



## RET Teacher Application

### Instructions

This application is completed only after the following **6 items** have been submitted:

- 1) an application - see attached
- 2) a resume,
- 3) a recommendation form -see attached, from your principal,
- 4) a 2<sup>nd</sup> recommendation form from another appropriate school administrator or teacher leader,
- 5) a letter of recommendation from your principal, and
- 6) a supplemental letter of recommendation from another appropriate school administrator or teacher leader.

All **6 documents** are due by **Friday, January 15<sup>th</sup>, 2016**.

See the directions below:

- (1) Submit the **application** (below) to Debbie Liberi at [futurescience.uc@gmail.com](mailto:futurescience.uc@gmail.com)  
Title the email subject: **Your Name – RET Application Documents\_2016**  
Save Your Application file name as **Your Name\_ RET Application\_2016**
- (2) Also include an updated **resume** saved as: **Your Name\_RET\_Resume\_2016**
- (3) Also include the following documents (see attached.) -**Two Recommendation Forms** (see below). One form is from the principal and a 2<sup>nd</sup> one is from another appropriate school administrator or teacher "leader." These forms can be emailed to Debbie Liberi at [futurescience.uc@gmail.com](mailto:futurescience.uc@gmail.com) by the recommender directly. A hand-filled form which is scanned and saved as a PDF document is acceptable to be emailed also. Please use the title **Applicants name – RET Recommendations** in the email. They can be emailed with the Letters of Recommendation (see below) from each recommender directly.
- (4) Also include two **Letters of Recommendation** (see attached.) Provide a letter of recommendation from your principal supporting the Post-RET implementation. Another (supplemental) letter of recommendation is required from another appropriate school administrator or teacher "leader." Both letters must provide *name, affiliation, and contact information* and be signed, scanned and emailed to Debbie Liberi at [futurescience.uc@gmail.com](mailto:futurescience.uc@gmail.com). Please use the title **Applicants name –RET Recommendations** in the email. They can also be emailed together with the Recommendation Form from each recommender.

The preferred method is to scan and email as PDF documents. However, if the reviewer does not have access to a scanner, the forms can be mailed to:

Debbie Liberi  
RET 2016 Grant Coordinator  
University of Cincinnati  
P.O. Box 210076  
Cincinnati, OH 45221-0076

## Application

**Name:**

Personal Email (required):

School Email:

Home Phone: ( ) -

Cell Phone (required): ( ) -

**NSF Diversity Reporting Information**

The National Science Foundation requests such information simply to determine the diversity of teachers our program is attracting. It is strictly confidential and used only in aggregate form.

Gender: Male: \_\_\_ Female: \_\_\_

Do you have a disability? No: \_\_\_ Yes (specify): \_\_\_\_\_

Race:

White: \_\_\_ Native American: \_\_\_ Black or African American: \_\_\_ Hispanic/Latino: \_\_\_  
 Native Hawaiian or Other Pacific Islander: \_\_\_

The RET Project requires participation in an Annual Tracking Survey for 3 years after participation. A signature below indicates your agreement in complying with it.

\_\_\_\_\_

Signature of Applicant
Date of Application

Personal Address Street: City: State: Zip:	School Address Street: City: State: Zip:
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Rank the following projects in the order of your preference (1=Highest - 6=Lowest)

Detailed project descriptions available at: <https://www.ceas3.uc.edu/ret/archive/2016/ret/>

- Project # 1: "Application of Nanocomposites on Controlling Biofilms in Drinking Water Distribution System"
- Project # 2: "Synthesis Characterization of Graphene for Energy Storage Devices"
- Project # 3: "Enhancing Decision Making Emulating Human Reasoning"
- Project # 4: "Assessing Traffic Signal Control Performance"
- Project # 5: "Cyberspace Attack and Defense"

If you do not get your first choice, are you willing to participate with any of the other choices:

Yes: \_\_\_\_ No: \_\_\_\_

If the answer to the above question is "Yes," indicate which ones. (Write the project #.

Example: Project # 1 or Project # 5, etc.): \_\_\_\_\_

Are there any projects you definitely would not like to participate in?

Yes: \_\_\_\_ No: \_\_\_\_

If the answer to the above question is "Yes," indicate which ones. (Write the project #.

Example: Project # 1 or Project # 5, etc.): \_\_\_\_\_

Answer the following questions, each in at least 100 words but no less than 50 words:

1) Considering your professional performance and especially the quality of your instruction, what are your strengths and how does this benefit the students?

2) What are your most effective techniques for increasing student learning?

RET Teachers will be utilizing engineering design and challenge-based learning. To read more about challenge-based learning pedagogy, please consult the following link: [challengebasedlearning.org](http://challengebasedlearning.org). Within a challenge-based environment, students learn specific content as they solve engineering problems. Students often work in teams to address design challenges and test and refine their solutions.

