Check one or more)

Graduate Fellowship for Thesis Research

Graduate Fellowship for Advanced Training

Postdoctoral Fellowship:            Named            Unnamed

Faculty Appointment

Travel Grant

## Complete Appropriate Sections as Per Call for Awards

### 1. Personal Information for Principal Applicant (main UW contact for JIN staff)

Is this an extension for a current award:    If Yes, when did the earliest previous (ie first) JIN start? \_\_\_\_\_

Name: \_\_\_\_\_ Signature: \_\_\_\_\_

Affiliation: \_\_\_\_\_

Home Department or Unit: \_\_\_\_\_

Street address: \_\_\_\_\_

Office/lab phone: \_\_\_\_\_ Email address: \_\_\_\_\_

### If grad student, please also include:

Student or University ID #: \_\_\_\_\_

Advisor(s): \_\_\_\_\_ phone: \_\_\_\_\_

\_\_\_\_\_ phone: \_\_\_\_\_

**For graduate student or postdoc salary requests, list the main UW and PNNL mentors for the project below, and have them both provide supporting letters:**

Name	Affiliation/Department	Phone	Email
1.			
2.			

### 2. Research Proposal

The application material should be prepared in two parts: The first consists of this cover page, the abstract and project description, and the letters from the two mentors. The second part consists of documentation required by the appropriate Steering Committee that may include transcripts, GRE scores, additional letters of recommendation, and information on matching funds and other financial support. Only the first part will be sent to the Council of Fellows, which is the body that makes the awards. The entire proposal will be sent to the Steering Committee that reviews the proposals and makes the recommendations of awards. The abstract and description of the proposed research are not to exceed three (3) pages or 1500 words (written by the student for a student award in the space provided). Supporting figures and list(s) of references should be included in an Appendix and not in the three pages. **Please include the following:**

- Project title and mentors
- Abstract (1/2 page) on the title page
- Specific aims of the project
- A brief description of experimental and/or theoretical methodology and optimistic outcome scenarios.
- A precise statement of how the candidate perceives the proposed research to contribute to the mission of the Joint Program.
- Major results to date, if any. This section is particularly important for renewal applications, in which case it should be included as a separate 3-page "Progress Report". *Awardees seeking renewal should include in the Progress Report a list of publications acknowledging the award, and attach ONE copy of each of these publications.*

# **Project Description for Joint PNNL/UW Fellowship**

## **Research Proposal**

**Title:**

**Mentors:**

**Abstract:**

## **Project Description for Joint PNNL/UW Fellowship**

## **Project Description for Joint PNNL/UW Fellowship**

# Budget Year for Joint PNNL/UW Fellowship

### 3. Detailed budget

(Explicitly list anticipated or desired start dates, durations and portions of time at each institution.)

#### Type(s) of Award(s) Being Requested (check one or more)

Graduate Fellowship for Thesis Research

Graduate Fellowship for Advanced Training

Postdoctoral Fellowship:            Named            Unnamed

Faculty Appointment

Travel Grant

#### A, PERSONNEL SALARY

Number Of Personnel	Type Of Personnel	Salary Calculations				Funds Requested w/fringe
		Start date for Salary	Salary w/o fringe (/mo)	Academic (#.##)	Summer (#.##)	
	Post Doctoral Associates					
	Graduate Students					
	Faculty Fellows					
	<b>Total Personnel</b>					

#### B. TRAVEL

Type of Travel	Notes		
<b>1. Seattle to/from PNNL</b> Housing at PNNL is provided for JIN Fellowship holders, so funding for it need not be requested here.	Transportation:		
	Housing:		
	Meals:		
<b>2. Travel to other locations</b> Only allowed if essential for collaboration success: specify location and explain need.	Transportation:		
	Housing:		
	Meals:		
<b>Total Travel Costs:</b>			

#### C. BUDGET DESCRIPTION

Please be brief

### 4. Recognition

Successful applicants and their mentors will be recognized as recipients of a UW/PNNL fellowship award. Consistent with such an award it is expected that support will be acknowledged, when appropriate, in publications and presentations.

## Additional Information Required for Joint PNNL/UW Fellowships

### 5. Previous Training Grant Support

Have you, as a graduate student, received support previously from any training grant at the UW, including this program?      No      Yes Please specify below.

Dates of Support: From: \_\_\_\_\_ To: \_\_\_\_\_

Grant title and/or NIH number: \_\_\_\_\_

Was this an individual or institutional grant? \_\_\_\_\_

### 6. Matching Funds and Sources of Research Team Support

Matching funds provided by mentor(s) or applicant: \_\_\_\_\_%

- Faculty mentor(s) must provide a list of their current research funding support in NSF or NIH format, listing \$ amounts for “direct costs” only.
- PNNL Mentors should list primary sources of funding, amounts and names of programs or grants.

Type Of Support	Source	Cost
1. Salaries		
2. Travel		
3. Supplies and Equipment		
<b>Total Participant Costs:</b>		

### 7. Resumes

Faculty, candidates for Post-doctoral fellowships, as well as all mentors and all collaborators should submit a short (2 page) resume instead of completing Items 8-10 below, which are for student applicants only.

### 8. Education

Ph.D. Student Year: (check one)    1    2    3    4    (specify beyond 4th year) \_\_\_\_\_

Education	School	Attendance Dates	Major Field	Science GPA	Overall GPA
Undergraduate					
Masters					
Graduate					

Please attach a copy of your **transcripts and GRE scores on less than 5 pages** unofficial copies are acceptable.

**Transcripts, GRE Report, and Recommendations are NOT NEEDED by current awardees seeking extension. However, letters of support from both the UW and the PNNL mentors are required for**

## **Additional Information Required for Joint PNNL/UW Fellowships**

### **9. List of Your Publications**

## **Additional Information Required for Joint PNNL/UW Fellowships**

### **10. Relevant Research Experience Not Described In Your Research Proposal.**