INSIDE From Jen's desk From Rajinder's desk Give a warm welcome to ... Magnet lab draws a crowd Zelenay honored for contributions to green energy research community Spendelow receives prestigious Toyota Young Investigator Fellowship Fensin to chair TMS Functional Materials Division Meier recognized for Science in '3' presentation MPA staff recognized for notable contributions to Lab's mission Veterans inclusivity tips Celebrating service **HeadsUP**

Leonardo Civale

Conducting a career with dedication

The first cuprate high temperature superconductor was discovered when Leonardo Civale was a physics graduate student in Argentina. Fascinated, he abandoned his previous research to focus on these exotic materials—the existence of which challenged years of accepted knowledge—and he never strayed.

Studying superconductivity from both fundamental and applied perspectives put Civale in a position to "bridge the gap" between the weakly interacting basic and applied high temperature superconductor research communities, a position, he said, he enjoyed.

Now, after 20 years at Los Alamos National Laboratory, Civale is retiring. He does so having contributed to the division, the Lab, and the international condensed matter physics community in a variety of distinguished and influential capacities.

Civale joined Los Alamos in 2002 as the physics team leader in the Superconductivity Technology Center. He said he remembers those years "as one of the most successful and rewarding periods of my career." As "the physicist" surrounded by world-class materials scientists, "each day was a learning adventure." The center played a leading role in the national superconductivity program for the electric grid, with Civale and co-workers earning top place several times in the program's annual peer review.



Above, in this 2017 photo, Leonardo Civale (right) and postdoctoral research associate Serena Eley prepare a cryostat to perform experimental studies of superconducting materials.

A decade later, with the end of the national program, Civale joined Condensed Matter and Magnet Science, which in 2019, after merging with parts of Physics Division, became Quantum (MPA-Q). The group is dedicated to advancing quantum materials and quantum technology in support of the nation's economic and national security needs. In 2020 Civale became its group leader, focused on uniting the then-newly formed organization and guiding it to maturity while navigating the challenges of a global pandemic.

In naming him fellow, the American Physical Society cited Civale for "seminal contributions to the understanding of anisotropic electrical and magnetic properties of superconductors and vortex physics." He has published more than 250 papers, which together have more than 10,000 citations, with an h-index of 46.

The central theme in Civale's career has been the study of superconducting vortex matter as a prime example of soft matter. He is fascinated by the rich physics of these elastic interacting objects, particularly their fast dynamics in high temperature superconductors. In his most cited paper, Civale and his co-authors demonstrated that the strong vortex pinning produced by columnar defects is created by heavy-ion irradiation.

In retrospect, Civale said he feels that the most gratifying aspect of his years at the Lab has been that each new scientific project and managing position led him to meet "new people, allowing me to forge many enriching professional and personal relationships and make some real friends. I am excited about the coming new chapter in my life, in which I plan to keep in touch with the Lab."



As deputy division leader I consider it my job to be of service to the engineers and scientists within MPA. I strive to be a strong advocate for your science and to innovate ways to help lower barriers so that your science may be more fruitful.

From Jen's desk...

As a long-time MPA scientist, it is my great pleasure to serve as your new deputy division leader.

Like many of you, I came to Los Alamos as a postdoc. After completing a PhD at the University of California, Santa Barbara, focused on self-assembly of soft matter and bioinorganic chemistry, I came to Los Alamos and completely switched fields. I split my time between teams in Intelligence and Space Research and Bioscience divisions, where I primarily developed deployed sensors. Between 2006 and 2018, I was a scientist within the Center for Integrated Nanotechnologies where my research spanned the synthesis, photophysical characterization, and application of silver and gold nanoclusters; characterization of nanomaterial superlattice structures under pressure; and creation of genetically engineered polymers. During that time, I worked with Sasha Balatsky and Nate Mara, whom many of you know, to create the Institute for Materials Science. While at Los Alamos, I have been honored to collaborate with scientists and engineers across the Laboratory and to spend much of my time at the Lab working on "both sides of the fence." I am further honored with several awards and recognitions, such as the Los Alamos Fellows Prize for Research; AAAS (American Association for the Advancement of Science) and Kavli elected Fellow; and the Lab's Outstanding Mentoring Award (2007 and 2011—my most prized!). In 2018, I joined Northern Arizona University. Together with a great team of colleagues, we created a new department and PhD program in applied physics and materials science. We also developed ¡MIRA!, the Center for Materials Interfaces in Research and Applications, which is a materials science and diversity center. As founding director of ¡MIRA!, I created the center cohort of faculty and championed its science with national funding agencies and university donors, while solving facility and staffing needs. No doubt like many of you, COVID impacted not only my family and nearby communities, but changed what motivated me. I missed the large collaborative and societally impactful projects that we have at Los Alamos and the resource of knowledge that rests in our scientists and engineers, and I am very honored to return to MPA.