3) How might you utilize challenge-based learning in classes you are scheduled to teach next school year?

4) What challenges do you currently face in your classroom as you try to help students both master content and sustain their interest in the subject matter?

5) What is your highest priority goal for post-RET implementing? Illustrate your answer using a specific classroom activity you plan to implement to achieve this goal.

6) If given the opportunity to participate in the RET program for a second year, would you?

Yes: \_\_\_\_ No: \_\_\_\_

If the answer is "Yes," describe how it will benefit you professionally and what you will do differently in your classroom?

7) What is your current teaching assignment? What grades and content are taught (mathematics, science or any other)?

8) Please describe your school demographics: school type (public/private), location (urban/rural/suburban), school; enrollment, and gender (male/female), ethnicity (White/ Native American/Black/Hispanic or Latino/Native American/Asian or Pacific Islander/Others) and economically disadvantaged student distribution (give %.)

9) What courses are you planning to teach in the 2016-2017 academic year (give exact course title, subject area, and grade level)? In which course will the RET Unit be taught? (Note: Please include this information on the Principal Recommendation Form.)

10) What is your educational background, including (a) degree title(s), (b) name of degree granting institution(s), (c) year of graduation for each degree, and (d) teaching certification obtained and year of expiration?

11) What is your occupational history and include a description of your special skills.

12) (a) Have you hosted and guided an intern or pre-service student teacher in your class? If yes, describe your role and reflect on your experience. (b) If the RET program requires you to host and guide an undergraduate engineering senior UC student in your class (6 hours/week), will this be acceptable to you and your school? If yes, describe the advantages in having this student in your class and in what ways you can best utilize the services of this student. (Note: The undergraduate engineering senior UC student will participate in 4 hours of professional development on CBL and EDP teaching methods)



Deadline: Friday, January 15<sup>th</sup>, 2016 (Completed application and additional documents must be submitted by this date. The review process will start immediately, and be completed by Friday, March 4<sup>th</sup>, 2016. The application period will be open until all positions are filled. You will be contacted about a phone interview date and time. In addition there will be a mandatory on campus orientation before the 12 finalists are announced. **You will be informed about the date, time and venue of the Orientation Meeting. Application process will be open until all positions are filled.**



**NSF Summer Research Experience for Teachers**  
**“Challenge-Based Learning and Engineering Design Process Enhanced Research Experiences”**

**Principal Recommendation Form for RET Teacher Applicant**

**All documents including the Recommendation Form and the Letter of Recommendation from the Principal are due by Friday, January 15<sup>th</sup>, 2016.**

Your candid assessment of the applicant named will greatly assist the selection committee. Your recommendation will be used to help determine whether the candidate will be selected and receive the financial benefits of the Research Experience for Teachers (RET) summer program.

Please complete the **Recommendation Form** on the following pages. In addition to the completed form, we would appreciate a **Letter of Recommendation** from you concerning the applicant's scholarship, personality, character, professional promise and an assessment of the applicant's strengths and weaknesses. The letter from the School Principal must provide *name, affiliation, and contact information* and should be signed, scanned and emailed as a PDF document to Debbie Liberi at [futurescience.uc@gmail.com](mailto:futurescience.uc@gmail.com).

After completing the both the **Recommendation Form** and the **Letter of Recommendation**, please scan and email them both to Debbie Liberi at [futurescience.uc@gmail.com](mailto:futurescience.uc@gmail.com). Please title the email subject: **“Applicant's Last Name – RET Recommendations”**

Although the preferred method is to email the documents, if you do not have access to a scanner or computer you may mail the **Recommendation Form** and the **Letter of Recommendation** to the address below. Please place the documents in an envelope and sign it across the seal before mailing.

Debbie Liberi  
RET 2016 Grant Coordinator  
(Dr. Anant R. Kukreti Lead RET PI)  
University of Cincinnati  
P.O. Box 210076  
Cincinnati, OH 45221-0076

Tel: Work (513) 556-6419, Cell (513) 608-4741; Work email: [liberid@ucmail.uc.edu](mailto:liberid@ucmail.uc.edu)



## Principal Recommendation Form

### 2016 NSF Summer Research Experience for Teachers

#### To Be Completed by the RET Teacher Applicant:

Name of Applicant: \_\_\_\_\_  
Last First Middle

School: \_\_\_\_\_

Address, City, State, & Zip: \_\_\_\_\_

Telephone: \_\_\_\_\_ Email: \_\_\_\_\_

Course in which the RET Unit will be taught in the 2016-17 Academic Year:

\_\_\_\_\_

#### To Be Completed by the School Principal:

- 1) **In a short statement, using the space below, please confirm that the teacher will be assigned the course, indicated (above) in his/her RET application, to teach during the 2016-2017 academic year during which the RET experience will be implemented.**
  
  
  
  
  
  
  
  
  
  
- 2) **Using the space below, please describe what types of support will be available from your school to make instructional/curricular changes that the applicant may want to implement as a result of this professional development experience?**

Using the chart below, please rate the applicant relative to other employees whom you have known in a similar capacity. If additional space is needed, or if you would like to add any other comments, please use an additional blank page.

