**Scholarship Grant Awards**

| Institution | Amount | Title |
|---|---|---|
| Thomas Edison State University | $199,396 | Thomas Edison State University Scholarship Program for Qualified Students Matriculated in Nuclear Energy Engineering, Electronics Systems Engineering Technology, Radiation Protection, Cyber Security, and Information Technology Degree Programs |
| University of Wisconsin - Madison | $200,000 | University of Wisconsin-Madison Undergraduate Scholarship Program in Nuclear Engineering |
| Rensselaer Polytechnic Institute | $200,000 | Enabling Strong Growth of the Nuclear Engineering Undergraduate Scholarship Program |
| University of Missouri S&T | $200,000 | Undergraduate Scholarships in Nuclear Engineering at Missouri S&T (2020-2022) |
| University of Texas at Austin | $158,040 | NRC Scholarship at the University of Texas |
| Florida Memorial University | $199,990 | Fostering Matriculation of Undergraduates in Nuclear Research and Collaboration |
| Case Western Reserve University | $187,105 | ThinkEnergy, ThinkNuclear:' The Next Generation of ThinkEnergy Scholars |

**Thomas Edison State University Scholarship Program for Qualified Students Matriculated in Nuclear Energy Engineering, Electronics Systems Engineering Technology, Radiation Protection, Cyber Security, and Information Technology Degree Programs**

## Executive Summary:

Having successfully implemented and managed three NRC Scholarship grants by awarding 120+ scholarships, Thomas Edison State University now seeks funding from the NRC to administer another two-year scholarship program that will award 40+ scholarships based on financial need and academic performance, to qualified University students seeking career-required technical baccalaureate degrees and matriculated in Nuclear Energy Engineering, Electronics Systems Engineering Technology, Radiation Protection, Cyber Security, Technical and Information Technology Degree Programs. The scholarships will support qualified, high-potential students who are active-duty Navy Nuclear and other Military Service members, veterans; graduates of the Nuclear Uniform Curriculum Program (NUCP) from 28 active Community College partners; and graduates of the University's non-ABET accredited Nuclear Engineering Technology program who now wish to upgrade their degree status in order to graduate from the University's ABET-accredited Nuclear Energy Engineering Technology degree program. The University's transfer policy and acceptance of nuclear industry/military assessed training enables many students to transfer 60-80 credits toward a baccalaureate degree. In addition, the University's students usually work in nuclear energy, such as military, commercial nuclear facilities, DOE national laboratories, or are attending community college programs linked to the industry by NUCP or RCNET and are seeking career required technical baccalaureate degrees. The objective of the scholarship program is to increase student retention, help students graduate in a timely manner, and enter or experience professional growth in the nuclear safety and security sector. The proposed scholarship program and the University's curriculum meet all the NRC's areas of interest and outlined challenges in order to enhance the NRC's transition as a modern, risk-informed regulator.

**Principal Investigator:** Richard Coe, rcoe@tesu.edu

**University of Wisconsin-Madison Undergraduate Scholarship Program in Nuclear Engineering**

**Executive Summary:**

The Nuclear Engineering degree program (NE) in the Engineering Physics (EP) Department at the University of Wisconsin – Madison proposes an Undergraduate Scholarship Program in Nuclear Engineering in support of outstanding undergraduate students enrolled in our nuclear engineering degree major, with a career objective of employment in nuclear engineering related fields. The employment may be with the NRC, other Federal agencies, State agencies, Department of Energy laboratories, nuclear-related industry, or academia in the recipients sponsored fields of study; i.e., 1-year of employment for a 2-year scholarship. Chair of the Department of Engineering Physics will administer the program with assistance from Co-PI of the Wisconsin Alliance for Minority Participation (WiscAMP), a NSF Louis Stokes Alliance for Minority Participation program. The proposed program will recruit top-notch students from among the nuclear engineering programs' sophomore and junior classes into the scholarship program, and award ten scholarships for two years to financially assist students in pursuit of their Bachelor of Science degree in Nuclear Engineering (BSNE). The recruitment, selection, and program administration of the students and their progress will use proven techniques from the EP department and the WiscAMP program. The expected duration to obtain a BSNE degree is about 4 years, depending on the students' preparation. The EP department will supplement this award, as appropriate, to allow students to complete their degree. Evaluation of program success will be accomplished in a collaborative fashion. The EP department chair will utilize the Engineering Physics faculty to provide an ongoing review of the undergraduate students' progress toward their degree, as well as interactions with nuclear power industry during any summer internships or co-op experiences.