As deputy division leader I consider it my job to be of service to the engineers and scientists within MPA. I strive to be a strong advocate for your science and to innovate ways to help lower barriers so that your science may be more fruitful. In addition, I am eager to help develop early career and postdoctoral mentorship programs, as two examples, and I look forward to continuing to work with many of our staff on these and other activities. I have met with many of you since my return and I look forward to continuing those meetings. I am not a person of formality, please come and chat with me and let me know how I can help you.

MPA Deputy Division Leader Jennifer Martinez



MPA-11, with its strong presence in electrochemical energy device, carbon capture, separations, and catalysis research, will definitely be contributing to fulfilling the country's and the world's clean energy goals.

From Rajinder's desk ...

This month I completed my acting assignment as MPA-11 group leader, a role I began in March. It was a great learning experience, where I oversaw a significant change in group management, administrative staff, and the group—crossing 100 employees, including staff, postdocs, and full-time students (plus more than 50 summer/casual students). The unprecedented job growth in the Lab's nuclear and energy security missions led to many key staff turnovers. Several senior staff accepted new roles either internally or externally, which disrupted the ongoing pace of projects within the group but positively created opportunities for new hires and advancements for early career staff. In the last six months, seven postdocs were converted to staff scientists. While we had setbacks in selected candidates choosing industry jobs over Los Alamos postdoc positions, we did manage to attract several top-level talents. With industrial growth and an anticipated increase in research funding, I anticipate current employee attrition and hiring trends to continue for a few more years.

The technical topic I would like to touch on in my letter is the Clean Energy Initiative under the Bipartisan Infrastructure Law (BIL). DOE recently announced funding opportunities for hydrogen and direct air capture (DAC) hubs amounting to total of \$10.5 billion. These hubs will fast track the US and the world toward large-scale deployment of a low-to-zero carbon energy economy. Equally exciting is the regional development anticipated in New Mexico from these DOE (and matching industry) investments in clean energy technology. The state has large natural gas reserves which will serve as a low carbon hydrogen source for the transportation and electricity sector, bridging the gap between fossil fuel and renewable power. A New Mexico hydrogen hub to support cross-country fuel cell trucking (across the I-40/I-25 corridor) seems like a great opportunity and is being actively discussed by energy industry leaders. For more information, visit the Lab's Hydrogen Hub webpage. MPA-11, with its strong presence in electrochemical energy device, carbon capture, separations, and catalysis research, will definitely be contributing to fulfilling the country's and the world's clean energy goals.

MPA-11's extensive experimental footprint requires an equally extensive adherence to safety (Safe Conduct of Research [SCoR] principle 4). While we did have a few safety incidents throughout the last year, fortunately they did not lead to significant injury or long-term work disruption. We did our due diligence in learning from the events (SCoR principle 6). Operations were paused and appropriate operational and IWD (integrated work document) changes were implemented to avoid a repeat occurrence. Active involvement by all stakeholders (SCoR principle 1)—including experienced staff, workers, Facility Operations Directorate members, and management—helped in dissecting the root causes of the incidents and identifying and resolving issues. A proactive approach and adopting a SCoR mindset certainly helped in keeping us safe.

Materials Synthesis and Integrated Devices Deputy Group Leader Rajinder Singh

Give a warm welcome to ...

In their own words, some of the division's newest members introduce themselves and share their impressions so far of their Lab experience. If you see these new faces in your area, be sure to say hi and introduce yourself.

MPA Materials Matter will continue to introduce new members, so watch this space for details on future newcomers.



