NSPE-AK Virtual Meeting—Converting Marine Waste into Construction Material

The Alaska Society of Professional Engineers and the Alaska Engineering Education Foundation will host a virtual meeting on Thursday, June 17 (12 p.m. AK Daylight Time) featuring Patrick Simpson on the topic of converting marine waste into construction material. Simpson is the president of PKS Consulting Inc, in Cordova, Alaska.

This presentation is timely as it follows the recognition of World Ocean Day (held annually on June 8). The Zoom meeting can be accessed here (login: 9076944730, password: ASPE).

The Presentation
In this presentation Patrick Simpson will describe his vision for assessing, collecting, and utilizing plastic ocean waste collecting on Alaska's beaches. With at least 8M tons of plastic waste entering the world's oceans each year, the accumulation of this plastic waste on our beaches has become a great concern. In addition to the plastic waste being a blight on our shores and an entanglement risk for marine species, the plastic is rapidly breaking down into micro plastics and beginning to enter our food supply through seafood.

Simpson will discuss various approaches that can be taken for the assessment and collection of plastic ocean waste, and he will share his concepts for a set of plastic ocean waste eco-recycler (POWER) modules that will convert plastic waste into useful products such as recycled plastic lumber. He will also briefly talk about the Small Business Innovation Research program, a federally funded program that he has successfully employed for previous entrepreneurial ventures and is again employing for this project.

Meet Patrick Simpson
Patrick Simpson grew up in a small fishing community on the Prince William Sound. He looked toward his love of math and science as a career and earned a bachelor’s degree in computer science at the University of California San Diego.
Over the past 30 years, Simpson has built several companies, including technology development firms, government contracting companies, a non-profit organization, real-estate holdings, marine vessel operations, and a natural product supplement company. Simpson has also distinguished himself in the field of computational intelligence where he published several books and archival papers on neural networks, fuzzy systems, and evolutionary programming. He recently completed a multi-year effort developing and permitting a large oyster farm outside of Sitka.

**Access the Zoom Meeting**
Meeting ID: 907 694 4730
Passcode: ASPE

One tap mobile
+16699009128,,9076944730#,,,,*454196# US (San Jose)
+12532158782,,9076944730#,,,,*454196# US (Tacoma)

**Dial by your location**
Meeting ID: 907 694 4730
Passcode: 454196
Find your local number here.

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**Alaska Team Takes the MATHCOUNTS Challenge**

On May 8-10, more than 200 students from around the nation gathered virtually for the 2021 Raytheon Technologies MATHCOUNTS National Competition. NSPE-AK congratulates the Alaska student team for being top mathletes in the state and participating in the national competition.

NSPE-AK MATHCOUNTS Director LaQuita Chmielowski, P.E., would also like to give a special thank you to **Sophia Lee, E.I.T.**, (Anchorage/state coordinator), **Doug Murray, P.E.**, (Juneau coordinator), **Chuck Schulz, P.E.**, (Fairbanks coordinator), **Cheyenne Alabanzas, E.I.T.**, (remote coordinator), and the coaches for their dedication to ensuring that students were prepared to compete during a challenging program year.

**Student Team**
Xiling E. Tanner—Kenai Middle School (Kenai, sixth grade)
Xinlan A. Tanner—Kenai Middle School (Kenai, eighth grade)
Ulysses Escobar—Steller Secondary School (Anchorage, eighth grade)
Wyatt Beardsley—Fairbanks BEST Homeschool (Fairbanks, seventh grade)

**Coaches**
David Thomas—Kenai Middle School
Juan Escobar—Steller Secondary School
Did you miss the MATHCOUNTS National Competition? Watch here.

DOE Awards $882K to Launch Alaska for Energy Innovation Project

On June 4, the US Department of Energy awarded $882,999 to the Launch Alaska Transportation and Energy Accelerator. The Energy Program for Innovation Clusters (EPIC) funding supports incubators and accelerators that will harness regional ingenuity and resources, develop pipelines for energy technology to reach the market, and stimulate the formation of new businesses to reach the Biden-Harris Administration's goal of a net-zero carbon economy by 2050.

Launch Alaska will stimulate energy and related hardware technology development and rapidly expand the growing cluster of innovative companies developing and deploying energy solutions in the state. The project will enhance Launch Alaska's resilience and operational sustainability, leading to greater development of transportation and energy-related hardware technologies in Alaska.

