

Session 101

13:45 - 17:00

Exhibit Hall, B-E, Student Poster Lounge

Intern Research Posters Featuring US DOE Savannah River National Laboratory (R10.11)

SESSION CO-CHAIR(S): **Evan Koelker**, *Savannah River National Laboratory*

LEAD ORGANIZER: **Evan Koelker**, *Savannah River National Laboratory*

This invited poster session focuses on the research projects that the Savannah River National Laboratory Interns supported and/or contributed for SRS.

- A1. Hanford Tank Refurbishment Using Two-Layer System - 26756**
David Lawrence, Tennessee Technical University; Pavan Shukla, Savannah River National Laboratory
- A2. Efficiency of Electrochemical Processes for Critical Mineral Extraction - 26757**
Kyle Schipf, University of Florida; Pavan Shukla, Savannah River National Laboratory
- A3. Design of Versatile Platform Robot to Deploy NDE Instruments on Concrete Structures - 26758**
Michael Carl, University of New Mexico; Christine Langton, Savannah River National Laboratory
- A4. Hardware Agnostic Sensor Package for Semi-Autonomous Navigation and Dynamic Obstacle Avoidance - 26759**
Sebastian Vargas, Florida International University; Donald Benza, Savannah River National Laboratory
- A5. High Temperature Gas Cool Reactor Process Control and Data Acquisition - 26760**
Eric Sledge, Claflin University; Vernon Bush, Savannah River National Laboratory
- A6. A Mass Flow Analysis on Mercury Recovery in DWPF - 26761**
Emma Brown, BSRA/Savannah River National Lab; Daniel Lambert, Savannah River National Laboratory
- A7. Use of 3D Printed Models for Visualization of DWPF Chemical Processing Cells - 26762**
J. Ashton Phelps, Utah University; Matthew Williams, Savannah River National Laboratory
- A8. Sustainability of Advanced ECMs in Cementitious Systems - 26763**
Colette Towles, University of Nevada, Las Vegas; Cory Trivelpiece, Savannah River National Laboratory
- A9. Hyperspectral Moisture Detection Coupled with LIDAR Mapping to Characterize R-Reactor Seepage Basin Concrete Cap - 26764**
Juan Hernandez, Florida International University; Troy Lorier, Savannah River National Laboratory
- A10. FCA Pellet Dissolution Using Alniflex: Probing Plutonium Solubility - 26765**
Carter Francelj, SRNL Intern; Jarrod Gogolski, Savannah River National Laboratory
- A11. Study of Pit Air Supply System for Underside Corrosion Mitigation of Double Shell Storage Tank Bottoms - 26766**
David Lawrence, Tennessee Technical University; Pavan Shukla, Savannah River National Laboratory
- A12. Characterization of Parameters for the Optimization of Neutron Activation Analysis - 26767**
Kaycee Lock, Augusta University; Troy Barlow, Savannah River National Laboratory
- A13. High Entropy Alloy Catalysis for Ammonia Decomposition - 26768**
Laila Qutob, University of Texas, Austin; William Adams, Savannah River National Laboratory
- A14. PLA Dosimetry Characterization via NMR - 26769**
Kira Yun, Augusta University; Nathan Boyle, Savannah River National Laboratory
- A15. Setting up the Volatile Corrosion Inhibitor Experiments - 26770**
Ja'Angelo Jones, North Carolina A&T State University; Pavan Shukla, Savannah River National Laboratory
- A16. Chemical Compatibility of 3D Printed Polymers against Sludge Batch Simulant Conditions - 26771**
Hyeontae Ju, Georgia Tech; Nathan Wilson, Savannah River National Laboratory
- A17. Utilization of GADRAS Software to Discern Key Source and Shielding Characteristics in Non-Destructive Gamma-Ray Assays. - 26772**
Jeffrey Brainard, Augusta University; Charles Schafer, Savannah River National Laboratory
- A18. Mechanical Design & Assembly for TRISO Waste Minimization Technology - 26773**
Kyle Kudrna, University of Missouri, Columbia; Geoff Fravor, Savannah River National Laboratory
- A19. Subsurface Evaluation of R-Reactor Seepage Basin Using Ground Penetrating Radar to Determine Cause of Observed Degradation - 26774**
Oscar Gonzalez, Florida International University; Troy Lorier, Savannah River National Laboratory
- A20. Determination of Californium Distribution Coefficients for Actinide Selective Resins - 26775**
Cooper Tillman, Clemson University; Travis Deason, Savannah River National Laboratory
- A21. Development of Photochromic Metal-Organic Frameworks (MOFs) - 26776**
Rodrigo Ruiz Arellano, University of California, Davis; Corey Martin, Savannah River National Laboratory

- A22. Effect of Surface Passivation of CZTS Semiconductor Detector on Leakage Current - 26777**
Anthony Kangethe, Morgan State University; Uptal Roy, Savannah River National Laboratory
- A23. Growth and Characterization of Cesium Hafnium Chloride: Cs₂HfCl₆ (CHC) - 26778**
Sonja Boettcher, Fisk University; Martine Duff, Savannah River National Laboratory
- A24. Honey as a Radionuclide Hyperaccumulator: An Isotopic and Pollen Analysis of CSRA Honey Samples - 26779**
Douglas Rosa, Franklin and Marshall College; Elizabeth LaBone, Savannah River National Laboratory
- A25. Using Spectroscopy to Quantify Acid Transport for Processing Nuclear Material - 26780**
Robert Lascola, Savannah River National Laboratory; Vince Shi, Grinnell College
- A26. Calibrating for Self-Absorption in Raman Spectroscopy with Chemometrics - 26781**
Aysia Bittinger, University of North Georgia; Robert Lascola, Savannah River National Laboratory
- A27. Methods for Imaging Subsurface Concrete using Non-Destructive Evaluation (NDE) - 26782**
Hector Valenzuela, University of New Mexico; Katie Hill, Savannah River National Laboratory
- A28. Continual Learning for On-the-Edge Intelligent Systems - 26783**
Victor Philippe, University of Georgia; Mohammad Taha, Savannah River National Laboratory
- A29. SRS Legacy Contamination Groundwater Remediation Support - 26784**
Sophia Fuentes, New Mexico State University; Holly VerMeulen, Savannah River National Laboratory/Battelle Savannah River Alliance