Dommino Delgado Administrative Assistant Materials Synthesis and Integrated Devices (MPA-11)

Throughout my work experience, there are many things that I have learned and on which I have improved myself. What has helped to make me comfortable in my new position are the skills of adaptability and organization. I am also very confident in my written and verbal communication skills.

My work supports and assists my team with what they need to perform their duties to the highest potential.

Teamwork for a better tomorrow

I decided to join the Lab due to the incredible opportunities in furthering my career. What attracted me to Los Alamos was wanting to be a part of a team that is working toward a better future.

And on the weekends ...

I play softball (I bring my daughter to practice), but I'm also a field deputy medical investigator. Whenever a body is found in one of the four counties I cover in Northern New Mexico, I get called out to investigate the death. I write a report, then take the body away. I've eased up on this work recently, but once I was called out to investigate eight times in one weekend.



Adam P. Dioguardi Research Technologist Quantum (MPA-Q)

I have 15 years of experience as an experimental condensed matter physicist. My subfield is solid state nuclear magnetic resonance, with relevant skills including cryogenics, superconducting magnets, nuclear magnetic resonance probe design, hardware and software automation, vacuum systems, and actinide research.

My main responsibilities involve managing the group's helium liquefaction operation, experimental capability development and troubleshooting, and experimental and analysis support. I strive to keep the strongly correlated electron systems team's materials physics experimental operations up and running—that is, synthesizing, characterizing, and understanding novel materials for both academic excellence and national security.

When I'm not at work, I like to be out rock climbing or mountain biking.

Prep now for rewards later

As a former Director's Postdoctoral Fellow, I would advise new hires not to get too frustrated with the bureaucracy of the Lab. Patience and a positive collaborative attitude go a long way when figuring out how to plan foreign travel, ship delicate instrumentation for repair, get through training, and perform experiments safely and efficiently. I like to think of these challenges as the important prep work needed before tackling the interesting part of a problem. Show your work!

continued on next page

Give a warm welcome to cont.



Jeremy Jernigen Research Technologist Materials Synthesis and Integrated Devices (MPA-11)

My background is in physics and petroleum and geological engineering. I have extensive experience in electron microscopy and focused ion beam milling, as well as laboratory and cleanroom management.

I support multiple researchers in the fuel cell team in the role of laboratory management, while also working to develop standard techniques and practices to accelerate onboarding of new students and postdocs while maximizing consistency and optimizing results.

I love the culture and community at Los Alamos, and the location is fantastic. I love being a part of cutting-edge research that supports the development and adoption of green energy. I look forward to increasing my role in research, specifically, applying my skills with electron microscopy and focused ion beam milling.

When out of the office ...

I love to hike and rock climb. I also build and fly "first person view" drones and have designed and 3D printed my own filmmaking drone. I plan to publish the design on a community website soon for other people to build.



Mihee Kim

Scientist

Center for Integrated Nanotechnologies (MPA-CINT)

I have experience in polymer synthesis, chemical and thermomechanical characterizations, polymers for biological applications, and bio-inspired nanomaterials.

I support the Lab's mission by developing polymers for applications under extreme environments.

Collaborative spirit

I look forward to collaborating with many scientists with different backgrounds across the Lab. Collaboration allows me to explore new fields and applications, which is always big fun.

When I'm not working ...

I enjoy reading books, gardening, and exploring nature's wonders—volcanos, badlands, canyons, etc.



Winson Kuo

Electron Microscopy Lab Manager Research Technologist Center for Integrated Nanotechnologies (MPA-CINT)

I am a versatile materials science engineer with expertise in materials characterization and a wide range of transmission electron microscopy and spectroscopy techniques as applied to the understanding of synthesis-structure-property relationships.

My mission is to deliver improved and sustainable performance and build and manage effective work teams. I also provide consultation and analytic services and collaborate with internal and external researchers.

Strength in diversity

The Lab has an exceptional research and academic reputation around the world. I am impressed by the diverse range of research topics, especially in the field related to microscopy, and I believe my expertise in electron microscopy and electron probe microanalysis would add to that diversity. I enjoy working in an intellectually stimulating and culturally diverse environment and look forward to meeting other passionate researchers!

Give a warm welcome to cont.



