WISE 2019

TEXAS STATE®
COLLEGE OF SCIENCE AND ENGINEERING

Women in Science and Engineering Conference
Friday, March 8, 2019
Texas State University
San Marcos, Texas

MEMBER THE TEXAS STATE UNIVERSITY SYSTEM

Equal Opportunity
Texas State University, to the extent not in conflict with federal or state law, prohibits discrimination or harassment on the basis of race, color, national origin, age, sex, religion, disability, veterans' status, sexual orientation, gender identity or expression.

Accommodations
This information is available in alternate format upon request from the Office of Disability Services.

Texas State University is a tobacco-free campus.

Dear WiSE Conference Friends,

On behalf of the WiSE Leadership Committee, I am pleased to welcome everyone to the 2019 Women in Science and Engineering (WiSE) Conference held by the College of Science and Engineering at Texas State University. This conference gives us all a moment to reflect on our mission as technically-minded people and on our goals.

Not long ago, I had the privilege to visit with a diverse group of undergraduate and graduate students across several STEM disciplines. I asked them, "By pursuing your degree, what do you hope to accomplish?" Though answers varied the underlying goal rang clear: we can make the world a better place. Some would accomplish this by advancing fundamental science and seeding technological advances, some by searching for environmental changes to protect wildlife, and others by pioneering medical and life-sustaining technologies. Each member of the group perceived their unparalleled power to do good, and each member of the group was unique, bringing their own special element of diversity to the table. For moving science forward, we must embrace this diversity so that our entire talent base feels accepted, valued, and included.

*Our vision for the WiSE conference is to bring together supporters of diversity and inclusion of all persons in STEM fields to celebrate and share experiences. For **anyone** drawn to the mission of advancing science and technology, WiSE is here to send a clear message: you are welcome at Texas State University. Please enjoy the presentations from leading professionals and accomplished academics, our technical student-led poster session, and exposition of hands-on activities presented by STEM organizations.*

Thank you for coming! Glad you are here!
Please enjoy the day!

WiSE
Women in Science and Engineering

Susan Holtz

Susan Holtz, Ph.D.
Chair, 2019 WiSE Conference

WELCOME & PROCLAMATION FROM THE MAYOR

Jane Hughson was elected as Mayor of San Marcos on November 6, 2018. She was previously elected to the San Marcos City Council on November 4, 2014, for a three-year term in Place 4, re-elected for a three-year term on November 7, 2017, and also served on City Council from May 1996 to May 2002. Councilwoman Hughson is a long time San Marcos resident and a Southwest Texas State University graduate. She worked at Texas State University for 33 years before retiring in 2015.

Currently, Ms. Hughson serves on the Capital Area Council of Governments (CAPCOG) Executive Committee and the following policy committees: Capital Area Emergency Communications District, Capital Area Economic Development District, Inc., Capital Area Regional Transportation Planning Organization, and the Central Texas Clean Air Coalition. She also serves as Vice Chair of the Alliance Regional Water Authority and is a member of the boards of the Hays Central Appraisal District and the Greater San Marcos Partnership.

Ms. Hughson has been a member of several public organizations, including chair of the Comprehensive Plan Citizen Advisory Committee, vice chair of the Planning and Zoning Commission, chair of the Transportation Advisory Board, and a board member for the Convention and Visitors' Bureau, the Charter Review Commission, and the Ethics Review Commission.

She has served as president of the Heritage Association of San Marcos, Leadership San Marcos, the Hays County Area Food Bank, and the Friends of the San Marcos Cemetery. Other organizations of which she is or has been a member are: Open San Marcos, League of Women Voters, Women's Political Caucus, San Marcos Chamber of Commerce, and the San Marcos Water Initiative. She was appointed by the Texas Legislature to the Edwards Aquifer Authority where she served as chair of the administrative committee.

