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**National Science Foundation (NSF)**

**Research Experiences for Teachers (RET) Site**

**at Texas A&M University-Kingsville (TAMUK)**

**Integrating data-driven research in Renewable Energy Across Disciplines (I-READ)**

**June 12, 2023 - July 21, 2023**

**Application Deadline: March 24, 2023**

**(Grades 6-12 STEM Teachers are Eligible to Apply)**

**Highlights of the I-READ NSF RET Site:**

* 6-week of team-based research and professional development activities at TAMUK with guidance from faculty mentors and industrial advisors
* $1,250/week stipend for the 6 weeks of summer research
* Develop curricular modules based on the research activities and training/workshop on curriculum development
* Field trips, seminars given by the invited speakers from industries, poster presentation, etc.
* Additional conference travel support to present the work
* Additional support to implement the curricular modules

**More information can be found at:**

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| --- | --- |
| <https://www.tamuk.edu/engineering/institutes-research/NSF-RET-Program/Index.html>or<https://tinyurl.com/4t2kyku2> | Qr code  Description automatically generated |

***Please Print or Type. Complete all items, if not applicable then please write ‘NA’ in the space.***

**Full Name:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Mailing Address:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**School:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **ISD**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Grade Teach**: \_\_\_\_\_\_\_\_\_\_\_

**Subject Teach:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Cell Phone #**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Email Address\*:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**\*Please note: You will be notified by email if selected, so please type or write legibly.**

**Are you a U.S. Citizen or permanent resident?** Yes**\_\_\_** No **\_\_\_**

**Are you a first-generation college graduate?** Yes\_\_\_ No \_\_\_

**How did you find about this RET opportunity?**

□ From NSF website □ From TAMUK website □ From your friends or faculty

□ Others: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Please provide the following demographic information as part of the application form.***

**Ethnicity:** □ Hispanic or Latino □ Not Hispanic or Latino

**Race: *(Choose one or more response)*** □ American Indian or Alaskan Native □ Asian

 □ Black or African American □ White

 □ Native Hawaiian or Other Pacific Islander

 □ Other (please specify):\_\_\_\_\_\_\_\_\_\_\_\_\_

**Gender:** □ Male □ Female □ Other (please specify):\_\_\_\_\_\_\_\_\_\_\_\_\_

**Disability:** □ Hearing □ Visual □ Mobility/Orthopedic □ None

 □ Other (please specify): \_\_\_\_\_\_\_\_\_\_

**Potential Research Projects**

Each project will host two RET participants to work as a team. Please choose the research projects from the list below, using 1 for the best and 5 for the least. Detailed project description can be found at the I-READ website.

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| --- | --- |
| **Potential Projects** | **Rank**  |
| 1. Solar Radiation Big Data Analysis to Increase the Efficiency of Organic Solar Cell
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| 1. Dynamic Visualization of Wave Energy Big Data for Discovering Its Behavior
 |  |
| 1. Effect of Daylighting on Students’ Learning and Classroom Electricity Consumption
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| 1. Study the Potential of Converting Food Waste into Renewable Energy in the Backyard
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| 1. Wind Farm Layout Study, Future Development, and Cost Analysis
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**Signature of Applicant Date**

***All application packages must be completed and must be emailed, or faxed, or postmarked by March 24, 2023.***

**To be qualified, you must:**

***1) Be a US citizen or permanent resident,***

***2) Be a STEM Teacher in 6-12 Grades, and***

***3) Submit the following materials before the application deadline:***

***a) Completed application form (this form),***

***b) Resume with detailed education and work experiences,***

***c) At least two recommendation letters including one letter from the principal/superintendent to verify the current job status (signed letters can be sent by the recommender directly to Dr. Mohammad Hossain via email or be sent by yourself together with other documents), and***

***d) One-page personal statement discussing the career goals and plans/experiences in promoting STEM.***

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**MAIL TO:**

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Mechanical and Industrial Engineering

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