Marcella Medina

Administrative Assistant

Materials Synthesis and Integrated Devices (MPA-11)

My experience includes being an administrator for three years at a child care center in Albuquerque. My skills include the willingness to always learn something new and being determined to contribute to the success of my workplace.

All in this together

My word of advice to all new hires is to not be afraid to make mistakes. Reach out to others for help when you're struggling and always repay the favor by helping other new hires. Remember everyone starts at the bottom and has to grow with the help of others!

My husband recently got me into fishing, so I spend a lot of weekends at a nearby creek with him and my daughter.



Allen Scheie Scientist

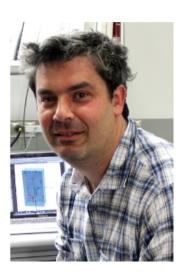
Quantum (MPA-Q)

My skills and experience include neutron scattering on magnetic materials and low temperature bulk measurements. My work aims to understand the strange behavior of highly entangled quantum materials. This involves answering fundamental questions about quantum physics, but also has potential for quantum computing and sensing technologies, which are relevant to national security.

I am most looking forward to learning about many-body entangled systems where the electrons are mobile and applying rigorous measures of quantum coherence to real materials.

Double hitter

I double-majored in physics and philosophy as an undergraduate and maintain a hobby interest in philosophy.



Arkadv Shehter

Scientist

National High Magnetic Field Laboratory-Pulsed Field Facility (MPA-MAGLAB)

I have a background in both theoretical and experimental condensed matter physics, with experience working in and leading large collaborative scientific efforts and developing new scientific tools and techniques.

My research at the magnet lab expands the scientific expertise at Los Alamos and helps attract young talented scientists to the scientific environment of the Lab.

Winning combination

I was drawn to the Lab for its unique combination of scientific and technical focus.

Outside of the magnet lab...

I love hiking in the mountains, and since moving here I've started loving mountain biking as well.

Magnet lab draws a crowd

Pulsed Field Facility hosts annual meeting designed to take the pulse of high magnetic field research

More than 50 members of the nation's high magnetic field scientific community recently descended on the Lab's Pulsed Field Facility (PFF) to take part in the National High Magnetic Field Laboratory's (NHMFL) annual user committee meeting. The three-day event included technical talks on science in pulsed high magnetic fields and an update on the health of the user program.

The NHMFL is the only facility of its kind in the United States, pulling in more than a thousand scientists internationally to use its one-of-a-kind magnets in collaboration with staff scientists and technicians. The Lab's PFF is one of three locations of the NHMFL, which has its headquarters and another experimental facility in Florida. The NHMFL is a partnership between Florida State University, the University of Florida, and Los Alamos National Laboratory.

"Since the PFF's inception the Laboratory has provided infrastructure and management support, most notably the 1.4 gigawatt motor-generator that powers the world-record-holding 100 tesla magnet," said Pulsed Field Facility Director Ross McDonald.

The motor-generator is currently undergoing a complex, multimillion-dollar, multi-year repair and upgrade. During a tour, meeting participants were able to view the pulsed power infrastructure in this unique state. The tour also showcased the PFF's new duplex magnets, which were designed and constructed by PFF staff. This state-of-the-art equipment supports both the PFF's user program and Los Alamos's national security science mission, McDonald said, "and will impact future magnet technology once the generator comes back online in 2024."

On behalf of the Laboratory, Los Alamos Neutron Science Center User Facility Director Mike Furlanetto told meeting participants that their contributions to the high-profile research conducted at the Pulsed Field Facility are an important part of the Lab's en-



Participants in the National High Magnetic Field Laboratory's annual user meeting were in for a rare treat this year—the opportunity to take in some unique views of the Pulsed Field Facility's pulsed power infrastructure. Specifically, participants were able to view the 1.4 gigawatt motor-generator without its 234-metric-ton rotor. The generator is undergoing a complex, multi-year, multimillion-dollar repair to replace the rotor and upgrade the drive and exciter subsystems.

during reputation. Los Alamos's priority of being a leader in the National Quantum Initiative, for example, is well aligned with the PFF's focus on quantum materials. The PFF continues to attract significant science investment from the DOE Office of Science via the "100T science" field work proposal and through its involvement in two Energy Frontier Research Centers and the Quantum Science Center.