2019 WiSE CONFERENCE LEADERSHIP TEAM

WiSE 2019 Conference Chair

Susan Holtz, Texas State University

WiSE 2019 Research Poster Session

Jennifer Irvin, Texas State University
Jennifer Jensen, Texas State University
Sunni Taylor, Texas State University

WiSE 2019 Scholarships

Maureen Lemke, Texas State University

WiSE 2019 EXPO

Joyce Anderson, Texas State University
Meg Taylor, Texas State University

WiSE 2019 Web Design, Publications

Susan Romanella, Texas State University

WiSE 2019 Committee

Glynda Betros, Texas State University
Wendi David, Texas State University
Elisa DeFord, Texas State University
Dana Garcia, Texas State University
Shannon Hicks, Texas State University
BJ Spencer, Texas State University
Jun Xiao, Texas State University

2019 WiSE CONFERENCE SPONSORS

We are very grateful to our sponsors for their financial support of the 2019 WiSE Conference. The many costs associated with putting on a large conference are considerable. Through the generosity of this year's sponsors, we have been able to keep our registration fees modest and create an exciting agenda of speakers and events for WiSE conference attendees.

We sincerely appreciate our sponsors' support and financial stewardship in helping us create an excellent conference for our students, faculty, staff, alumni, and conference guests.

Center for Diversity and Gender Studies
College of Science and Engineering
Department of Biology
Department of Chemistry and Biochemistry
Department of Computer Science
Department of Geography
Department of Engineering Technology
Department of Mathematics
Department of Physics
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Materials Application Research Center
Materials Science, Engineering, and Commercialization Program
Office of Equity and Inclusion
Office of Research and Federal Relations
Step up for State "Think WiSE" Scholarship Donors
Texas State University Common Experience

CONNECT WITH WISE

2019 Wise Conference on Twitter:
@TxSTwise #thinkwise
https://twitter.com/TxSTwise

We know you are walking around with your cellphones glued to your hands (or pockets)! Join the WiSE conversation on Twitter! If you are listening to a terrific speaker or presentation, tweet about it! Tag us with a picture of you enjoying the EXPO or the WiSE poster session!

WiSE on Facebook:
https://www.facebook.com/WISETXST

WiSE on the web:
https://wise.cose.txstate.edu

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2019 WiSE CONFERENCE SCHEDULE

7:30am-9:00am (LBJSC Ballroom)
Registration opens, Continental breakfast begins at 8am

9:00am-9:15am (LBJSC Ballroom)
Welcome, Opening Remarks, Meet & Greet Icebreaker

9:15am-10:00am (LBJSC Ballroom)
Plenary Speaker: Ali Guarneros Luna

10:00am-11:20am (LBJSC– see EXPO flyer for room numbers)
WiSE EXPO & Scavenger Hunt

11:20am-12:45pm (LBJSC Ballroom)
Luncheon, Scholarship Awards; 11:45-Keynote Speaker: Sarah Evans

12:45pm-1:00pm
Break; High School Participants depart on bus to The Meadows Center for Water and the Environment

1:00pm-1:30pm (LBJSC Ballroom)
Networking Circles Prologue and Introduction of Circle Leaders Speaker: Helen Biller

1:30pm-2:45pm (LBJSC Ballroom)
Concurrent: Research Poster Session & Sign-up for Networking Circles

2:00pm-2:45pm (LBJSC Ballroom)
Career Services Event: Dress for Success, Speaker: Elisa DeFord

2:45pm-3:30pm (LBJSC Ballroom)
Networking Circles Sessions: Robert Bardwell, Tania Betancourt, Helen Biller, Sarah Evans, Ali Guarneros Luna, Beth Turman, Shannon Weigum

3:30pm-4:00pm (LBJSC Ballroom)
Raffle drawing, Announcement of People's Choice Awards, Close

WiSE Welcomes our High School Participants

We are delighted to welcome students from the following high schools to the 2019 WiSE Conference!

Akins High School
Harmony Science Academy-Pflugerville
San Marcos Academy
San Marcos High School
Seguin High School
Smithson Valley High School

Important: High School Teachers and High School Students – Information about the afternoon session at The Meadows Center

Bus transportation has been arranged to take you from the LBJ Student Center to The Meadows Center at 12:45pm.

Please meet the bus at 12:45pm in the bus circle at the front entrance of the LBJ Student Center.

Your afternoon WiSE session at The Meadows Center will conclude at 3:30pm. No bus transportation back to LBJSC will be available. **Please notify your school's bus driver to pick up your group at The Meadows Center bus loop parking lot at 3:30pm.**

Note: If your high school group has arrived by car instead of by bus, you will need to retrieve your car from the LBJSC parking lot and drive your group over to The Meadows Center (rather than taking the bus because no bus transportation back to LBJSC will be available). You can park at The Meadows Center parking lot.

