



Montana Society of Engineers
Promoting Professional Engineers

NEWSLETTER

Second Quarter 2019

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Special points of interest:

- Corporate Sponsors and Volunteers Support Montana MathCounts – pg 2
- MSE PE HOF Inductees— pg 5
- Challenge: Share this issue with 5 engineers!

President’s Message

Grant Gershmel, PE, President

As I write my last article for the Montana Society of Engineers, I reflect back on why I first was interested in volunteering for the board years ago. Today, having just returned from the IEEE working standards that create safety parameters for the electric power grid, I’m reminded that one of my biggest driving forces is upholding the integrity of the professional engineer in the interest of public safety.

As licensed engineers, our public (many times unknowingly) puts a huge trust on us to create reliable and safe designs. Bridges do fail and overpasses can collapse, but these instances are so extremely rare that they are drawn out in the news in dramatic fashion, justifiably so. I also believe as our knowledge and technological advances grow, engineered products will continue to become safer, so long as we

continue to defend the integrity and vetting of the professional engineer.

With that, as I step aside I welcome Tom Moody as the new President, and I’m confident he will do a great job. One of the most enjoyable parts of serving the board was getting to know engineers from around the state with the same interest in public service as me. The board is comprised of very capable engineers that I’m confident will continue the success of the MSE.

I would like to extend a big thank you to Connie Dempster. With everyone’s busy schedule, we would surely never get anything accomplished if it wasn’t for her organizational abilities and miles of patience.

As Dan Munson steps down from “Mathcounts”, I would like to thank him for the years of successful and tireless running and

organizing this annual event. I’m sure he has been doing this since before I was born (sorry Dan, I just had to get one last jab in). I would also like to thank Cory Hasiak for stepping up to take on Dan’s position!

Lastly, I’m excited to see the future of the MSE as a non-integrated affiliate of the NSPE. This not only allows us more freedom in Montana to select the direction of this society, it makes the MSE one of the most affordable societies you can join. And as a reminder at \$60 per year, you can actually save money if you attend the JEC by receiving \$100 discount on your registration.

Thank you and see you at the JEC!



Montana MathCounts—Results from National Competition

Cory Hasiak, PE and Dan Munson, PE, – MathCounts State Co-Coordinators

Our four top Montana MATHCOUNTS Mathletes competed in the National MATHCOUNTS Competition on May 11th in

Montana MATHCOUNTS Mathletes™ benefit from dedicated math coaches at each of the participating schools. These coaches receive additional tools from the MATHCOUNTS program. But, the

In addition to our sponsors, Montana MATHCOUNTS is blessed to have many dedicated volunteers! This includes our coordinators:

Cory Hasiak & Dan Munson – Billings Chapter and State Co-Coordinators

Aaron Jewett – North Central Chapter Coordinator

Mike Hunter – Eastern Montana Chapter Coordinator

Jason Williams – Kalispell Chapter Coordinator

Sean Everett – Western Montana Chapter Coordinator

Cammy Dooley – Bozeman Chapter Coordinator

Chelsea Loomis – Butte Chapter Coordinator

Each of these Coordinators depend on the volunteer efforts of many engineers and others that give time to help with competitions in many roles such as scorers, proctors, photographers, setup and much more. A special thank you needs to go out to Mike Keene who not only spear headed MSE's involvement in the MATHCOUNTS program as the original Billings and State Coordinator but remains one of our most devoted fundraisers.

Want to get involved? Visit with any of the Coordinators or contact the MSE Office: mse@assoc-mgt.com We would love to have your help!!



Orlando, Florida. They competed with 220 other top Mathletes across the nation. The experience they had left deep impressions as they witness the best problem solving middle school minds in the country. Montana placed 51st out of 56 teams. We were recognized for having a three time National Competition participant, Edward Guthrie from Bozeman, who earned a spot on our National Team as a 6th, 7th, and 8th grader. This has only happened one other time in Montana in the 35 years we have participated in the MATHCOUNTS program.