**Principal Investigator:** Paul Wilson, paul.wilson@wisc.edu

**Enabling Strong Growth of the Nuclear Engineering Undergraduate Scholarship Program at Rensselaer Polytechnic Institute**

**Executive Summaries:**

The project will directly and greatly contribute to recruiting, maintaining, and advancing the nuclear workforce by promoting two important goals. Firstly, it places emphasis on improving the interest, dialogue, and engineering thinking of students through innovative nuclear-related education and research. Secondly, it is committed to creating and supporting a community diverse in several ways: diversity students and students from various and different backgrounds. The Nuclear Engineering program and Rensselaer Polytechnic Institute are committed to utilizing this opportunity to power up the next generation nuclear workforce.

**Principal Investigator:** Li (Emily) Liu, liue@rpi.edu

**Undergraduate Scholarships in Nuclear Engineering at Missouri S&T (2020-2022)**

**Executive Summaries:**

The requested NRC funding will provide undergraduate scholarships to defray the cost of fees for 26 full-time students each year for two years. Thirty (30) high quality students with a minimum GPA of 3.0/4.0 will be selected from a pool of 60 students who are expected to be next year's Juniors and Seniors. The selection criteria will primarily be academic merit (GPA). This NRC scholarship grant will assist in providing a significant fraction (~4%) of the nation's approximately 620 expected graduates with a B.S. degree in Nuclear Engineering each year who would be capable of supporting the design, construction, operation and regulation of nuclear facilities and the safe handling of nuclear materials, and benefit nuclear safety and security sector. Success of the NRC grant is assured based on the outcome of our previous scholarship grants from NRC (2012-2014; 2014-2016; 2015-2017; 2016-2018; 2017-2019, 2018-2020) which have helped 150 students obtain scholarships ranging from $1,000 to $3,300 per semester. Ninety six of them graduated with a B.S. degree in Nuclear Engineering. Among the 96 graduates, 39 were employed in the nuclear industry, 24 students are continuing in graduate school, and the rest are employed in fields related to the nuclear industry or seeking employment.

**Principal Investigator:** Joshua P. Schlegel, schlegelj@mst.edu

**NRC Scholarship at the University of Texas**

**Executive Summary:**

A nuclear engineering option at The University of Texas at Austin has been in existence for fifty years. The NRC scholarships supported by this grant will help recruit top undergraduate students into the Nuclear Certificate Technical Option (four Nuclear and Radiation Engineering courses) in the Walker Department of Mechanical Engineering and the Radiation Physics Technical Option (six Nuclear and Radiation Engineering courses) in the Department Physics. Recruiting for the program will utilize resources in the Cockrell School of Engineering Scholarship Program office and the Equal Opportunity in Engineering (EOE) Program. Six scholarships per year will be awarded each year.

**Principal Investigator:** Sheldon Landsberger, s.landsberger@mail.utexas.edu

**Fostering Matriculation of Undergraduates in Nuclear Research and Collaboration**

**Executive Summary:**

Building upon our past successes, the project increases the pool of underrepresented students entering careers in the nuclear sciences, helping to fill the need for nuclear science professionals.

**Principal Investigator:** Ayivi Huisso, ahuisso@fmuniv.edu

**ThinkEnergy, ThinkNuclear:' The Next Generation of ThinkEnergy Scholars**

**Executive Summary:**

'*Think*Energy, *Think*Nuclear:' The Next Generation of *Think* Energy Scholars project aims to leverage an existing, co-curricular program in energy at Case Western Reserve University (CWRU) to educate and motivate a select cohort of CWRU undergraduate students to pursue professional opportunities related to nuclear energy science and industry. Using existing mechanisms to attract and recruit a diverse cohort of undergraduate students, the *Think*Nuclear initiative will facilitate nuclear-energy relevant seminars, projects, and internships to the students. Existing connections with key industry partners and national laboratories will facilitate experiential learning leading to the development of the next generation of scholars trained in and knowledgeable about opportunities in nuclear energy.

**Principal Investigator:** Rohan Akolkar, rohan.akolkar@case.edu