The Meadows Center for Water and the Environment
Texas State University
15 Years

2019 STEM EXPO EXHIBITORS

Alkek Library

American Chemical Society

Astronomy Club

Biochemistry Society

H-LSAMP Scholars Program

LBJ Institute for STEM Education and Research

San Marcos High School Robotics Team

Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS)

Student Support Services

Society of Women Engineers

Society of Women in Physics

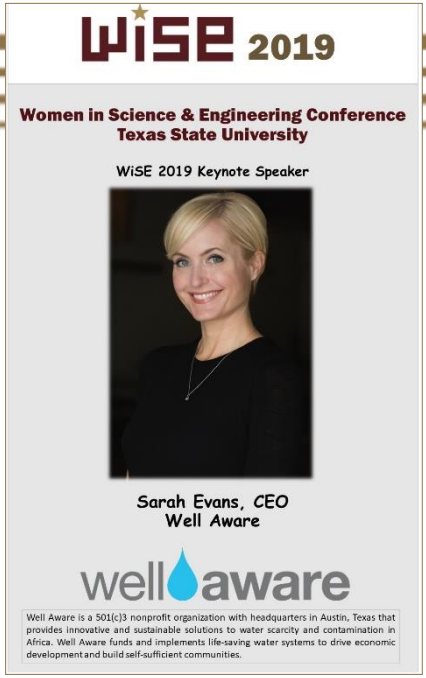
The Ornithological Society

Tri Beta Biology Honor Society

EXPO

As Senior Aerospace Engineer at NASA Ames Research Center in Mountain View, CA, **Ali Guarneros Luna** specializes in satellite design. She currently works with the Office of System Safety & Mission Assurance as deputy project manager and co-investigator for the Sub-Orbital Aerodynamic Re-entry Experiments where she has performed in multiple engineering roles to include design, building, and testing for a series of suborbital experiments. She has been honored for her significant technical contributions to NASA and to international space research, along with recognition for her extensive community involvement.

Ali is an active member of affinity groups at NASA Ames and in the larger community, including the Native American Advisory Committee, the Women Influence Network, Lesbian Gay Bisexual and Transgender Advisory Group, and she is an international member of UN Space for Women Chapter at the Silicon Valley. She participates in multiple STEM-related associations, and mentors girls and young women as well as underrepresented youth ranging from elementary school to the university level.



Sarah Evans is the founder and CEO of Well Aware, an Austin-based nonprofit that funds and implements clean water systems for impoverished communities in Africa. Evans has worked to change the way water projects are executed and managed in east Africa. Well Aware is known for its sustainability model in building lasting water systems with high impact.

Under her leadership, Well Aware has impacted more than 220,000 people, and the organization's reputation for project success (100%) and cost effectiveness (averaging $10 per person for decades) has prompted numerous collaborations with other NGO's worldwide to guide their water infrastructure projects through Well Aware.

Evans is also founder and CEO of Well Beyond, a worldwide for-profit business that advises organizations on water development efforts. Evans' vision is to enable prosperity in impoverished communities by providing access to lasting, clean water.

Evans and her team work with the great potential that already exists in struggling communities while catalyzing development through access to clean water.

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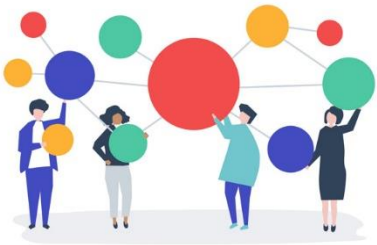

NETWORKING CIRCLE LEADER

Helen Biller currently works for Boeing Commercial Airplanes as the Engineering Manager for the Propulsion Technology Team. She has previously held management positions in BCA Propulsion on the 737 MAX and 777X Development Programs and for the Propulsion Safety and Airworthiness team. Prior to that, Helen supported the 777 propulsion system in revenue service, working with airlines around the world, from 2001 to 2012.

Before joining The Boeing Company, Helen worked for 19 years at Rolls-Royce, plc, in a number of engineering roles: designing, testing, and supporting aero-engines for commercial and military aircraft. She graduated with a Bachelor's Degree in Aeronautical Engineering and Design from Loughborough University of Technology in the UK in 1983 and has been a member of the Royal Aeronautical Society and the European Engineering Council since 1990.