**To Be Completed by the School Principal:**

	<b>Not observed</b>	<b>Weak</b>	<b>Fair</b>	<b>Good</b>	<b>Excellent</b>	<b>Outstanding</b>
Ability to analyze a problem and formulate a solution						
Ability to initiate instructional change						
Ability to work cooperatively with others						
Communication skills (oral and written)						
Emotional maturity						
Evidence of creativity and imagination						
Evidence of personal character and ethics						
Experimental ability						
Follow-through and commitment						
Leadership exhibited within the school						
Overall self-confidence						
Motivation to succeed in the summer RET program						
Potential for RET to impact teaching performance						

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name (please type or print) \_\_\_\_\_

Title: \_\_\_\_\_ School: \_\_\_\_\_

Number and Street Name \_\_\_\_\_

City, State, and Zip Code \_\_\_\_\_

Telephone \_\_\_\_\_ E-mail \_\_\_\_\_



## NSF Summer Research Experience for Teachers

### “Challenge-Based Learning and Engineering Design Process Enhanced Research Experiences”

#### Administrative Leader or Teacher “Leader” Recommendation Form for RET Teacher Applicant

**To Be Completed by another Administrative Leader or Teacher “Leader.” All documents including the Recommendation Form and the Letter of Recommendation from the Administrative Leader or Teacher “Leader” are due by Friday, January 15<sup>th</sup>, 2016.**

Your candid assessment of the applicant named will greatly assist the selection committee. Your recommendation will be used to help determine whether the candidate will be selected and receive the financial benefits of the Research Experience for Teachers (RET) 2016 summer program.

Please complete the **Recommendation Form** on the following page. In addition to the completed form, we would appreciate a **Letter of Recommendation** from you concerning the applicant’s scholarship, personality, character and professional promise and an assessment of the applicant’s strengths and weaknesses. The letter from the Administrative Leader or Teacher “Leader” must provide *name, affiliation, and contact information* and should be signed, scanned and emailed as a PDF document to Debbie Liberi at [futurescience.uc@gmail.com](mailto:futurescience.uc@gmail.com).

After completing the both the **Recommendation Form** and the **Letter of Recommendation**, please scan and email them both to Debbie Liberi at [futurescience.uc@gmail.com](mailto:futurescience.uc@gmail.com). Please title the email subject: “**Applicant’s Last Name – RET Recommendations**”

Although the preferred method is to email the documents, if you do not have access to a scanner or computer you may mail the **Recommendation Form** and the **Letter of Recommendation** to the address below. Please place the documents in an envelope and sign it across the seal before mailing.

Debbie Liberi  
RET 2016 Grant Coordinator  
(Dr. Anant R. Kukreti Lead RET PI)  
University of Cincinnati  
P.O. Box 210076  
Cincinnati, OH 45221-0076

Tel: Work (513) 556-6419, Cell (513) 608-4741; Work email: [liberid@ucmail.uc.edu](mailto:liberid@ucmail.uc.edu)

## Administrative Leader or Teacher "Leader" Recommendation Form

### 2016 NSF Summer Research Experience for Teachers

**To Be Completed by the RET Teacher Applicant:**

Name of Applicant: \_\_\_\_\_  
Last
First
Middle

School: \_\_\_\_\_

Address, City, State, & Zip: \_\_\_\_\_

Telephone: \_\_\_\_\_ Email: \_\_\_\_\_

Using the chart below, please rate the applicant relative to other employees whom you have known in a similar capacity. If additional space is needed, or if you would like to add any other comments, please use an additional blank page.

**To Be Completed by the Administrative Leader or Teacher "Leader":**

	Not observed	Weak	Fair	Good	Excellent	Outstanding
Ability to analyze a problem and formulate a solution						
Ability to initiate instructional change						
Ability to work cooperatively with others						
Communication skills (oral and written)						
Emotional maturity						
Evidence of creativity and imagination						
Evidence of personal character and ethics						
Experimental ability						
Follow-through and commitment						
Leadership exhibited within the school						
Overall self-confidence						
Motivation to succeed in the summer RET program						
Potential for RET to impact teaching performance						

Name (type or print) \_\_\_\_\_ Signature: \_\_\_\_\_

Date \_\_\_\_\_ Title: \_\_\_\_\_ School: \_\_\_\_\_

Number and Street Name \_\_\_\_\_

City, State, and Zip Code \_\_\_\_\_

Telephone \_\_\_\_\_ E-mail \_\_\_\_\_