Montana Society to Host Virtual Meeting

The Montana Society of Engineers will host a General Membership Meeting on Wednesday, **November 4** via Zoom. Topics of discussion will include MATHCOUNTS, the Joint Engineers Conference, the NSPE House of Delegates meeting, and awards.

Due to COVID-19, the annual Joint Engineers Conference was canceled this year and will resume November 3-5, 2021 in Helena, Montana.

Please contact NSPE House of Delegates Representative Mike Keene, P.E. for information about attending the meeting.

MT Sells Bonds to Support Infrastructure Projects

Governor Steve Bullock announced on September 30 that the state sold $52.2 million in bonds to continue moving forward with infrastructure projects across the state and refinanced $32.4 million in bonds to take advantage of lower interest rates and save taxpayer dollars.

“By selling bonds today we are moving forward with critical projects across the state and supporting the Montana economy by continuing to put shovels to dirt and facilitate good-paying jobs,” Bullock stated in a news release. “Additionally, we are ensuring we are good stewards of taxpayer dollars by refinancing existing bonds to take advantage of low interest rates and save the state millions of dollars over the long term.”

The Board of Examiners executed the Bond Purchase Agreement, finalizing $52.2 million in bond issuance for infrastructure projects. The bonds sold will continue financing projects such as Romney Hall, expansion of the Great Falls College MSU Dental Hygiene Clinic, and the Montana Heritage Center. Interest rates for the bond issuances were historically low and ranged between .7% to 1.8%. The board also approved refinancing $32.4 million in trust land bonds as well as water
pollution control bonds. Refinancing will save the state $7 million.

The Montana Legislature passed and Governor Bullock signed legislation in 2019 to fund sewer, water, bridges, buildings and other public works projects. It is the first time the Legislature has agreed to a comprehensive statewide bond package in over a decade.

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**Butte Named as Top STEM City**

Butte, Montana was recognized as a 2020 Top STEM City for being a community showcasing exceptional dedication to science, technology, engineering, and math education and careers.

The data science team at Insurify (an insurance quotes comparison site) analyzed both proprietary and publicly-accessible data to determine the top STEM city in each state. The team identified cities with the highest proportion of residents in STEM-based careers and compiled data from Niche on the colleges and graduate schools with the best programs in STEM, as well as the best cities for women in tech.

[Read more.](#)

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**MSU Receives Funding to Study Faster COVID Testing**

Montana State University has received state funding from the governor to research a potentially faster and cheaper method of testing for the COVID-19 virus.

The $776,000 grant will fund the university’s research on a type of COVID-19 test that could improve the access to and speed of testing, according to a *Bozeman Daily Chronicle* article published on October 17.

The method, called loop-mediated isothermal amplification, or LAMP testing, relies on saliva as opposed to the commonly used nasal swab test. “There’s a lot of research exploring LAMP right now because of its speed,” said Connie Chang, an assistant professor in the department of chemical and biological engineering. Chang is leading the project and working alongside 12 MSU faculty members.

LAMP testing analyzes saliva samples in around 30 minutes and delivers results by changing the sample color to yellow if it’s positive for the COVID-19 virus.

“With the technology that we’re developing, we think we can trim the result time even more. It’s an exciting developing technology for point-of-care testing, and that’s why a lot of people are working on it right now,” Chang said.
NSPE’s **Job Board** is your one-stop resource for professional engineering employment. Whether you are on the hunt for your next career move or looking for today’s top engineering leaders and talent, you will find it here.

NSPE provides the tools PEs need to keep current in the profession and advance their careers.

**Featured Job**
Positive Train Control Project Manager
Missoula, MT

*Find more job openings or reach the right employees on the NSPE Job Board.*

*Stay up to date on legislative issues through the NSPE Advocacy Center.*

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**NSPE President Warns Against Broad-Brush Licensing Reform**

NSPE President Tricia Hatley, P.E., F.NSPE, recently challenged an opinion piece that advocates making temporary licensing deregulation permanent, measures that were enacted in response to the COVID-19 pandemic.

In a letter to the editor of the *Oklahoman*, Hatley warns that efforts to weaken licensing, however well-intentioned, make no distinction for highly complex, technical professions. This is a critical distinction that broad-brush proposals like those referenced in the article fail to make—and puts thousands of lives at risk in Oklahoma and elsewhere.

She also states that professions like engineering, architecture, accounting,
landscape architecture and surveying are responsible for the safety of our physical spaces and the integrity of our financial systems. Because of this, they are required to meet rigorous standards based on education, experience, and examination to demonstrate a minimum qualification level.

Read more.

**An Adventure to the Moon with Future City**

Future City is a project-based learning program where middle school students imagine, research, design, and build cities of the future. This year’s Future City theme is “Living on the Moon.” Teams will be challenged to design a lunar city and provide examples of how their city uses two moon resources to keep citizens safe and healthy.

Due to COVID-19, Future City transitioned this year’s program into a virtual format to offer impactful volunteer opportunities you can do from the comfort of your home or office.

**Inspiring the Next Generation**

Kay Bailey is a senior research and development engineer currently working on an innovative mechanical device that relieves back pain and pressure. She knows firsthand the added challenges in academia—and professional settings—when few people look like you. “When I was a middle school student, I didn’t see many examples of African Americans doing engineering,” she says.

This inspired Kay Bailey to volunteer as a Future City mentor in a predominantly African American school in Milwaukee. “I wanted to do whatever I could to show these students that it’s okay to be interested in engineering. Right away I could tell Future City would be a great way to get involved.”

Over the last two years, Bailey has loved working with these young scholars. Sometimes she helps them shape their creative ideas or explains STEM concepts, and other times they simply want to hear about what she is working on at her job. “I want these young people to be encouraged to pursue whatever they want.”

If, like Kay Bailey, you’re interested in inspiring the next generation, you can sign up to be a mentor by clicking here or email Info@FutureCity.org with any questions. This year, the program (including mentoring) will be virtual.
NSPE’s **PE Institute** helps members stay current in the profession, earn PDHs, and advance in their careers through webinars on important topics. The webinars are held at 2:00 p.m. – 3:00 p.m. EST at a member price of $99 ($129 for nonmembers).

**October 28**
**Put Me in Coach! The Engineering Team from Concept to Completion**
Within the construction industry, engineering-based decisions are made by professional engineers closely engaged with technicians. Working as an efficient team, a project moves smoothly and is successfully completed. A panel of PEs and technicians will share engineering best practices and approaches to overcoming technical challenges. 
This webinar is **FREE** for members and non-members.
*Presenters: Kent D. Dvorak, P.E., Chip Hollis (moderator), William Kenneth Johnson, Jr., P.G., Shannon Looney P.E., and John W. Quidley S.E.T.*

**November 2**
**Canon 1, NSPE Code of Ethics for Engineers: “Hold paramount the safety, health, and welfare of the public”**
This webinar will introduce you to four of the current members of the **NSPE Board of Ethical Review** (BER). Discussion will focus on four ethics cases that illuminate multiple aspects of Canon 1, to “hold paramount the safety, health and welfare of the public.” These cases are personal favorites selected by each BER member from the more than **600 opinions** the BER has published since the late 1950s.
*Presenters: Mark Dubbin, P.E., FPE, Jeffrey H. Greenfield, Ph.D., P.E., BCEE, F. NSPE, David Kish, Ph.D., P.E., William D. Lawson, P.E., Ph.D., F. NSPE*
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