Outside of work she has raised 3 children, competed in and coached national level track and field, mountaineered around the world, and currently has a small horse facility at her home near Seattle, Washington.

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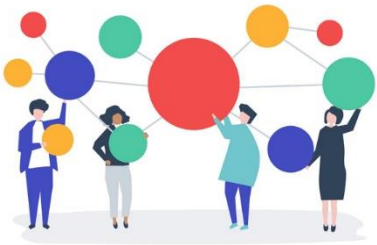

NETWORKING CIRCLE LEADER

Robert Bardwell is the senior leader for Missiles and Weapon Systems of air vehicle segment of a weapon systems program. Prior to that, he worked 18 years in Human Space Flight as an engineer working in NASA's Space Shuttle Program and designing the Space Launch System that will be responsible for eventually propelling humans to Mars.

Robert is a Texas State University alumnus, having graduated from the university with a Bachelor's degree in physics in 2000. He obtained a M.S. in physics from the University of Houston-Clear Lake (2005) and a Master of Engineering in Engineering Management from The University of Texas at Austin (2008). Since graduating, Robert has acquired broad technical expertise in product development, proposal development and management experience including engineering, program management, system integration, product design, test, analysis, manufacturing and operations. He currently serves on the Texas State University Development Foundation Board, has participated in a number of external advisory committees including Alpha Phi Alpha Executive Board – Delta Theta Lambda Chapter, and has made significant efforts to support programs that aim to increase the participation of underrepresented minorities in STEM and mentor high school and college interns through the National Society of Black Engineers.

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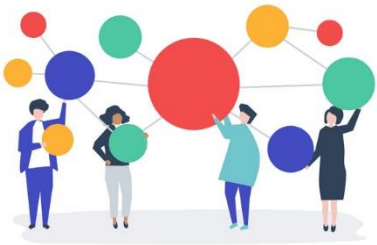

NETWORKING CIRCLE LEADER

Dr. Tania Betancourt obtained her B.S. degree in chemical engineering from Texas A&M University and her M.S. and Ph.D. degrees in biomedical engineering from the University of Texas at Austin. Dr. Betancourt is an Associate Professor in the Department of Chemistry and Biochemistry and a faculty member of the Materials Science, Engineering, and Commercialization Program at Texas State University.

Dr. Betancourt leads the research of the Biomaterials and Nanomedicine Laboratory, which focuses on the development of functional polymeric nanostructures for the detection, monitoring, and treatment of cancer and other diseases. Prior to joining Texas State University in 2011, Dr. Betancourt worked at InnoSense LLC, a technology company serving the aerospace, energy, defense, and health care market. During her three year tenure at InnoSense, Dr. Betancourt held the positions of Research Scientist, Team Leader, and Deputy Director-R&D. At InnoSense, Dr. Betancourt was responsible for developing novel technologies in the areas of biosensors, biomaterials, therapeutics, contrast agent, drug delivery, and specialty materials. Dr. Betancourt's work has been documented in twenty-five peer-reviewed publications, two review articles, two book chapters, and multiple professional presentations.

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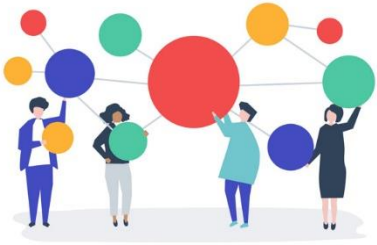

NETWORKING CIRCLE LEADER

Beth Turman is the Senior Director North America Networking Sales at Dell Technologies in Austin, Texas. Ms. Turman began working with Dell in 1997 and has held a variety of roles: National Sales Director Storage - Sales/Engineering; Regional Sales Director for Public Data Center Sales/Engineering; National Sales Director for Commercial and Global Data Center Acquisition Business; Technical Sales Director-High Ed/K12; Senior Director Online Marketing; IT Manager-Custom Sales Support Systems; and Business Systems Consultant-Global and Public IT Operations.

Before joining Dell Technologies, she worked for the State of Texas Attorney General's Office for eleven years and held the positons of IT Director, Legislative Analyst-Planning and Compliance, Systems Analyst, and Accountant.

Ms. Turman graduated from the University of Texas at Austin with a B.B.A., majoring in petroleum land management (1985).