Technical contact: Ross McDonald

Zelenay honored for contributions to green energy research community

Piotr Zelenay (Materials Synthesis and Integrated Devices, MPA-11) has been honored by the International Association for Green Energy (IAGE) as the winner of its 2022 Outstanding Researcher Award.

The IAGE supports green energy endeavors across academia, industry, and society. The award honors recipients for "outstanding research and advancement of knowledge in fuel cells, electrochemical energy, and



green energy systems" and is given to researchers who have "demonstrated exceptional contribution to the green energy research community."

As a Laboratory Fellow and scientist, Zelenay concentrates on fundamental and applied aspects of polymer electrolyte fuel cell science and technology, electrocatalysis, and electrode kinetics. His research has focused on electrocatalysis of oxygen reduction reaction and methanol and dimethyl ether oxidation in polymer electrolyte fuel cells and, more recently, on electrochemical conversion of atmospheric carbon dioxide to value-added chemicals. He has taken a leading role in the development of non-precious metal oxygen reduction reaction catalysts worldwide, the discovery of ruthenium crossover in the direct methanol fuel cell, and the advancement of the direct dimethyl ether fuel cell performance to the level that now matches that of the state-of-the-art direct methanol fuel cells.

Zelenay has more than 200 research publications to his credit, including in leading scientific journals such as Nature, Nature

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Zelenay cont.

Catalysis, Science, Chemical Reviews, Accounts of Chemical Research, Angewandte Chemie, Energy and Environmental Science, and Advanced Materials. He has co-authored 26 patents and patent applications in the area of polymer electrolyte fuel cells. For his contributions to electrochemical science, Zelenay was awarded, among others, fellowship of The Electrochemical Society in 2014 and fellowship of the International Society of Electrochemistry in 2021.

Technical contact: Piotr Zelenay ■

Spendelow receives prestigious Toyota Young Investigator Fellowship

Award funds green energy projects

Jacob Spendelow (Materials Synthesis and Integrated Devices, MPA-11) has received an Electrochemical Society Toyota Young Investigator Fellowship for projects in green energy technology. Spendelow, whose research investigates electrochemical energy technologies including fuel cells and electrolyzers, is one of four fellows named this year.



The fellowship supports early career electrochemical researchers as they develop technological innovation

around batteries, fuel cells, and carbon dioxide capture, conversion, and utilization. It is offered by The Electrochemical Society and the Toyota Research Institute of North America, a division of Toyota Motor Engineering and Manufacturing North America.

Spendelow's work investigates electrolysis, the process by which electricity separates water into oxygen and hydrogen. Using renewable energy sources, electrolyzers have the potential to produce clean hydrogen for use in hydrogen fuel cells, which can power transportation and industry without creating greenhouse gas emissions. Spendelow's focus on improving electrolysis efficiency centers on anode design, the critical component of the electrolyzer that enables hydrogen molecules to be split into protons and electrons. "One of the limiting factors in electrolysis is the anode, which adds costs and reduces efficiency," said Spendelow. "We're trying to create an anode that has a lower content of precious metals, such as iridium, while also consuming less electricity and producing more hydrogen. Making electrolysis more efficient will reduce energy demand and make the technology less expensive, facilitating economically viable clean-hydrogen production."

Spendelow joined Los Alamos National Laboratory in 2006 as a Director's Postdoctoral Fellow, becoming a staff member in 2008. He earned a PhD in chemical engineering from the University of Illinois Urbana-Champaign in 2006.

Technical contact: Jacob Spendelow ■

Fensin to chair **TMS Functional Materials Division**

Saryu Fensin (Center for Integrated Nanotechnologies, MPA-CINT) has been named TMS (The Minerals, Metals and Materials Society) Functional Materials Division (FMD) chair. This division includes researchers whose work focuses on materials synthesis and processing, structure,



properties, and performance of electronic, photonic, magnetic, and superconducting materials.

As chair, Fensin will guide the division in its efforts to promote technical exchange and assist in the professional development of its members through programming, publications, and continuing education. She will also represent the division on the TMS Board of Directors. Previously she served as the division's vice chair. She begins her three-year term in February 2023.

Fensin leads MPA-CINT's quasi-static and dynamic behavior of materials thrust, where her research focuses on the role of heterogeneities and defects on failure in metals and alloys. Fensin, who earned her PhD in materials science and engineering from the University of California, Davis, joined the Lab in 2006.