We truly appreciate all our individual and corporate sponsors, as well as our teams of volunteers who help us facilitate the MATHCOUNTS program every year. This year, we set a record of having 574 students from 67 schools across the state. With your support, we continue to make our MATHCOUNTS offering more impactful each year. If you

MATHCOUNTS program would not be possible without financial sponsors and volunteers at every level.

Ash Grove Cement Company
Bison Engineering
Blackfoot Communications
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Phillips 66 Billings Refinery
REC Advanced Silicon Materials
Robert Peccia & Associates
Sibanye Stillwater Mining Company
SK Geotechnical
Western Sugar Cooperative
Westmoreland Coal Company
Whitten & Borges, PC
Yellowstone Electric Company
Yellowstone Valley Electric CoOp

WE SALUTE YOU!

THANK YOU ALL!

MATHCOUNTS

A math enrichment initiative providing the structure and activities needed to encourage the formation of math clubs within schools.



Montana Legislative Wrap-Up

Darryl James, MSE Lobbyist

This session, the Montanan Infrastructure Coalition and its individual members actively engaged with legislators on about 25 key bills, and provided direct lobbying on 17 of those. The majority of the bills tracked by the Coalition focused on funding for critical infrastructure like roads, bridges, water and sewer projects, but also included funding for a wide array of state-owned vertical infrastructure.

Montanans have not seen a significant infrastructure package come out of Helena since before 2011. With Coalition support, this Legislature accomplished some major objectives with regard to infrastructure investment:

- With the passage of HB 553 and HB 652, the Legislature has changed the dialogue and broken the log jam on the use of bonding for state infrastructure investment.
- With the bonding bill and SB 338, the Legislature has finally dealt with both Romney Hall and the Museum, so future bonding discussions will not be bogged down with those contentious projects.
- TSEP monies raked out during the Special Session have been restored, and a modest amount has been added for local infrastructure projects.
- While there were numerous discussions around property taxes, entitlement share and the budget for the Office of Public Defender, local government infrastructure funding remains largely in tact.

The Legislature committed to a detailed examination of the state's

overall tax structure, and we've been offered an official seat at the table during the interim.

Not at all surprisingly, four separate approaches to a local option tax and one attempt to amend out the arbitrary inflationary cap on property taxes were swiftly killed in committee. In spite of informed, bi-partisan support as well as the support of the trade unions, legislation to provide an innovative project delivery tool involving private financing for public infrastructure continued to face opposition from organized labor. AIA also expressed concerns about the traditional "public-private partnership" tool, and the Coalition worked to develop something more suitable to Montana. Unfortunately, the measure still failed to gain traction and we continue to be left with too little funding and too few tools to address the mounting deficit in vertical infrastructure demands.

In sum, the Coalition should consider the 2019 legislative session a success in that the dialogue around infrastructure investment continues to turn in our favor due to the narrative we've established and the commitment of our membership to stay engaged in the conversation during the session and beyond.

Whether MSE is involved in legislative debate about industry-specific issues, or community development issues, or infrastructure investment concepts, you – as an industry professional – have a significant role to play.

Even during the interim, remember that your Executive Director and government relations team are here to support you and your interests in any way we can, so

please don't hesitate to reach out with questions, concerns or ideas as we already set out sights on the 2021 legislative session. We're pleased to be part of your team and look forward to working with you on your most important policy issues.

Run-up to 2020 Elections

Like it or not, the 2020 election cycle is already in full swing.

Current Attorney General, Tim Fox, is the front-runner in the race for Governor but is likely to face a primary challenge from current U.S. Representative, Greg Gianforte. Few Democrat names have been thrown into the ring to date.

If Congressman Gianforte enters the Governor's race, current State Auditor, Matt Rosendale, is likely to run for Montana's sole Congressional seat and likely face former state legislator Kathleen Williams in the general election. Both candidates have strong legislative records and good state-wide name recognition. Rosendale easily won his current position and Williams nearly upset Gianforte in his previous bid for Congress. This will be an interesting race to watch and should involve serious policy debate.