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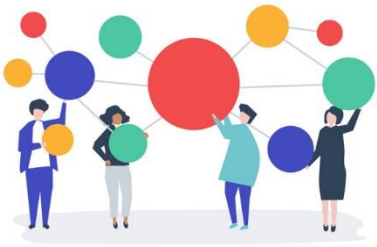

NETWORKING CIRCLE LEADER

Dr. Shannon Weigum is an interdisciplinary researcher focused upon the development of optical biosensors and microfluidic devices that can detect and diagnose disease at the point-of-care. Dr. Weigum is an Associate Professor in Biology and core faculty for the Materials Science, Engineering, and Commercialization Program at Texas State University. In addition, she is also serving as the Texas State University 2018-2019 Presidential Fellow.

Dr. Weigum holds a bachelor's degree from Texas A&M University, a master's degree from Texas State University, and a doctoral degree in Biochemistry from the University of Texas at Austin. She was a postdoctoral fellow in Biomedical Engineering at Rice University before joining the Texas State faculty in 2011. Dr. Weigum has published numerous peer-reviewed manuscripts and poster abstracts, one book chapter, and holds two US patents. Her work has been featured nationally in Popular Science, CNET news, and on the cover of the journal "Lab-on-a-Chip."

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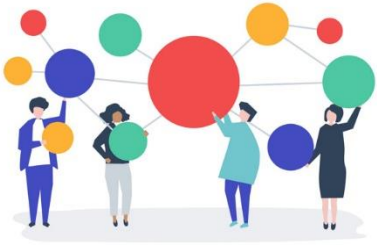

NETWORKING CIRCLES – PRIZE DONORS

We are very grateful to the following donors for contributing a wonderful variety of prizes for our Networking Circle participants!

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Summer Moon Coffee
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Texas State University Bookstore

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"DRESS FOR SUCCESS" SPEAKER

Elisa DeFord currently serves as the Science and Engineering Career Advisor in Career Services at Texas State University. She has worked in higher education for 15 years in roles including student development, administration, and fundraising. She is a member of multiple professional associations including the National Association of Colleges and Employers (NACE) and the Cooperative Education and Internship Association (CEIA).

Elisa is a Texas State Bobcat through and through. She earned her Bachelor of Arts in Mass Communication from Texas State University in 2003 and has worked professionally for her alma mater for 11 years.

Her communications background allows her to better assist students and young professionals who sometimes struggle with articulating their skills on a resume or during an interview or networking situation.

2019 WiSE RESEARCH POSTER SESSION ABSTRACTS

1. A Multi-stage Stochastic Programming Approach for Prepositioning of Relief Supplies
   *Oluwasegun Olanrewaju, Dr. Hu Shaolong, Dr. Sasha Dong**

2. A Role for ABCC4 in Regulating Pigment Granule Aggregation in Mice
   *Thomas Mireles, Diana Emely Wiebe, Dora Evelyn Ibarra, Cody Rodriguez, Dr. Dana García**

3. A Survey of Recent Statistical and Computational Approaches for Haplotype Assembly with DNA Sequencing Data
   *Allison Bertie Johnson, Dr. Shuying Sun**

4. Algorithm to Diagnose Problematic Wires or Contacts of Four Point Probe Measurement Setup
   *Rigoberto Mayorga-Luna, Chandler Hutton, Luisa Scolfaro, Dr. Wilhelmus Geerts**

5. Alkali Silica Reactivity of Blended Class C and Class F Fly Ash System
   *Maria Valdez, Dr. Federico Aguayo**

6. An Experimental Study on the Utilization of Optical Fiber cables for Indoor Farming
   *Danielle Cortez, Michelle Mata, Juan Silva, Dr. Bahram Asiabanpour**

7. Assessing the Anti-Biofouling properties of Plasma Immersion Ion Deposited (PIID) Coatings
   *Carol Ellis-Terrell, Dr. Kent Coulter (Southwest Research Institute), Dr. Tania Betancourt**

8. Assessment of the Sulphur River Basin Fish Communities
   *Elizabeth Rosas, Audrey L. Fry, Peter J. Pfaff, Cody A. Craig, Dr. Timothy H. Bonner**

9. Barriers to Native Shrub Establishment on Abandoned Oil and Gas Pads on the Colorado Plateau
   *Logan Maxwell, Lesley DeFalco, Dr. Susanne Schwinning**