A TMS member since 2010, she has helped organize multiple symposia at TMS annual meetings and led special topic JOM issues as a guest editor related to some of these symposia. She has served as chair of the TMS Young Professionals, Professional Development, and Mechanical Behavior of Materials committees. She was a member of TMS functional committees on the TMS Programming; Diversity, Equity, and Inclusion; and Public and Governmental Affairs committees. Awards for her leadership include the 2014 TMS FMD Young Leaders Award, the 2016 Young Leaders International Scholar Award with the Japan Institute of Metals and Materials, and the 2019 AIME Robert Lansing Award for her insights into the role of grain boundaries in damage and failure.

Technical contact: Saryu Fensin

Meier recognized for Science in '3' presentation

Kristina Meier received an honorable mention at the Lab's Science in "3" event. The career development event, organized by the Postdoc Program Office, challenges participants to present their research to a general audience in three minutes or less.



continued on next page

2021 Distinguished Performance Awards

MPA staff recognized for notable contributions to Lab's mission

For their dedication, effort, and outstanding sustained performance in support of transformational science in a safe, secure workplace, members of Materials Physics and Applications were recognized with 2021 Laboratory Distinguished Performance Awards.

Small Team Distinguished Performance Awards

Challenge Tomorrow Team

Spearheaded by Linda Deck (Bradbury Science Museum, CP-BSM) the Challenge Tomorrow team designed and put in motion an innovative approach to science and educational outreach that brings science to the people via an interactive "lab-on-wheels" experience. Two themed trailers, staffed with Lab employees as science ambassadors, will visit schools, fairs, and recruiting events throughout New Mexico. Team members include Stacy Baker (Center for Integrated Nanotechnologies, MPA-CINT); Jennifer Cline (Applied Energy, SPO-AE); Paul Ziomek (Multimedia Production, CEA-MP); and Jonathan Creel, Deck, and Emily Schmidt (CP-BSM).

SuperCell Hydrogen Fuel Cell Team

It took two years of preparation, but in August 2021 the SuperCell team conducted a groundbreaking experiment on a novel device, known as a SuperCell, by using the Annular Core Research Reactor (ACRR) at Sandia National Laboratories. A miniature hydrogen fuel cell stack, the SuperCell produced the required amount of power after receiving a radioactive pulse from the ACRR. The success of this team's advanced research stands to open new avenues and experimental capabilities for the Laboratory and has resulted in a paradigm shift in how scientists and engineers will implement power sources for future applications important to the National Nuclear Security Administration. The team includes Eric Brosha, Mahlon Wilson, and Cortney Kreller (Materials Synthesis and Integrated Devices, MPA-11); Edward Lum (Engineering Analysis, W-13); and Steve Simmonds (Work Control, MSS-WC).

Large Team Distinguished Performance Awards

Direct Cast Team

Near-net-shape casting has played an important role for the Laboratory's materials community. To make advances in casting, Sigma Division assembled a multidivision and multilaboratory team to achieve a multi-year goal supported by a variety of programmatic interests. In 2021 the team, which includes Carl Cady and Saryu Fensin (MPA-CINT), made advancements in developing and implementing new technologies for the National Nuclear Security Administration—a feat requiring significant effort, careful planning, and exacting execution.

Los Alamos Oxygen Monitor and Alarm Installation Pilot Team

Improper responses to low oxygen monitor alarms in 2019 caused serious life-threatening near misses. To address this safety problem, the Lab, collaborating with DOE and the Office of Enforcement, made sweeping changes to the oxygen monitor and alarm policy and procedures and emergency response and training for such alarms. Per the updated policy, the team, which included Ricardo Marti-Arbona (MPACINT), carried out a component of this policy, completing the installation of 14 oxygen alarm systems with horns and strobes. Collaborating with personnel from three associate lab directorates and seven divisions in the Science and Technology Operations Facility Operations Directorate (STO-FOD), the team created a standard approach to install oxygen alarms.

Meier cont.

In "Drought-resistant crops, two photons at a time," Meier described a novel way of studying plant-water dynamics, which is important to improving the environmental adaptability of high-value crops that provide essential byproducts such as biofuels, soluble sugars, and starch.

