

NSF GRANTEES POSTER SESSION

| Board # | Paper ID | Title   | Division                    | Presenting Author          | Organization   | Email                          | Session Code | Session                                | Location                                      |
|---------|----------|---|-----------------------------|----------------------------|--|--------------------------------|--------------|--|---|
| 1       | 16880    | Baton Rouge Community College/Louisiana State University: A Partnership for STEM Student Success  | NSF Grantees Poster Session | Adrienne Steele            | Louisiana State University                               | alopez@lsu.edu                 | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 2       | 14439    | Revamping Robotics Education via University, Community College and Industry Partnership - Year 1 Project Progress                             | NSF Grantees Poster Session | Aleksandr Sergeev          | Michigan Technological University                        | avsergue@mtu.edu               | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 3       | 16071    | Evaluation of an Interactive and Inter-connected Software in Undergraduate Renewable Energy Courses   | NSF Grantees Poster Session | Amjad Aman                 | University of Central Florida                            | aaaman@knights.ucf.edu         | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 4       | 16859    | Transfer Student Pathways to Engineering Degrees: Progress and Preliminary Findings from a Multi-institutional Study Based in Texas           | NSF Grantees Poster Session | Andrea M. Ogilvie          | Virginia Tech  | aogilvie@utexas.edu            | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 5       | 15082    | Active Engineering Education Modules: Summary Paper of Five Years of Incremental Improvements to the Modules                                  | NSF Grantees Poster Session | Ashland O. Brown           | University of the Pacific                                | abrown@pacific.edu             | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 6       | 16914    | Espoused faculty epistemologies for engineering mathematics: Towards defining mathematical maturity for engineering                           | NSF Grantees Poster Session | Brian E Faulkner           | University of Illinois, Urbana-Champaign                 | faulkne2@illinois.edu          | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 7       | 17142    | Interactive Tutorial System for Linear Circuit Analysis: Impact on Learning and Novel Tutorials   | NSF Grantees Poster Session | Brian J Skromme            | Arizona State University                                 | skromme@asu.edu                | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 8       | 15009    | Using an e-Learning Environment to Create a Baseline of Understanding of Digital Logic Knowledge  | NSF Grantees Poster Session | Carolyn Plumb              | Montana State University                                 | cplumb@coe.montana.edu         | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 9       | 17064    | Evaluating the usefulness of virtual 3D lab modules developed for a flooding system in student learning                                       | NSF Grantees Poster Session | Chandramouli Viswanathan   | Purdue University, Calumet (Engineering)                 | cviswana@purdue.cal.edu        | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 10      | 17403    | A Pilot Study of Project-Based Learning in General Chemistry for Engineers  | NSF Grantees Poster Session | Chang-Yu Wu                | University of Florida                                    | cywu@uff.edu                   | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 11      | 16891    | A Two-Step Program for Undergraduate Students to Gain Authentic Experience in the Research Process  | NSF Grantees Poster Session | Charles E. Pierce          | University of South Carolina                             | piercec@cec.sc.edu             | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 12      | 15122    | Engineering Ambassadors Network: Progress in Year 3 on Creating a National Network of Ambassadors   | NSF Grantees Poster Session | Christine Haas             | Engineering Ambassadors Network                          | christineahaas@gmail.com       | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 13      | 15703    | Integrating Sustainability Grand Challenges and Experiential Learning into Engineering Curricula: Years 1 through 3                           | NSF Grantees Poster Session | Claire Louise Antaya Dancz | Clemson University                                       | cdancz@clemson.edu             | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 14      | 16519    | Research and Instructional Strategies for Engineering Retention   | NSF Grantees Poster Session | Claudia J Rawn             | University of Tennessee, Knoxville                       | crawn@utk.edu                  | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 15      | 15065    | A Preliminary Study on Supporting Writing Transfer in an Introductory Engineering Laboratory Course   | NSF Grantees Poster Session | Dave Kim                   | Washington State University, Vancouver                   | kimd@wsu.edu                   | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 16      | 14483    | Understanding Diverse and Atypical Engineering Students: Lessons Learned From Community College Transfer Scholarship Recipients               | NSF Grantees Poster Session | Donald M. Peter, M.S.      | Seattle Pacific University                               | dongp@spu.edu                  | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 17      | 16601    | A Contextual Approach to Teaching Sustainability  | NSF Grantees Poster Session | Elise Barrella             | James Madison University                                 | barrelem@jmu.edu               | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 18      | 15705    | Professional Development on Giving Feedback on Design for Engineering Students and Educators  | NSF Grantees Poster Session | Farshid Marbouti           | Purdue University, West Lafayette                        | fmarbout@purdue.edu            | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 19      | 15029    | Enhancements for the Online Ethics Center for Engineering and Science   | NSF Grantees Poster Session | Frazier Benya              | National Academy of Engineering                          | fbenya@nae.edu                 | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 20      | 17186    | Bayesian Network Models for Student Knowledge Tracking in Large Classes   | NSF Grantees Poster Session | Gabriel Terejanu           | University of South Carolina                             | terejanu@cec.sc.edu            | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 21      | 16514    | NSF TUES Grant: A Collaborative, Multi-Campus Program to Enhance STEM Learning in Energy Science, Technology and Policy                       | NSF Grantees Poster Session | Gary P. Halada             | Stony Brook University                                   | gary.halada@stonybrook.edu     | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 22      | 17349    | Research on Innovation and Creativity in Higher Education in Engineering and Science for Community Colleges: Student Strengths and Challenges | NSF Grantees Poster Session | Gisele Ragusa              | University of Southern California                        | ragusa@usc.edu                 | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 23      | 17351    | Research Experiences For Teachers: Linking Research to Teacher Practice and Student Achievement in Engineering and Computer Science           | NSF Grantees Poster Session | Gisele Ragusa              | University of Southern California                        | ragusa@usc.edu                 | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 24      | 15779    | A Longitudinal Study of the Dimensions of Disciplinary Culture to Enhance Innovation and Retention among Engineering Students                 | NSF Grantees Poster Session | Homero Gregorio Murzi      | Virginia Tech  | hmurzi@vt.edu                  | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 25      | 14427    | The S-STEM Scholarship: An Integrated Approach to Helping Talented Students in Need   | NSF Grantees Poster Session | Jana Lunt                  | Southern Utah University                                 | janalunt@suu.edu               | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 26      | 17321    | Supporting STEM transfer students   | NSF Grantees Poster Session | Jennifer Marie Duis        | Northern Arizona University                              | Jennifer.Duis@nau.edu          | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 27      | 15338    | Addressing the Learning Needs of Minority Students in Engineering Through Participatory Design  | NSF Grantees Poster Session | Jianyu Dong                | California State University, Los Angeles                 | jdong2@exchange.calstatela.edu | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 28      | 14409    | Successful Undergraduate Research Experiences in Engineering: Student, Faculty and Industrial Perspectives                                    | NSF Grantees Poster Session | John R. Reisel             | University of Wisconsin, Milwaukee                       | reisel@uwm.edu                 | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 29      | 14815    | Evaluating the Impact of Teaching Function in an Engineering Design Curriculum  | NSF Grantees Poster Session | Julie S Linsey             | Georgia Institute of Technology                          | julie.linsey@me.gatech.edu     | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 30      | 15719    | PEEPS: Cultivating a cohort of supportive engineering students and building a support team for institutional change                           | NSF Grantees Poster Session | Katherine Chen             | California Polytechnic State University, San Luis Obispo | kcchen@calpoly.edu             | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 31      | 15604    | Reflections on the Integration of Social Justice Concepts into an Introductory Control Systems Course (Work in Progress)                      | NSF Grantees Poster Session | Kathryn Johnson            | Colorado School of Mines                                 | kjohnson@mines.edu             | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 32      | 14778    | PLANNING AND ASSESSMENT OF A WORKSHOP ON UNDERGRADUATE EDUCATION IN BIOMETRIC SYSTEMS   | NSF Grantees Poster Session | Kevin D. Dahm              | Rowan University   | dahm@rowan.edu                 | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 33      | 14986    | Integrating an Introduction to Engineering Experience into an University Seminar Course   | NSF Grantees Poster Session | Kimberly Grau Talley       | Texas State University, San