

RET Participant 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 (secondary school only) or department head (community college only),

4) a 2nd recommendation form from another appropriate school administrator or teacher leader,

5) a letter of recommendation from your principal (secondary school only) or department head (community college only), and

6) a supplemental letter of recommendation from another appropriate school administrator or teacher leader.

All 6 documents are due by Wednesday, January 24th, 2018.

See the directions below:

(1) Submit the **application** (below) to Debbie Liberi at <u>futurescience.uc@gmail.com</u> Title the email subject: **Your Name_RET-Application-Documents_2018** Save Your Application file name as **Your Name_RET-Application_2018**

(2) Also include an updated resume saved as: Your Name_RET_Resume_2018

- (3) Also include the following documents (see attached.) <u>Two</u> Recommendation Forms (see below). One form is from the <u>Principal (secondary school only) and/or Department Head (community college only)</u> and a 2nd one is from <u>another appropriate school administrator or teacher "leader</u>." These forms can be emailed to Debbie Liberi at <u>futurescience.uc@gmail.com</u> 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 **Applicant's 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 (secondary school only) or department head (community college only) 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. 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 2017 Grant Coordinator University of Cincinnati P.O. Box 210076 Cincinnati, OH 45221-0076

Application

Name:

Personal Email (required): School/Institution Email: Home Phone: () -Cell Phone (required): () -NSF Diversity Reporting Information

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

Gender:	Male: 🛛	Female: 🗆		
Do you have	e a disability?	No: 🗆	Yes (specify):	
Race:				
White: 🗆 N	ative America	n: 🗆 🛛 Blac	k or African American: 🛛	Hispanic/Latino: 🗆
Native Hawa	aiian or Other	Pacific Island	er: 🗆	

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	School/College Name:
Street:	School/College Address
City:	Street:
State:	City:
Zip:	State:
	Zip:

Rank the following projects in the order of your preference (1=Highest to 6=Lowest) Detailed project descriptions available at: <u>https://www.ceas3.uc.edu/ret/archive/2018/ret/</u>

Project # 1: "Overcoming Challenges Faced by Small Water Utilities"

Project # 2: "Energy Storage Based on Carbon Nanotube and Graphene"

Project # 3: "Bio-Inspired Artificial Intelligence"

Project # 4: "Community Air Quality Monitoring Near Railroads"

Project # 5: "Cyber Attack and Defense"

If you do not get your first choice, are you willing to participate with any of the other choices: Yes: \Box No: \Box 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 50 words but no more than 100 words:

 What is your current job title and classification: tenure track, adjunct, regular fulltime, regular part-time, temporary full-time, temporary part-time or other (describe)? Will this job be the same during the 2018-2019 Academic Year or change, and if it will change give its classification?

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

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

RET Participants will be utilizing engineering design and challenge-based learning. To read more about challenge-based learning pedagogy, please consult the following link: <u>challengebasedlearning.org</u>. 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. 4) How might you utilize challenge-based learning in classes you are scheduled to teach next school year?

5) 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?

6) 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.

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

Yes: I No: I

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

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

9) 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 %.)

10) What courses are you planning to teach in the 2018-2019 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 / Department Head Recommendation Form.)

 11) 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 (if applicable)? 12) What is your occupational history and include a description of your special skills.

<u>Deadline</u>: Wednesday, January 24th, 2018 (Completed application and additional documents must be submitted by this date. The review process will start immediately, and be completed by Friday, March 2nd, 2018. 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 10 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 (RET)

"Engineering Design Challenges and Research Experiences for Secondary and Community College Teachers"

Principal (secondary school only) / Department Head (community college only) Recommendation Form for RET Applicant

All documents including the Recommendation Form and the Letter of Recommendation from the Principal (secondary school only) / Department Head (community college only) are due by Wednesday, January 24th, 2018.

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 (secondary school only) or Department Head (community college only) must provide *name, affiliation, and contact information* and should be signed, scanned and emailed as a PDF document to Debbie Liberi at <u>futurescience.uc@gmail.com</u>.

After completing the both the **Recommendation Form** and the **Letter of Recommendation**, please <u>scan and email</u> them both to Debbie Liberi at <u>futurescience.uc@gmail.com</u> 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 2017 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

Principal (secondary school only) and/or Department Head (community college only) Recommendation Form

2018 NSF Summer Research Experience for Teachers

To Be Completed by the RET Applicant:

Name of Applicant:		Middle
Last	First	Middle
School:		
Address, City, State, & Zip:		
Telephone:	Email:	
Course in which the RET Unit will be t	taught in the 2018-19 Academic Yea	r:

To Be Completed by the School Principal (secondary school only) and/or Department Head (community college only):

- 1) What is the current job title and classification of the applicant: tenure track, adjunct, regular full-time, regular part-time, temporary full-time, temporary part-time or other (describe)?
- 2) If the applicant is hired on a contract, what are the start and end dates of the contract?
- 3) Will the above job remain the same during the 2018-2019 Academic Year or change, and if it will change give its classification?
- 4) 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 2018-2019 Academic Year during which the RET experience will be implemented.
- 5) Using the space below, please describe what types of support will be available from your school or institution 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 (secondary school only) and/or Department Head (community college only):

	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						

Signature:	Date:
Name (please type or print)	
Title:	
School/Institution:	
Number and Street Name	
City, State, and Zip Code	
Telephone	
E-mail	



NSF Summer Research Experience for Teachers

"Engineering Design Challenges and Research Experiences for Secondary and Community College Teacher"

Administrative Leader or Teacher "Leader" Recommendation Form for RET Applicant

To Be Completed by another Administrative Leader or Teacher "Leader." All documents including the Recommendation Form <u>and</u> the Letter of Recommendation from the Administrative Leader or Teacher "Leader" are due by <u>Wednesday, January 24th, 2018</u>.

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) 2018 summer program.

Please complete the **Recommendation Form** on the following page. <u>In addition</u> 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 <u>futurescience.uc@gmail.com</u>.

After completing the both the **Recommendation Form** and the **Letter of Recommendation**, please <u>scan and email</u> them both to Debbie Liberi at <u>futurescience.uc@gmail.com</u> 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 2017 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

Administrative Leader or Teacher "Leader" Recommendation Form

2018 NSF Summer Research Experience for Teachers

To Be Completed by the RET 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)	Name (type or print) Signature:					
Date Title:	Date Title: School:					
Number and Street Name						
City, State, and Zip Code						
Telephone		E	-mail			