



Message from the Chair

Dear Friends,

Greetings! Hope you are having a wonderful year so far! The spring semester is drawing to an end, and we're all looking forward to a great summer!

We welcomed two new staff members to the Idaho Falls Center at the end of 2024, Tyler Thompson as Business Specialist III and Sarah Coombs as Program Coordinator I. The NEIM Department is located in the Idaho Falls Center, and we are excited to welcome these two to the Idaho Falls Vandal Family.

We are looking to expand our Idaho Falls Vandal Family even further. Currently, we are in the process of hiring two new faculty members in industrial management for fall'25, and two faculty members in nuclear engineering for fall'26! We are looking forward to the experience and ideas that the new faculty members will bring with them.

We are thrilled to share that the University of Idaho is now officially a Carnegie R1 Very High Research Activity research institution, the first and only one in Idaho. Thanks to the hard work and dedication of all the Vandals that we as a university have achieved this coveted designation. Recently, the university signed a five-year SUPER agreement with the Idaho National Laboratory, paving the way for enhanced research engagement and collaborations with this leading national lab. NEIM, being located in Idaho Falls, will have a key role to play.

This newsletter, we will be highlighting our student and staff news as so much has been going on! We are so proud to share all the interesting conferences, research, and awards that our students have been working on since our last letter.



*Indrajit Charit, Ph.D., P.E.
Department Chair and Professor
Nuclear Engineering and Industrial Management*

Your support is crucial to our success. Wishing you and yours a happy sunny summer. Go Vandals!

Indrajit (Indy) Charit
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Management (NEIM)
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Tyler Thompson Joins Idaho Falls Center as Business Specialist III

July 2024

Tyler was born and raised in Northern Idaho. He is an alumnus of the University of Idaho (2005) and worked for UI in Moscow for sixteen years before relocating to Idaho Falls in summer 2024. Tyler has been married to his wife, Camille, for twenty-four years and they have three sons and one daughter. He loves being outdoors and traveling with his family. He enjoys writing and would like to finish one of their many stories someday.



*Tyler Thompson
Business Specialist III
Idaho Falls Center*

Sarah Coombs Joins Idaho Falls Center as Program Coordinator I

October 2024

Returning to the area after nearly three decades away, Sarah Coombs joined the Idaho Falls team at the beginning of October 2024. She holds a Master's in Mental Health Counseling and Behavioral Medicine from Boston University and is a licensed, private practice psychotherapist and supervisor in the state of Washington. She's thrilled to be part of academia once again, having previously enjoyed working for Brown University, Salve Regina University and Reed College.

She gives most of her personal time to the local community theatre and any hours left are spent snuggling her dog, reading books and traveling to beloved places (preferably haunted or at least historic) with her friends that are spread all over the world.



*Sarah Coombs
Program Coordinator I
Idaho Falls Center*

Beloved Student Advisor Retires

August 2024

The start of the Fall 2024 semester brought a bittersweet moment when longtime U of I employee, Debbie Caudle, retired. Debbie served as the Student Services Coordinator at the Idaho Falls campus for almost 20 years. During that time, she helped hundreds (thousands, perhaps) of students on their academic journeys. Always the cheerleader for them when they needed extra support and a strong advocate for resolution to any issue, her kindness, hard work and generous laughter leave a lasting impact in the lives of students.

"Deb is able to relate to the students in an authentic way. She was a non-traditional student when she earned her bachelor's degree. She also understands what it takes to work fulltime and go to school. She earned her masters while working at U of I," says Alice Allen, Director of Recruitment and Student Engagement.

Debbie will still be involved with the Nuclear Engineering and Industrial Management department, serving as a member of the advisory board. She is looking forward to staying connected to the university by participating in county fairs as a judge for events and exhibits.

Among her many plans, Debbie wants to travel and reconnect with family members and volunteer with the local organizations such as the symphony. She is a lifelong learner and is looking forward to engaging with Friends for Learning and other educational opportunities.