Share the Value of Society Membership

Professional engineers have unique skills and knowledge and carry an obligation to protect the public health, safety, and welfare. NSPE and the Alaska Society of Professional Engineers are dedicated to supporting these professionals throughout their careers.

NSPE and NSPE-AK help PEs to stay current on the latest in engineering through leadership training, networking, and ethical guidance, all to safeguard the wellbeing of the public and navigate the new challenges that engineers confront daily. NSPE-AK members are encouraged to share the value of membership at the national, state, and local levels when engaging with their peers.

Learn more about membership benefits.
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**

**Civil Engineer**  
Fairbanks, AK

*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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**Register for the 2021 Virtual PECon**

Registration is now open for NSPE’s **Virtual Professional Engineers Conference 2021** (August 3–5). The **early bird registration rate deadline is July 15**.

Attendees will have access to up to 14 unique and insightful PDH sessions (live and on-demand sessions) and will have the opportunity to collaborate with peers and experts from across the country through morning “coffee chats” and Mastermind sessions. In the Mastermind sessions, attendees will address their most pressing professional issues and tap into the knowledge, experience, and advice of their peers and PE experts to help workshop solutions. There will also be virtual engineering facility tours and a celebration of **PE Day** (August 4).
PECon at a Glance

- **Bridging the Gap to Leadership: Connecting the Skills You Have with the Skills You Need** (Shelley Row, P.E., CSP, Leadership and Decision-Making Expert)

- **Florida International University Bridge Failure, A Study in Ethics** (Susan Sprague, P.E., F.NSPE, Senior Associate, and Eric Tappert, P.E., Consultant)

- **AI and the Evolving Role of the “Traditional” Engineer: An Engineer’s Perspective from NASA to Infrastructure and Beyond** (Kimberly Johnson, P.E., Founding Principal)

- **Reaching New Heights in Engineering** (Alan Mallory, P.E., PMP, Speaker, Author, and Performance Coach)

Registration Options

A **Day Pass** for NSPE members is $99 until July 15 and $149 after July 15. The pass provides access to four PDH sessions, networking morning “coffee chat” roundtables of your choice each day, and evening post-session discussions.

The **All Access Pass** for NSPE members is $249 until July 15 and $299 after July 15. This pass provides access to 14 PDH sessions, access to daily networking morning “coffee chat” roundtables, and evening post session discussions.

Student members can register for a Day Pass or the All Access Pass for free until July 15. The rate for both passes is $50 after July 15. Nonmembers can join NSPE for $299 and receive member pricing.

Women in Engineering Event to Explore Gender and Racial Equity

DiscoverE and the Congressional Women in STEM Caucus will co-host an event on **June 23**, in celebration of **International Women in Engineering Day**. The event will include a lively panel discussion exploring the factors that attract girls to engineering, why women persist in the field, and the role you can play in achieving gender and racial equity in engineering and technology.

NSPE Government Relations staff coordinated the participation of the Women in STEM Caucus for the event. The Women in STEM Caucus seeks to bring public
and congressional awareness to policies, programs, and initiatives that support women in STEM fields, and develops the next generation of women leaders. Rep. Chrissy Houlahan (D-PA), Rep. Debbie Lesko (R-AZ), Rep. Haley Stevens (D-MI), and Rep. Jackie Walorski (R-IN) serve as caucus co-chairs.

NSPE recognizes the benefits of a diverse population of licensed engineers in shaping the future of engineering. Diverse backgrounds foster unique contributions and capabilities and create an inclusive community ultimately leading to a more creative, effective and technically respected community.

Register here.

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**2021–22 Call for Volunteers**

NSPE needs your knowledge, expertise, and time to help the Society carry out its vision and mission and meet the goals of the strategic plan. Volunteer positions begin in mid-August and end at the 2022 Professional Engineers Conference.

There are three types of volunteer opportunities:

- **Level 1 (Highest Engagement)—Standing Boards and Committees**
  Often includes attending at least one in-person meeting. Most meetings held via video conference. Terms may be up to three years.

- **Level 2 (Intermediate Engagement)—Ad Hoc Committees and Task Forces**
  Activities primarily include online correspondence and video conference meetings.

- **Level 3 (Lowest Engagement)—Ad Hoc Volunteer**
  Volunteer on a project-by-project basis.

Submit forms by July 9 to be considered for a 2021-22 term.