

Thawing Ground

A Newsletter of the US Permafrost Association



The AGU Issue: Celebrating USPA's Student Members

The mission of USPA is to encourage sharing of knowledge and data in permafrost science.

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Who's presenting at AGU this year?

We're spotlighting USPA's student members with oral presentations or posters showcasing their research. And, yes, there's a bunch of them!
Congratulations to all!

Match 'em up!

Match the name with the photo, and with the topic.

What are they talking about?

Well... ground subsidence, Arctic river chemistry, PF thaw in NW Greenland, thermo-erosion in gully streams, defense readiness, CH4 emission hotspots, post-fire ecosystems, cryoplanation terraces, stable isotope probing, soil organic C age and fractions, thermokarst taliks, periglacial hillslopes, polarimetric radar, methane flux and spectroscopy, river discharge in Greenland, and self-formed alluvial channels. Wow!

The Active Layer

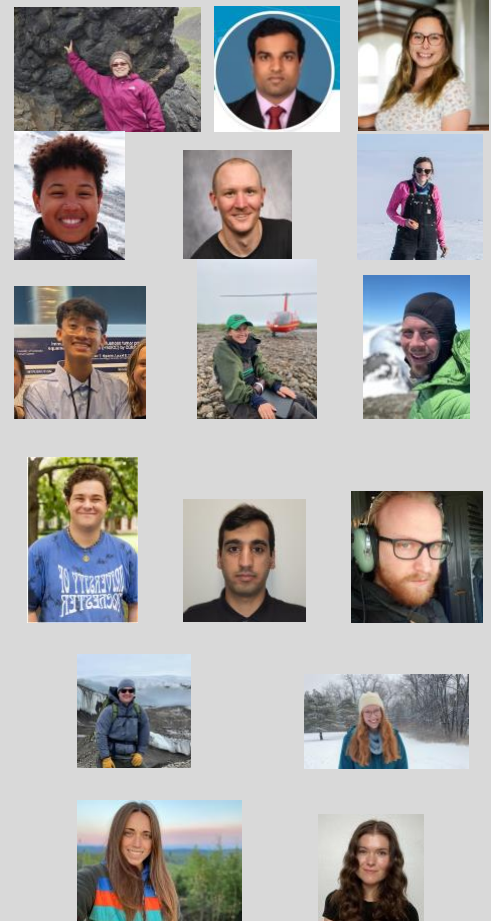
The History of the American Geophysical Union

AGU was founded in 1919 by the National Research Council. After fifty-plus years as an affiliate of the National Academies of Science, it became independent in 1972. AGU has long held its annual meetings in December, frequently in San Francisco and this year in our nation's capital. With over 25,000 attendees, it is the main event for many disciplines and has organized itself exceptionally well to accommodate both specific sections and interdisciplinary groups to advance Earth and space sciences. AGU has grown to some 60,000 members in 137 countries. Our group, Cryosphere, boasts 1500 members who call it their primary affiliate. Like USPA, AGU Cryosphere honors students and early career researchers with awards to highlight their work and support their travel expenses.

2024 AGU Oral Presentations

- Alexander Nguyen
- Amelia Grose
- Cameron Kuhle *
- Zena Robert
- Carmen Atkins*
- Chathuranga Senevirathne*
- Rachel Badzioch
- Raven Mitchell*
- Sean Schaefer*
- Emma Lathrop*
- Joel Eklof
- JohnPaul Sleiman*
- Kazem Bakian-Dogaheh*
- Kevin Rozmiarek
- Logan Wieland
- Maria Schmeer*

*Lead presenter



Quotes

UNH: During your time at UNH, what are you most proud of?

Torin: The research I'm currently conducting looking at microbial dispersal in thawing permafrost. I never thought I would have an opportunity to do research like this as an undergrad, let alone go to the Arctic Circle for my study....

[Our] study helps establish a baseline of the ecology that is found across the microbial environments of permafrost which contribute to a critical carbon sink and allows for further investigation into the impact that microbial communities have on carbon cycling in the Arctic.

Torin Scalora-Riley, UNH, Poster Presenter
Strong work, Torin!! We are proud of you!!