2019 WiSE RESEARCH POSTER SESSION ABSTRACTS

10. Carbene Acid Splitting Photocatalysts for Hydrogen Production
    *Brenton Gildner, Dr. Todd Hudnall**

11. Changing Homework Achievement with Mechanix Pedagogy
    *Sonali Bante, Dr. Kimberly Talley**

12. Characterization of the Role of PIC30 Protein in Plant Immune Response
    *Elizabeth Sanchez, Praveen Kathare, Dr. Nihal Dharmasiri, Dr. Sunethra Dharmasiri**

13. Characterizing Activity of Three Novel Differentiation-Inducing Small Synthetic Compounds in Neuroblastoma Cells
    *Alejandro Oviedo, Zhenze Zhao, Dr. Alexander Kornienko, Dr. Liqin Du**

14. Chemical Communication to Signal Mating Readiness in Sailfin Mollies
    *Shante' Williams, McKenna Bristow, Dr. Caitlin Gabor**

15. Communicating Scientific Concepts to Non-Scientists
    *Damilola Runsewe, Kelli Burke, David Hebert, Veronica Marin Ponce, Mariana Ocampo, David Sharp, Marisa Snapp-Leo, Venus Stanton, Xu Wang, Dr. Jennifer Irvin**

16. Complete Design and Development of Sliding Friction and Wear Test Setup
    *Jorge Melguizo, Dr. Meysam Khaleghian**

17. Deep Learning for Identification of Structural Changes in Geo-located Overhead Imagery
    *Brent Redmon, Daniel Le, Dr. Jelena Tesic**

18. Developing a Thermoacoustic Refrigerator for Atmospheric Water Generation
    *Zaid Almusaied, Dr. Bahram Asiabanpour**

2019 WiSE RESEARCH POSTER SESSION ABSTRACTS

19. Developing NASA Digital Badge on Interdependent Relationships in Ecosystems with the Theme of Mars Travel and Settlement
*Genisis Segundo, Riley Horner, Dr. Bahram Asiabanpour**

20. Do I Belong in a Makerspace? Investigating Student Belonging and Non-verbal Cues in a University Makerspace
*Stefanie Hotchkiss, Dr. Kimberly G. Talley**

21. Doublet Emitters Derived from Stable Carbenes for Potential OLED Applications
*Gabrielle Harmon, Christopher Barrigan, Dr. Todd Hudnall**

22. Dual Beam Detection Technique to Study MOKE
*Shankar C. Acharya, Brian Collier, Md. Abdul Ahad Talukder, Dr. Luisa Scolfaro, Dr. Wilhelmus Geerts**

23. Edge Component Connectivity
*Gabriela Lara, Dr. Daniela Ferrero**

24. Effects of Philophthalmus gralli on the Shedding Rates of Snails Naturally Infected with Centrocestus Formosanus and Haplorchis Pumilio
*Sydney Calton, Jeremiah Leach, Allie Scott, Alan Bond, Ryan Fiorni, Dr. David Huffman**

25. Electroactive Polymer Nanocomposites for Photocatalytic Water Purification
*Mariana Ocampo, Veronica Marin-Ponce, Kelli Burke, Dr. Jennifer Irvin**

26. Exposed Ice in Lunar South Pole Permanently Shadowed Regions: A Spectral Analysis by the Lyman Alpha Mapping Project
*Lizeth Magana, Dr. Kurt Retherford (UTSA)**

27. High-Throughput Preparation of Monodispersed Nanoparticles for Drug Delivery Using Fiber Fluidic Reactor
*Emilio Lara, Niloofar Heshmati, Dr. Tania Betancourt**

2019 WiSE RESEARCH POSTER SESSION ABSTRACTS

28. Integrated Physics Identities of Women of Color and LGBQ+ Physicists
*Xandria Quichocho, Jessica Conn, Erin Schipull, Dr. Eleanor Close**

29. Intrinsic Defect Formation Energies in Transparent Conductive Delafossite Oxides
*James Shook, Pablo D. Borges, Samuel Cantrell, Dr. Wilhemus J. Geerts, Dr. Luisa M. Scolfaro**

