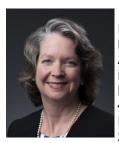
Newsletter American Nuclear Society Trinity Section

ANS Trinity Section, 3167 San Mateo Blvd NE #131, Albuquerque, NM 87110

Fall 2020

http://local.ans.org/trinity/

Evelyn Mullen named ANS Fellow



Past Trinity Chair Evelyn Mullen has been named an ANS Fellow. Here is the press release: Newswise — LOS ALAMOS. N.M., Oct. 13, 2020—Evelyn Mul-

len, chief operating officer for Global Security at Los Alamos National Laboratory, was named a fellow of the American Nuclear Society for her leadership in nuclear national security and ensuring the nation's experi-

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Kairos Power comes to New Mexico

Kairos Power is an advanced nuclear engineering company that is mission-driven to enable the world's transition to clean energy. Singularly focused on the development of the Kairos Power Fluoride Salt-Cooled High Temperature Reactor (KP-FHR), the company has the goal of a US demonstration plant before 2030 and rapid deployment thereafter.

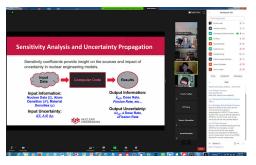
Albuquerque has been selected as the location of a non-nuclear research and development center that will contain Kairos Power's Engineering Test Unit (ETU), a non-nuclear and unenriched Flibe-wetted integrated test for

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Rescheduled Apr 2020 Dinner and Annual Business Meeting

We are still planning to hold the (postponed) annual Section business and dinner meeting some time in the future at the National Museum of Nuclear Science & History in Albuquerque, when it becomes possible. The speaker is still planned to be Lou Martinez Sancho, MS, Vice President of

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First Zoom Lightning Talks

Since we haven't been able to get together in person for our usual dinner meetings with speakers for some time. the Section has begun hosting "virtual" meetings over Zoom with "lightning talks" by members and friends who have volunteered to tell us something about their current technical activities. The initial lightning talks were held Fri, 18 Sep 2020 at 7pm, and featured 15min talks by 4 of our members:

- Pat McDaniel, Research Professor, Nuclear Engineering Dept, UNM. A Partial Update on Cold Fusion (LENR), demonstrating Low Energy Nuclear Reactions.
- Michael Rising, MCNP Team Lead, R&D Scientist, XCP-3 (Monte Carlo Codes), LANL. MCNP6® Current Efforts in Code Modernization and Capability Development.
- John L. Bliss, Principal HP, **ESHQSS-INT** (Integration Program Office), LANL. The Seattle Cesium Contamination Event. Some Impressions.
- Chris Perfetti, Asst Prof, Nuclear Engineering Department, UNM. Methods for Sensitivity and Uncertainty Analysis in Nuclear Engineering Applications.

(LIGHTNING, continued on page 2)

Volunteers Needed

We welcome Carl Willis (UNM) as the new PI&O Committee Chair (see his article in column 3) and we welcome Josh Richard (LANL) to fill an unexpired At-Large ExCom member

Public Information & Outreach

Greetings to all Trinity Section members and friends! As the new chair of the Public Information & Outreach Committee, I'd like to solicit your feedback on a few ideas for outreach in this challenging pandemic. More traditional in-person activities must be curtailed, but there are ways we can leverage opportunity in the near term to develop a more robust and creative online presence, and there is also no time like the present for planning ahead for when circumstances become more favorable. My suggestions are hardly exhaustive; please feel free to add your thoughts via email, or give me a call. Once I have an idea of where membership interest lies, I'll develop a more targeted agenda for outreach that will be appealing and help us build a robust and active committee. I look forward to working with you!

Some outreach ideas:

- Mentorship connections (via the website): Making nuclear science and technology accessible and enjoyable for kids should be a priority, and one good way of doing this is to help mentor students who have nuclear-themed interests and projects.
- Science fair judging: Science fairs, typically in the Spring, need judges. Also, organizations like ours can sponsor prizes and scholarships, as we have

(PI&O, continued on page 2)

Upcoming Zoom with ANS President

Dr. Mary Lou Dunzik-Gougar, Associate Dean of the College of Science and Engineering at Idaho State University, is the current ANS President. She is reaching out to the Sections to hold a series of virtual meetings, featuring a presentation titled: Where is the Love? Why isn't Nuclear Power Embraced as THE Clean Energy Source?

Trinity Section is working to arrange a Zoom meeting with Dr. Dunzik-Gougar in late January 2021. Stay tuned for additional information.

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principal structures, systems and components (SSCs) that are scaled proportionally to the first demonstration KP-FHR. The purpose of the ETU is to impart confidence in Kairos Power's ability to design, build, integrate, and operate high-temperature Flibe systems.

For more information on Kairos Power, as well as employment opportunities at the Albuquerque facility, please visit https://kairospower.com/newmexico/.

(MULLEN, continued from page 1)

mental capability in nuclear criticality.

"For more than 25 years, Evelyn Mullen has displayed outstanding leadership in nuclear and radiological threat response," said Nancy Jo Nicholas, associate Laboratory director for Global Security at Los Alamos. "She has provided intellectual leadership for planning and executing science and technology for nuclear nonproliferation, detection, render safe, and attribution; foreign nuclear weapon analysis; and nuclear detonation response and recovery issues. Being named an ANS Fellow is a well-deserved honor for someone who has contributed so much to the field."