Marcos                       | kgt5@txstate.edu               | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 34      | 15800    | Participating in authentic engineering projects improves teachers' ability to teach the design process to middle school students              | NSF Grantees Poster Session | Kristen Billiar            | Worcester Polytechnic Institute                          | kbilliar@wpi.edu               | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 35      | 16921    | Sustaining Innovation in Engineering Education through Faculty Communities  | NSF Grantees Poster Session | Laura D Hahn               | University of Illinois, Urbana-Champaign                 | lhahn@illinois.edu             | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 36      | 14698    | Transcending industrial era paradigms: Exploring together the meaning of academic leadership for diversity                                    | NSF Grantees Poster Session | Lizabeth T Schlemmer       | California Polytechnic State University, San Luis Obispo | lschleme@calpoly.edu           | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 37      | 16411    | Support Model for Transfer Students Utilizing the STEM Scholarship Program  | NSF Grantees Poster Session | Lynn Olson                 | Boise State University                                   | lynnolson1@boisestate.edu      | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 38      | 15987    | Assessment of a Collaborative NSF RET Program Focused on Advanced Manufacturing and Materials   | NSF Grantees Poster Session | Margaret Pinnell           | University of Dayton                                     | mpinnell1@udayton.edu          | M268         | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |

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|----|-------|---|-----------------------------|---------------------------|---|-------------------------------|------|--|---|
| 39 | 15333 | Retaining Engineers through Research Entrepreneurship and Advanced-Materials Training (RETREAT): Expansion and Evaluation                             | NSF Grantees Poster Session | Margaret Scheiner         | Florida A&M University/Florida State University                     | mscheiner@fsu.edu             | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 40 | 16647 | SIMPLE Design Framework for Teaching Development Across STEM  | NSF Grantees Poster Session | Margret Hjalmarson        | George Mason University   | mhjalmar@gmu.edu              | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 41 | 16381 | Assessing the Spectrum of International Undergraduate Engineering Educational Experiences   | NSF Grantees Poster Session | Mary E. Besterfield-Sacre | University of Pittsburgh  | mbsacre@engr.pitt.edu         | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 42 | 17294 | Summary of a 14 Year NSF Sponsored S-STEM Academic Scholarship and Professional Program   | NSF Grantees Poster Session | Mary R. Anderson-Rowland  | Arizona State University  | mary.anderson@asu.edu         | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 43 | 15576 | Assessing the Effectiveness of a Nanotechnology Educational Module using the "Nanotechnology Awareness Instrument"                                    | NSF Grantees Poster Session | Matthew Klopstein         | Oklahoma State University   | matthew.klopstein@okstate.edu | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 44 | 15136 | Expanding Access to and Participation in the Multiple Institution Database for Investigating Engineering Longitudinal Development                     | NSF Grantees Poster Session | Matthew W. Ohland         | Purdue University, West Lafayette                                   | ohland@purdue.edu             | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 45 | 16101 | What Do Young Makers Learn?   | NSF Grantees Poster Session | Micah Lande               | Arizona State University, Polytechnic campus                        | micah.lande@asu.edu           | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 46 | 14770 | Adaptive Learning Environment for High Value Manufacturing (HVM) Geared towards the Energy Industry   | NSF Grantees Poster Session | Michael Johnson           | Texas A&M University  | mjohnson@tamu.edu             | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 47 | 15296 | Enhancing STEM Education at Oregon State University - Year 2  | NSF Grantees Poster Session | Milo Koretsky             | Oregon State University   | koretsm@engr.orst.edu         | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 48 | 15342 | Positioning Students to Understand Urban Sustainability Strategies through Vertical Integration: Years 1 through 3                                    | NSF Grantees Poster Session | MOHAMED ELZOMOR           | Arizona State University  | melzomor@asu.edu              | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 49 | 16594 | Experimental Centered Pedagogy approach to learning in Engineering: An HBCUs experience   | NSF Grantees Poster Session | Mohamed F. Chouhka        | Howard University   | mchouhka@howard.edu           | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 50 | 14881 | No Small Feat: Building A Nanoscience and Nanotechnology Program for Engineering Undergraduate Students   | NSF Grantees Poster Session | Naima Kaabouch            | University of North Dakota  | naima.kaabouch@engr.und.edu   | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 51 | 14431 | Self-Regulated Learning in Engineering Education: A