Using "quantum ghost imaging," water content in plants is studied using quantum correlations between spatially entangled photons. The technique allows plants to be bioimaged without introducing interfering or damaging elements, such as incident light or radiation. Her work advances on previous applications of the technique,

leveraging the Lab's ultra-low-light camera to eliminate the need for cumbersome optical delay lines that require precise tuning.

Meier holds a joint postdoc appointment with Space and Remote Sensing (ISR-2) and Quantum (MPA-Q), where she focuses on quantum photonics and quantum-enhanced security. She earned a BS in physics from Denison University and a PhD in physics from the University of Illinois Urbana-Champaign. Meier is mentored by Rebecca Sandoval (ISR-2) and Raymond Newell (MPA-Q).

Technical contact: Kristina Meier

Veterans inclusivity tips

With Veterans Day recently observed, we are reminded of the selfless commitment of those who have served in our uniformed forces. While we celebrate specifically on November 11, there are many ways in which we can continue to recognize our veterans and honor their service year-round. Please consider the following.

- A simple "thank you" goes a long way! Respectfully acknowledging their dedication to service can be a great way to let our veterans know how much we appreciate them.
- Service comes with a cost. For veterans, post-traumatic stress disorder (PTSD) is not a matter of "if you have it" but rather "how severe is it" and "have you worked through it." Suicide is tragically high within the veteran population, and triggers can come in many forms, including anniversaries and holidays. Please be cognizant of your veteran peers and their well being. Simple acts of kindness and engagement, like lending an ear or sharing a cup of coffee, can make a huge difference.
- As the Lab continues to grow, please keep an open mind when reviewing veterans' applications. Veterans often come with skill sets that may not show through on paper: leadership, time management, mission focus, etc. In addition, veterans may "speak military" during interviews, which can be difficult for interviewers to understand. If you find yourself preparing to interview a candidate who identifies as a veteran, please reach out to our Veterans Employee Resource Group leadership team. We have several members who are willing to serve on veterans' interview panels to help facilitate and translate discussions.

Celebrating service

Congratulations to the following MPA Division employees who recently celebrated a service anniversary:

| Carl Cady, MPA-CINT35 years |
|--|
| |
| Roman Movshovich, MPA-Q |
| Mahlon Wilson, MPA-11 |
| Fedor Balakirev, MPA-MAGLAB25 years |
| Marcelo Jaime, MPA-MAGLAB25 years |
| Piotr Zelenay, MPA-1125 years |
| Eric Bauer, MPA-Q20 years |
| Kathryn Berchtold, MPA-11 20 years |
| Malcolm Boshier, MPA-Q20 years |
| Leonardo Civale, MPA-Q20 years |
| Han Htoon, MPA-CINT20 years |
| Sergei Ivanov, MPA-CINT20 years |
| John Singleton, MPA-MAGLAB20 years |
| Cristian Pantea, MPA-1120 years |
| Abul Azad, MPA-CINT |
| Per Magnelind, MPA-Q |
| Changhyun Ryu, MPA-Q15 years |
| Igor Savukov, MPA-Q15 years |
| Young Jin Kim, MPA-Q10 years |
| Siddharth Komini Babu, MPA-115 years |
| John Greenhall, MPA-11 5 years |
| John Matteson, MPA-11 5 years |
| Eric Meierdierks, MPA-11 5 years |
| Eun Joo Park, MPA-115 years |
| Nicholas Sirica, MPA-CINT 5 years |
| Sean Thomas, MPA-Q 5 years |
| Oscar Ayala Valenzuela, MPA-MAGLAB 5 years |
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Help make the Lab a more sustainable workplace

Easy sustainable initiatives to start in your office are

- Purchasing recycling bins for the office
- Having power strips with on/off switches
- Posting reminders for staff to turn off the lights when leaving the room
- Having only one shared office printer and no individual ones
- · Having IT set double-sided printing as default for computers
- Reporting maintenance issues such as water leaks or electrical problems when you see them



Materials Physics and Applications

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To submit news items or for more information, contact Karen Kippen, ALDPS Communications, at 505-606-1822 or aldps-comm@lanl.gov.

To read past issues see www.lanl.gov/orgs/mpa/materialsmatter.shtml.





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