Mullen was instrumental in developing plans for new diagnostic capabilities for subcritical plutoniumintegrated experiments at the Nevada National Security Site that will become operational in 2025. Furthermore, she currently leads a major effort for recovery from a radiation source accident in Seattle, Wash.

Mullen joined Los Alamos National Laboratory in 1992. She holds bachelor and master of science degrees in nuclear engineering and is a registered professional engineer in the State of New Mexico. She currently serves on the Army Science Board. Mullen has volunteered with the Los Alamos National Laboratory Foundation on the scholarship and grants committees for many years and is a founding member of the Legacy Society. Mullen is also a founding member of the Los Alamos Community Foundation and has been recognized by the Los Alamos Engineering Council with their community service award.

(**PI&O**, continued from page 1) done in the past.

- Public-facing Q&A online: A platform for submitting and answering questions. The Health Physics Society has a good model.
- Teacher workshops: Nuclear science only makes a cursory appearance in some HS classes, typically in chemistry (at the end of the semester). Some physics teachers introduce nuclear topics. There is a real opportunity and a proven model for getting teachers more literate and excited about nuclear topics through workshops. The national ANS website for this program has been down. However, the basic outline for these workshops is remembered well by many of us who have participated in them in the past.
- Workshop kit assembly: We're uniquely situated with respect to access to uranium ore and surplus detection equipment; we could have a nationally-prominent role in assembling kits for teacher workshops.
- Boy Scouts (Nuclear Science Merit Badge) and Girl Scouts (Get to Know Nuclear): The pandemic is a good time to coordinate with these organizations on presenting these curricula. Online presentations are possible.
- Virtual field trips: Encourage institutions and businesses with Trinity Section connections to create ~15-min video field trips of their nuclear facilities, suitable for public viewing, to provide a verité-style walking-tour perspective on what you do, rather than a polished PR slideshow. I am finishing up one of these for the UNM nuclear reactor lab.
- Nuclear@Home: short (5-min) videos focused on nuclear technology in the home, the natural radiation environment, and simple experiments approachable from a residential setting.
- **Direct outreach to schools:** Classroom visits over Zoom, with either a live activity or a presentation, with opportunities for questions and discussion. Reach out via guidance counselors and principals; coordinate with individual teachers.
- Environmental justice initiative: Support equipment, training, expert opinion, and other outreach to people in NM impacted by the nuclear fuel cycle.
- Summer camp sponsorship: Thanks to Trinity Section for supporting UNM's summer camp development. We are planning a camp in 2021; further development is needed.
- Internships bulletin board: Website-based board for posting internship opportunities (this is one of the biggest questions I get from first-year nuclear engineering students, so demand is high and I know many of our members work for companies that want to sponsor interns.

Please provide your thoughts and interests about Public Information & Outreach activities, and the areas in which you are able to help, to:

Carl Willis, Trinity Section PI&O Committee Chair, Chief Reactor Supervisor, UNM, (505) 412-3277, carlwillis@unm.edu.

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Strategy and Innovation, Kairos Power. Her topic will be "How a nuclear power startup's investment in Albuquerque will shape the future energy landscape." Additional information will follow as we are able to develop more concrete plans.

(VOLUNTEERS, continued from page 1)

term. We still have vacancies for the Membership committee co-chairs. We also need members to support Carl on the PI&O Committee. If you are interested in helping the management team of the Section, or can help with a number of other jobs, please contact any of the Executive Committee members (see box below).

(LIGHTNING, continued from page 1)

Although attendance was small, the session provided an opportunity to view current work activities, helped us maintain some professional focus in these socially distanced times, and stimulated some good discussion. A flyer with their abstracts, and the slides they used, are posted on our Past Events page.

The second set of lightning talks is scheduled for Tue 24 Nov 2020 at 7pm via Zoom. Information will be posted on our Calendar Page.

If you are interested in presenting a lightning talk of your own current work, please drop us a line to volunteer at ans.trinity@yahoo.com.

2020-2021 Officers and Committee Chairs

Executive Committee:

John Bliss, Chair ('21), LANL Chris Perfetti, Vice-Chair/Chair-Elect ('21), UNM James Pike, Secretary ('21), LANL Pat McDaniel, Treasurer ('21). UNM Matthew Denman, Immediate Past Chair ('21), Kairos Power

Travis Trahan, Previous Chair ('21), LANL Christian Arguello, UNM Student Section

President ('21)
Adam Hecht, At-large ('21), UNM
Matthew Jasica, At-large ('21), SNL
Josh Richard, At-large ('22), LANL
James Tutt, At-large ('22), LANL
Mary Alice Cusentino, At-large ('23), SNL
Melissa Teague, At-large ('23), SNL

Committee Chairs:

Carl Willis, Public Information & Outreach, UNM Bill Flor, Communications, LANL [vacant], Membership, northern Co-chair [vacant], Membership, southern Co-chair Tom Hirons, Emeritus, LANL (Retired)

To reach the ExComm members, visit our Directory at http://local.ans.org/trinity/directory.html