30. Lean Techniques Applied to Hydroponics
*Riley Horner, Alex Little, Dr. Bahram Asiabanpour**

31. Lighting Effects on Herbal Plant Biomass
*Ashley Castillo, Melissa Garcia, Karl Hagenbuch (San Antonio College)**

32. Multi-wavelength Lunar Reconnaissance Orbiter Investigations: Analysis of Lunar Craters and Pyroclastic Deposits
*Elizabeth Czajka, Dr. Kurt Retherford (UTSA)**

33. Nanoparticles for Dual Chemotherapy and Photothermal Therapy of Cancer
*Niloofar Heshmati, Juan Castillo, Dr. Tania Betancourt**

34. Possible Hosts for Ornithodoros turicata, a Relapsing Fever Vector in Central Texas
*Rosa Ramirez, Karina Salinas, Dr. Benjamin Schwartz, Dr. Pete Teal, Dr. Ivana Mali, Dr. Job Lopez, Dr. Ivan Castro-Arellano**

35. Role of Testing Feedback through the Eyes of General Chemistry Faculty
*Wendy Rangel, Nicholas Castillo, Dr. Cynthia Luxford**

36. Stability of Transition Metal Impurities in Nickel Oxide Via Formation Energy Calculations
*Samuel Cantrell, Pablo D. Borges, James Shook, Dr. Wilhelmus J. Geerts, Dr. Luisa Scolfaro**

2019 WiSE RESEARCH POSTER SESSION ABSTRACTS

37. Statistical Practices: What do Statisticians do?
    *Layla Guyot, Dr. Alexander White**

38. Stochastic Models for Planning Distributed Wind Generation based on Data Analytics
    *Temitope Runsewe, Dr. Tongdan Jin, Dr. Clara Novoa**

39. Study on Polycrystalline CdTe Solar Cell Improvement with Absorber Back Surface Flattening Procedure
    *Rab Sadia Rakinur, Dr. Thomas H. Myers**

40. Study on Travel Frequency Patterns of Public Bike Systems and Bike Sharing Systems
    *Lingyu Meng, Dr. Zhiyuan Liu (Southeast University, China), Dr. Zhijie Sasha Dong**

41. Studying the Temperature Dependent Magnetic Properties of Reactive RF Co-sputtered NiFeO Thin Films using VSM
    *Selena Najar, Joselyn Lesikar, Dr. Luisa Scolfaro, Dr. Wilhelmus Geerts**

42. Synthesis of Electroactive Monomers and Polymers for use as Biosensors
    *Kelli Burke, Marisa Snapp-Leo, Serra Holthaus, Dr. Jennifer Irvin**

43. Synthetic Approaches for High Molecular Weight Electroactive Polymers
    *David Hebert, Venus Stanton, Timothy Carrum, Benjamin Shoulders, Dr. Jennifer Irvin**

44. Temperature and Salinity Effects on Rheological Characteristics of Wormlike Micellar Solutions
    *Emad Jafari Nodoushan, Young Ju Lee, Dr. Namwon Kim**

45. The Effect of Sheet Metal Macro and Micro Surface Roughness on the Efficiency of the Atmospheric Water Generation System
    *Allison Manning, Dr. Bahram Asiabanpour**

46. The Role of Vertebrate LARP6 N-Terminal-Region in RNA Binding Activity
    *Brianna Norbury, Leticia Gonzalez, Hatice Külköylüoglu, Chad A. Brautigam, Dr. Karen A. Lewis**

47. Thermodynamics of Conformational Bias in the Denatured States of Protein
    *Elisia Paiz, Lance R. English, Stephen So, Dr. Steve Whitten**

48. Tuning Optoelectronic Properties of Semiconducting 2-D Material
    *Maura Herrera, Chihkai Liao, Dr. Mahmoud Abdelwahed (UTSA)**

49. Validating and Using Water-borne Hormone Methods with Tadpoles: ACTH Challenge, Recovery Time, Repeatability, and Optimal Rearing Designs
    *Joseph Robicheaux, G.F. Almond, H.R. Perkins, C.B. Goff, Z.R. Forsburg, Dr. Caitlin Gabor**

50. Weathering Patterns of Ignitable Liquids - Applications to Arson Investigations
    *Gwen Roden, Dr. William D. Hoffmann**

NOTES

NOTES

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College of Science and Engineering

Dr. Christine Hailey, Dean, College of Science and Engineering

2019 Texas State University System Board of Regents

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