*Debra Caudle
Recent U of I Retiree
Idaho Falls Center*



Presenting Research at NUTHOS-14

By Hossam Hassan Abdellatif

I had the privilege to attend the NUTHOS-14 Conference, held in British Columbia, Canada, from October 25-28, 2024. During the event, I was excited to present our research, titled *"Thermal Hydraulic Analysis of The AP1000 Passive Containment Cooling System Following LBLOCA Using ANSYS FLUENT"*, which was featured in the Natural Circulation and Passive Systems Modeling session. Our work focused on modeling the AP1000 containment response following a large break loss-of-coolant accident (LBLOCA) and a main steam line break (MSLB). Using CFD analysis, we successfully predicted the containment's behavior during these scenarios.

I received highly positive feedback from both the session leader and attendees, who commended the quality of the research and its potential to contribute to future studies. I also participated in discussions related to my dissertation on natural circulation loops for molten salt reactors, gaining valuable insights from leading experts. Moreover, I connected with international researchers and industry professionals, fostering potential collaborations that could enhance my ongoing Ph.D. research.

In addition to the technical sessions, I had the chance to experience a cultural event featuring the **"Wild Moccasin Dancing,"** which added a unique and enriching dimension to the conference. Overall, my participation at NUTHOS-14 significantly advanced my expertise and broadened my exposure within the global nuclear engineering community.



Hossam Hassan Abdellatif third from left



Photo taken by Hossam Hassan Abdellatif

Outstanding Graduate Student Research and Creativity Award

Hossam Hassan Abdellatif was chosen for the Outstanding Graduate Student Research and Creative Activity Award. They are invited to attend the University Excellence Awards Ceremony in April. They will receive a gift and a monetary award.

2024 Department of Energy Office of Science Graduate Student Research Award

Drew Glenna, major professor Dr. Haiyan Zhao, recently won the 2024 Department of Energy Office of Science Graduate Student Research Award and is now part of their fellowship.

The Office of Science Graduate Student Research (SCGSR) Fellowship (<https://science.osti.gov/wdts/scgsr/>) is a program that allows graduate students to advance their PhD thesis research while working at a Department of Energy (DOE) National Laboratory. Fellows collaborate with world-class scientists and use state-of-the-art facilities and cutting-edge scientific instrumentation. This experience allows them to maximize the impact of their research, expand their professional network, and develop new opportunities for the future.



Academy of Engineers – Michael Patterson

Mike started work in the family construction business, and shortly after high school enlisted in the U.S. Navy. He served eight years as a reactor operator and electronics technician, certifying as engineering watch supervisor and leading the reactor controls division aboard a ballistic missile submarine. He returned home for college, and after graduating from the University of Idaho, started his career at the Idaho National Laboratory (INL) as a process engineer. He spent the next 33 years in increasingly responsible technical leadership positions - building, analyzing, and managing complex experiments, demonstrations, and technical initiatives with high risk, visibility and impact.

Mike's early work at INL focused on management and recycling of spent nuclear fuel, nuclear waste treatment, and remediation of deactivated nuclear processes. He led a team of Shift Technical Advisors, developed the closure plan for used fuel reprocessing facilities, and characterized the chemical and radionuclide constituents in the High Level Waste (HLW) tank farm.

He led the HLW and local Spent Nuclear Fuel Programs, developing disposition paths for toxic radioactive waste and irradiated fuel, advancing INL's remediation commitments to the State of Idaho.

Mike's later career focused on demonstrations of nuclear technology and advanced reactors. He managed nuclear programs and infrastructure projects, served as a technical director for several advanced reactor initiatives, and recently led MARVEL – a project to demonstrate a liquid metal, thermal microreactor - through final design. Mike's career has been a series of challenges and learning opportunities, serving as needed in engineering and technical leadership positions.



Nuclear Engineering Students Present Research at the ANS Student Conference 2025

Recently, five graduate students from the University of Idaho attended the American Nuclear Society (ANS) Student Conference 2025, held in Albuquerque, New Mexico, during April 3-5, 2025. The list included: Kavindan Balakrishnan (MS/PhD in NE); Mamata Adhikari (PhD student in NE); Jonah Hudman and Deekshith Basvoju (MS students in NE); and Olubenga Gideon (Graduate Certificate in Nuclear Criticality Safety / PhD in Psychology). By presenting at this conference, the students gained valuable experience and exposure for advancing their careers as well as creating more visibility for the University of Idaho and the NEIM department. Below are the papers presented by our students.

