

State News for NSPE Members

Bozeman Launches \$26M Infrastructure Projects for Summer

The City of Bozeman has announced a significant investment in infrastructure with \$26 million allocated for maintenance, upgrades, and improvements this summer, [NonStopLocal reports](#).

Twelve new projects are planned, focusing on enhancing water and sewer facilities. For drivers, cyclists, and those on foot, there will be noticeable road and safety improvements.

“That has really been sort of the missing link in the past. In Bozeman here, we hear from our public and we hear strongly from our commission that they really want staff doubling down on safety projects,” said Nick Ross, transportation and engineering director Nick Ross.

Among the projects, two near Gallatin High School aim to improve safety. A protected left turn lane will be added turning from Oak Street onto Flanders Mill Road. This intersection has been closed since last summer to test if that would reduce traffic collisions and has been successful, Ross said. However, it also resulted in more cars using alternate paths through neighborhoods.

A new crosswalk will connect the school with the Bozeman Sports Park, which is under development. [Read More](#).

Montana Tech Student Lands Fellowship at Brookhaven National Laboratory

Jakob Nielsen, a third-year mechanical engineering student at Montana Technological University, will join 24 top students from around the United States at Nuclear Chemistry Summer School (NCSS) at the Brookhaven National Laboratory this summer, [Montana Technological University reports](#). The journey to the East Coast Department of Energy facility that has produced seven Nobel-Prize winning

discoveries is one of determination and commitment to science that ignited six years ago during his sophomore year at Butte High.

“I was bored during the pandemic,” Nielsen said. “I played all sports in high school that I could do. I got my physical stimulation that way, but I really wanted to improve my academics, so I reached out to the Montana Tech Nanotechnology Laboratory, and they said that they were pretty open to having new people in there.”

The Montana Tech Nanotechnology Laboratory (MTNL) is home to a clean room with a powerful scanning electron microscope and a transmission electron microscope and other specialty equipment valued at over \$1 million. The lab was not able to accommodate Nielsen’s request during the pandemic, but in his junior year of high school Dr. Jack Skinner, interim dean of the Lance College of Mines and Engineering, gave Nielsen the opportunity to come to campus and assist in research. [Read More](#).

Montana State Research Looks at Fungi to Help Create Building Materials

That root system is composed of a substance called fungal mycelium, and, according to researcher Chelsea Heveran, it could provide a “scaffold” for microorganisms to adhere to and harden through a process called calcification, [Montana State University reports](#). In some instances, the mycelium scaffold itself can calcify without adding microbes.

Heveran, an assistant professor of mechanical and industrial engineering in MSU’s Norm Asbjornson College of Engineering, is the senior author of a study of mycelium’s material properties published last month in the journal Cell Reports Physical Science. MSU doctoral student Ethan Viles is the publication’s first author.

“Ethan did a tremendous job with this study,” Heveran said. “This work benefitted from his enthusiasm for engineered living materials and his skill in working at the intersection of engineering, materials science and biology.”

Currently, most engineered living materials, or ELMs, are soft, she said. There is an emerging effort, including by MSU researchers, to design load-bearing materials that are also alive. However, keeping biomineralized ELMs alive for more than a few days or weeks has been challenging. In this work, MSU researchers demonstrated that the mycelium scaffold could enable the ELMs to stay alive for at least a month.

“We saw that both the mycelium, or bacteria living on the mycelium scaffold, were abundantly viable a month into investigation, even when we kept it in very hot and dry conditions,” she said. “That is a challenge for microorganisms in these kinds of

materials.” [Read more](#).

Stay up to date on legislative issues through the [NSPE Advocacy Center](#) .

Get Involved! NSPE Seeks Volunteers for 2025–26 Committees

NSPE’s passionate and dedicated committee volunteers are essential to our mission. **Why serve?** In addition to giving back to the professional engineering community, NSPE volunteers form strong connections with committee colleagues, learn new skills, enjoy networking with leaders or hone their own leadership skills. [Learn more and apply to NSPE’s committees by June 4](#). (You must log-in with your NSPE credentials to submit an application.)

If you do not see an opportunity that interests you in the link above, check out [Get Involved](#) throughout the year to learn more about other areas of engagement, including short-term projects.

Build Momentum – NSPECon25 Keynote Speakers



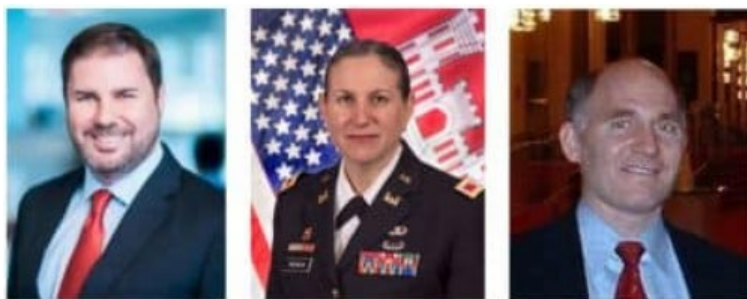
NSPECon25 (Kansas City, Missouri, August 6-8), the prime national event for professional engineers, will feature keynote speakers to provide inspiration and guidance to help elevate your career in addition to putting a spotlight on emerging issues within the industry. Meet your keynote speakers below and be sure to review the [full conference program](#).



Dr. Cindy Frewen, FAIA, urban futurist and architect, will present the session **“A World Gone Sideways: Engineering 2050 in a Post-Normal World.”** She will explore how engineers in 2050 can become not just problem-solvers, but storytellers, system-shapers, and stewards of a better world.



Coach Donnie Campbell will present the session **“What’s Your MVP? Leadership Lessons from the Coach Who Inspired Ted Lasso.”** In his leadership keynote, inspires audiences to discover their “MVP” – their mission, values, and principles to inspire individuals to reach their potential and teams to reach new heights.



A presentation on the **“Government and Private Industries’ Response to the Maryland Key Bridge Collapse”** will explore the coordinated efforts between government agencies and private industries in response to the tragic bridge collapse. **Stephen R. Skippen**, DBIA, CCM, ENV SP (senior project manager,

Skanska USA Civil), **Colonel Estee Pinchasin** (director of logistics, National Security Agency), and **Paul Hankins** (director, salvage operations and ocean engineering, United States Navy), are the presentation panelists.

Early-bird discount rates are available until June 27. NSPECon25 will take place at the Intercontinental Kansas City at the Plaza. The [deadline for reserving a hotel room](#) at the discounted conference rate is July 4. We encourage you to make your reservation early since there are a limited number of conference-rate hotels rooms available.

Welcome 2025 Sponsors!

NSPE offers a range of sponsorship packages tailored to meet various goals and budgets, with a special exhibitor discount available for Kansas City-based businesses. Discover more about these opportunities in the [Sponsor and Exhibitor section](#) of the conference website.

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Don't Miss Out on the 2025 Spring Webinar Series



NSPE offers a live webinar series free to members—“WORKability Wednesdays”—to support their professional development goals. Register now at [NSPE's PE Institute](#) to attend the webinar on **May 28**—[How Has Technology Shaped Workstyles Across Generations?](#)

Members can access a recording of the recent webinar held on May 14—[Using Your Engineering Expertise as a Forensic Expert](#) in addition to the webinars held in March and April. *Members are advised to consult their state licensing board to determine requirements for PDH or CPD credits.

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