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**National Science Foundation (NSF)**

**Research Experiences for Undergraduates (REU) Site**

**Integrating Research in Sustainable Energy and the Environment across Disciplines (IR-SEED)**

**June 4 to August 11, 2016**

**Application Deadline: March 6, 2017**

**Highlights of the IR-SEED USF REU:**

* Ten-week summer undergraduate research program
* $5,000 stipends and up to $1,000 travel allowance
* On-campus housing and meal allowance provided
* Field trips, Invited speakers from industries, and weekly seminars about various research disciplines, technical writing, presentation skills, graduate school preparation, etc.

More information can be found at:

<http://www.tamuk.edu/engineering/departments%20and%20institutes/research/nsf-reu/index.html>

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

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

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

**Home Phone Number**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Cell #**:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Email Address:\*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date of Birth: \_\_\_\_\_\_\_\_\_**

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

Please check one:

\_\_\_\_I am a current student at TAMUK; K#: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Current Major \_\_\_\_\_\_\_\_\_\_Cumulative GPA\_\_\_\_\_\_\_\_\_\_\_

Are you a senior or junior student? Yes\_\_\_\_\_ No\_\_\_\_\_

\_\_\_\_I am a current student at another U.S. university;

Current Major \_\_\_\_\_\_\_\_\_\_Cumulative GPA\_\_\_\_\_\_\_\_\_\_\_

Are you a senior or junior student? Yes\_\_\_\_\_ No\_\_\_\_\_

Name of University: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

If selected, will you commute\_\_\_\_, or stay in the dorm\_\_\_\_?

***The following request for demographic information is voluntary. Thank you for helping us with this task.***

**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

**Gender:**  □ Male □ Female

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

 □ Other \_\_\_\_\_\_\_\_\_\_\_

**Educational Plans and Challenges**

Use the provided scale to indicate your level of agreement/disagreement with the statements.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Strongly Agree** | **Agree** | **Neither Agree or Disagree** | **Disagree** | **Strongly Disagree** |
| 1. **Participating in this research program would have an impact on whether or not I complete my degree.**
 | ⭘ | ⭘ | ⭘ | ⭘ | ⭘ |
| 1. **I am committed to completing my bachelor’s degree.**
 | ⭘ | ⭘ | ⭘ | ⭘ | ⭘ |
| 1. **Participating in this research program would have an impact on whether or not I attend a graduate school.**
 | ⭘ | ⭘ | ⭘ | ⭘ | ⭘ |
| 1. **I am interested in attending graduate school.**
 | ⭘ | ⭘ | ⭘ | ⭘ | ⭘ |
| 1. **This program may help determine whether to major in a science, technology, engineering, or math major.**
 | ⭘ | ⭘ | ⭘ | ⭘ | ⭘ |

**Potential Research Projects**

Please choose the research projects that you like best. Using 1 to 10 scale as 10 for the best. Please choose at least four projects. Detailed project description can be found at the IR-SEED website.

|  |  |
| --- | --- |
| **Potential Projects** | **Rank**  |
| 1. Innovative Improvement of Engineering Properties of Expansive Soils with Nanomaterials
 |  |
| 1. The effect of fenestration system on building energy and daylighting performance – An experimental study
 |  |
| 1. Vehicle Interior Air Quality Analysis
 |  |
| 1. Conceptual Design of a Small Scale Wave Energy Converter
 |  |
| 1. Evaluation of wind energy production using Geographic Information Systems (GIS) tools and data-driven methodologies
 |  |
| 1. Evaluation of wind turbine placement using Geographic Information Systems (GIS) tools
 |  |
| 1. Water Use and Water Scarcity Analysis at Regional Scale
 |  |
| 1. Estimation of Land Surface Conditions Using Remote Sensing Data
 |  |
| 1. Clean Energy Technologies to Minimize Carbon Release from Power Plants
 |  |
| 1. Eco-friendly Hydraulic Fracturing by an Energetic Frac Fluid for Unconventional Reservoir Development
 |  |

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 **\_\_\_\_\_\_\_\_**

**Signature of Applicant Date**

***All application packages must be completed and must be postmarked or emailed by Monday, March 6, 2017.***

***To be qualified, you must:***

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

***2) have 3.0 or above GPA, and***

***3) be enrolled in an undergraduate program at a college or university through August 2017. Junior or Senior standing is preferred.***

***4) submit the following materials before the application deadline:***

***a) your completed application form (this form),***

***b) an unofficial current transcript,***

***c) at least two recommendation letters (signed letters can be sent by your referrer directly to me or included in your application package with other documents)***

***d) resume, and***

***e) an one page research interest essay***

**MAIL TO:**

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**FAX TO:**

361-593-4026

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**TO BE COMPLETED BY OFFICE STAFF**

**Date Received: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**