K. Balakrishnan, K. Raja, I. Charit, J. Selvaraj, V. Subramanian, "Manufacturing of Iron Core Oxide Shell Nanoparticles."

M. Adhikari, K. Balakrishnan, K. Raja, I. Charit, "Electrochemical Corrosion Behavior of Cold Sprayed Alloy 625 (UNS-N06625) in Molten Chloride at 600 °C."

M. Adhikari, K. Balakrishnan, K. Raja, "Corrosion Behavior of SiC and SS in FLiNaK Molten Salt in Open Atmosphere."

J. Hudman, K. Raja, I. Charit, "Oxidation of Zinc and Bismuth Nanoparticles in Open Atmosphere."

D. Basvoju, I. Charit and A. Vakanski, "Physics-Informed Neural Networks and Microstructural Analysis for Creep Life Prediction."

O. Gideon, "A comparative Analysis of Students and Trained Operator's Mental Workload in the Testing of Thermal Power Dispatch (TPD) Concept of Operations." (**Best Presentation Award**)



Olubenga making the award-winning presentation at the ANS Conference



Kavindan (left) and Olubenga (right) at the ANS Conference

CONGRATULATIONS TO OUR GRADUATES!

Nuclear Engineering

Spring 2024

Stefan E. Abbott, M.S.
Samuel Bynum, M.Engr.
Douglas A. Corbett, M.Engr.
Kristen L. Geddes, Ph.D.
Drew M. Glenna, M.S.
Sarah A. Khan, M.S.
Dylan D. Ohrt, M.Engr.
Samuel J. Root, M.S.

Technology Management

Spring 2024

Mosiah J. Castro, M.S.
Leslie A. Johnson, M.S.
Bryon Mowlds, M.S.
Juliana Ocampo Giraldo, M.S.
Thomas J. Patterson, M.S.
Martin M. Plum, M.S.

Summer 2024

Anantachote, Intty – M.S.
Bachman, Jeff A. – M.S.
Brown, Rob E. – M.S.
Hix, Jay D. – M.S.

Engineering Management

Spring 2024

Mario J. DiCino, M.Engr.
Clayton J. Housley, M.Engr.
Cody B. Kelley, M.Engr.
Robert P. Mariano, M.Engr.
Shawn St. Germain, M.Engr.
Jason D. Toomer, M.Engr.

Summer 2024

Hodgson, Gunner D. – M.Engr.
Kabeh, Pardis – M.Engr.
Smokovich, Lucas B. – M.Engr.

Industrial Technology

Spring 2024

Coleton M. Danell, B.S. Tech.
Konnor W. Gilstrap, B.S. Tech.
Christian Roberts, B.S. Tech.
Jerry L. Robertson, B.S. Tech.

Summer 2024

Frye, Meesha E. – B.S. Tech

Fall 2024

Cody Hidalgo, B.S. Tech.

Hiring Industrial Technology and Nuclear Energy Faculty Members at Idaho Falls



University of Idaho
Department of Nuclear Engineering
and Industrial Management

The Department of Nuclear Engineering & Industrial Management at the University of Idaho, located on the Idaho Falls campus in proximity to Idaho National Laboratory, invites applications from qualified individuals for four faculty positions. The Nuclear Engineering program will be hiring one tenure-track Assistant Professor and a tenure-eligible Associate/Full Professor position. The Industrial Technology program will be hiring one tenure-track Assistant/Associate Professor and a non-tenured clinical faculty.

For more information, please view the below link:
<https://www.linkedin.com/feed/update/urn:li:activity:7300934759646384130>

University of Idaho achieves Carnegie Classification as a top U.S. research institution

<https://www.uidaho.edu/news/news-articles/news-releases/2025/021325-r1>

University of Idaho Signs Five Year Strategic Understanding for Premier Education and Research (SUPER) Agreement with INL

<https://www.uidaho.edu/news/news-articles/news-releases/2025/012825-inl>

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