Spotlight on a Star:

Julian Dann is a Board Member here on USPA as the liaison to PYRN. He is also a stalwart on the awards program: advertising, organizing, and sifting through applications so USPA can support its many students to travel to conferences like AGU to show off their research. He's also a huge help with the USPA website where his tech skills far outshine those of the older board members. ☺

Based in Fairbanks, Julian is working on his Ph.D. in permafrost hydrology and remote sensing. He's a passionate researcher no matter how remote he is!



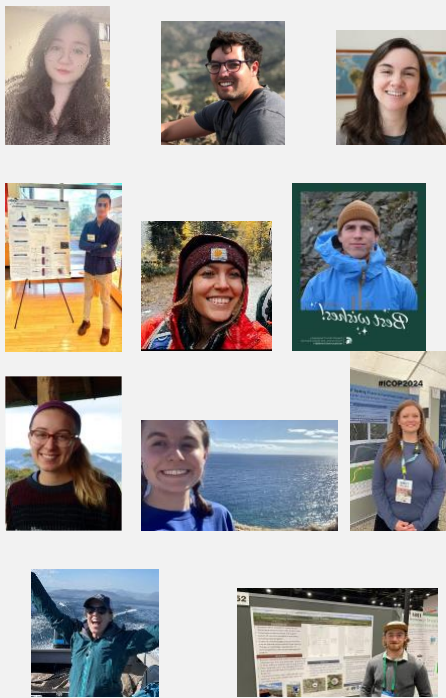
Thanks so much, Julian, for all you do for permafrost science!

Not yet a member? Join or Renew Today!

<https://uspa.memberclicks.net>

At just \$60/yr, and only \$15/yr for students, it's a bargain. You can stay up to date on events and learn the latest in permafrost science!

Who are they? Match faces to names, to topics!



2024 AGU Poster Presenters

- Ahmad Tourei **
- Alexander Nguyen *
- Cameron Kuhle *
- Torin Scalora-Riley *
- Vasily Tolmanov
- Yue Zhao
- Rachel Badzioch *
- Raven Mitchell
- Sean Schaefer
- Elena Harner
- Emily Graham *
- Erin VanderJeugd *
- Hailey Webb *
- JohnPaul Sleiman *
- Julian Dann **
- Katherine Braun *
- Kazem Bakian-Dogaheh
- Kevin Rozmiarek
- Logan Wieland *
- Maria Schmeer *
- Mary Farina *
- Megan McGroarty *

*** Lead Presenter**

What are they talking about?

Well...distributed acoustic sensing, PF microbial characterization, cryoplanation terraces, PF sites and seismic responses, C stabilization with metals in Arctic lakes, UASAR analysis of beaver ponds, response of soils to storm simulations, gradual vs. abrupt emissions of CO₂, CH₄, VOCs; Arctic story maps and remote sensing of seismic exploration, influences on ice-wedge degradation, CH₄ flux as a heterogenous driver in boreal forests and fens, and PF thaw effects on ecosystems (ACCLIMATE).

Thank you to all our students for your diligent work to advance permafrost science and engineering. We look forward to seeing you in D.C.

1. Maria Schmeer
2. Cameron Kuhle
3. Sean Schaefer
4. Logan Wieland
5. Rachel Badzioch



Permafrost Corner

1. Which student attends Cal Tech?
2. Who's studying permafrost thaw in NW Greenland?
3. Who's into quantitative stable isotope probing?
4. Who travels from UAF to Greenland to study changes in river discharge?
5. Which ND student studies post-fire ecosystems?



Answers are in the sideways box!

AGU 2024 by the Numbers

USPA has 60 student members. 16 have oral presentations; 9 of those are lead presenters. 22 have posters; 15 of those as lead authors. And 13, nearly one-quarter of our students, have multiple offerings. If you can catch up with Ahmad and JohnPaul, congratulate them on their *five* presentations each! That's a big active layer.

A HUGE THANK YOU TO OUR CORPORATE AND INSTITUTIONAL MEMBERS!



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Boulder



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Geo-Watersheds
Scientific



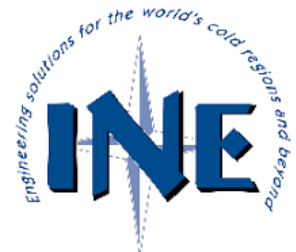
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