Research Experiences for Undergraduates (REU) Site Program  | NSF Grantees Poster Session | Ning Fang                 | Utah State University   | ning.fang@usu.edu             | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 52 | 15525 | An Intelligent Tutoring System for Multimedia Virtual Power Laboratory  | NSF Grantees Poster Session | Ning Gong                 | Temple University   | tue51998@templ.e.edu          | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 53 | 16727 | Recruiting, Retaining and Graduating more Women in Computer Science and Math  | NSF Grantees Poster Session | Perry Fizzano             | Western Washington University                                       | perry.fizzano@wwu.edu         | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 54 | 15668 | A Multidisciplinary Undergraduate Nanotechnology Education Program with Integrated Laboratory Experience and Outreach Activities                      | NSF Grantees Poster Session | Priscilla J Hill          | Mississippi State University  | phill@che.msstate.edu         | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 55 | 14867 | Enhancing the Pedagogy of Bio-inspired Design in an Engineering Curriculum  | NSF Grantees Poster Session | Ramana Pidaparti          | University of Georgia   | rmparti@uga.edu               | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 56 | 14895 | Promoting Inclusive Engineering Identities in First-Year Engineering Courses  | NSF Grantees Poster Session | Rebecca A Atadero         | Colorado State University   | ratadero@engr.colostate.edu   | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 57 | 15998 | Nanotechnology Fellows Program: Preparing Undergraduate Students for Careers in Nanotechnology  | NSF Grantees Poster Session | Saniya LeBlanc            | George Washington University  | sleblanc@gwu.edu              | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 58 | 14628 | Transforming Curriculum for Workforce Development in Green Plastics Manufacturing Technology (GPMT) for STEM: Lesson Learned                          | NSF Grantees Poster Session | Spencer Seung-hyun Kim    | Rochester Institute of Technology (CAST)                            | shkmet@rit.edu                | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 59 | 14805 | An adaptable and transferrable project based on a heart-lung machine design challenge   | NSF Grantees Poster Session | Stephanie Farrell         | Rowan University  | farrell@rowan.edu             | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 60 | 15317 | Faculty Characteristics that Influence Student Performance in the First Two Years of Engineering  | NSF Grantees Poster Session | Stephen J Krause          | Arizona State University  | skrause@asu.edu               | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 61 | 15458 | Military Veteran Student's Pathways in Engineering Education (Year 2)   | NSF Grantees Poster Session | Susan M Lord              | University of San Diego   | slord@sandiego.edu            | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 62 | 14633 | Enhancing Verification and Validation Education using Active Learning Tools Developed through an Academia-Industry Partnership                        | NSF Grantees Poster Session | Sushil Acharya            | Robert Morris University  | acharya@rmu.edu               | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 63 | 14553 | Integrating a Faculty Summer Workshop with a Faculty Learning Community to Improve Introductory STEM Courses  | NSF Grantees Poster Session | Tanya Kunberger           | Florida Gulf Coast University                                       | tkunberg@fgcu.edu             | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 64 | 16850 | STARSS: Scholarships to Aid Rio Hondo STEM Students   | NSF Grantees Poster Session | Vann Priest               | Rio Hondo College   | vpriest@riohondo.edu          | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 65 | 17409 | Examining Choice in Self-directed Tiered Homework Assignments in College-Level Engineering Courses  | NSF Grantees Poster Session | Vasiliki Ikonomidou       | George Mason University   | vikonomi@gmu.edu              | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 66 | 16361 | NUE: The Freshman Experience and Nanotechnology Solutions to Engineering Grand Challenges   | NSF Grantees Poster Session | Virginia A. Davis         | Auburn University   | davisva@auburn.edu            | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 67 | 14567 | Professional Formation of Engineers' Conceptions of the Public: Early-Concept Exploratory Research  | NSF Grantees Poster Session | Yanna Lambrinidou         | Virginia Tech   | gnalternatives@yahoo.com      | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 68 | 14827 | REU Site program to engage undergraduate students in cybersecurity research   | NSF Grantees Poster Session | Ziqian Dong               | New York Institute of Technology                                    | zliqian.dong@nyit.edu         | M268 | Monday, June 27 at 9:45 am to 11:15 am | New Orleans Convention Center, Exhibit Hall F |
| 69 | 15339 | Spatial Skills Training Impacts Retention of Engineering Students - Does This Success Translate to Community College Students in Technical Education? | NSF Grantees Poster Session | Susan Staffin Metz        | Stevens Institute of Technology (School of Engineering and Science) | susan.metz@stevens.edu        | T368 | Tuesday, June 28, 11:30 am to 1:00 pm  | New Orleans Convention Center, Exhibit Hall F |