Jon Bennion, who spent several years as the government affairs director for the Montana Chamber of Commerce and the last eight years as a deputy to Attorney General Tim Fox, has filed to fill his outgoing boss' post. Bennion is likely to face a primary challenge from former state legislator, Austin Knudsen, from Culbertson. Again, this primary race should include an interesting ideological debate even before meeting probable Democrat challenger, Kim Dudik

in the general election. Dudik is a long-time, well-respected state legislator who has consistently weighed in on legal and criminal justice issues in the legislature.

Other statewide offices and legislative seats will also be hotly contested in 2020, but those races are still barely shaping up.

Also grabbing headlines is the Presidential candidacy of current Governor, Steve Bullock. As a young governor, Bullock's political career is likely far from over. Many have suggested that he challenge Gianforte, or even current U.S. Senator, Steve Daines for a seat in our Congressional Delegation. Instead, Bullock has thrown his hat into a very crowded field of Democrat candidates for President. Having recently failed to meet the fundraising and polling threshold to take the stage in televised national debates, Bullock faces a significant challenge in gaining early traction in this crowded race. Still, he's increasing national name recognition that could benefit him in future races or consideration for Democrat cabinet positions. It may be several months before we hear substantive policy discussions amongst these candidates, but we'll keep you posted on anything of critical interest to the industry. We also encourage you to reach out individually and ask questions of these candidates to understand where our elected leaders stand on the issues most important to us as business professionals.

No. 1234

STATE OF MONTANA

MSE GOLD MEDAL AWARD Recipient at Montana Tech

Sandra Anderson, PE & Past President and Brian Sullivan, PE

The winner of the Montana Tech Gold Medal Award is Levin Mullaney.

Levin maintained a 4.0 GPA in Electrical Engineering. He knew when he was in 7th grade that he wanted to be an Engineer. His resume is full of leadership and writings that he completed. He led a Rocket club as a freshman and was able to grow the club with upperclassmen. He led

fundraising efforts and competitions for the club. This led to numerous volunteer efforts.

He interned with NASA and has received an opportunity to advance his schooling at the University of Alabama – Huntsville as he continues to prepare to work for NASA. He was selected to apply to two distinguished scholarships (Rhodes and Barry M Goldwater Memorial).

Levin impressed us with his knowledge and drive

to advance. He is the type that will continue to work and develop engineering solutions even if he was not getting paid.



Brian Sullivan, Levin Mullaney, and Don Blacketter

Gold Medal Award Selection Process Used by Sandra and Brian

Sandra Anderson and Brian Sullivan have been involved in the Gold Medal Award selection process for many years. This is their process:

- Introductions and an explanation of MSE and the Gold Medal Award.
- Describe the plaques hanging in the Student Union Building that date back to the early 1900's with winner's names.
- Congratulate each of the students just for being nominated.
- Allow the student to introduce themselves and tell their story

List of Possible Questions:

- Why did they choose engineering?
- Why the specific

discipline. The Gold Medal Award covers any of the engineering programs offered at Tech.

- Why did they choose Montana Tech
- What was favorite subject / professor

Other Criteria Considered:

- Leadership qualities
- Volunteering
- Leading student groups (ASME, SPE, etc.)
- We have had students get involved with Engineers Without Borders. They fundraise, design, order parts, travel and manage construction activities. All while maintaining high GPA's.
- Numerous clubs are represented by these

students. Many are in a leadership role.

- Sports if applicable will show leadership, teamwork and the ability to manage time and maintain GPA. Sports did not apply this year.

- Review scholarships and awards

Consider Future Plans

- Discuss plans to continue education to Masters and/or PhD aspirations
- Discuss future professional career plans. The students we interview normally have multiple offers.
- Discuss jobs held and internships while attending school
- Discuss plans for pursuing a Professional

Engineering license. MSE supports and encourages licensing.

Then if there are other topics that the student brings up just listen. Items like parenting, military commitments, family commitments, etc. those things that pull on a few students and how they are able to work through and maintain their position at school

Much of the discussion falls on the student. The students interviewed are typically leaders and able to lead the conversation. A lot of the judgement of the student on their ability to have an intelligent conversation. The meeting is open forum and the students often ask questions as well.

MSE GOLD MEDAL AWARD Recipient at MSU—College of Engineering

*Cammy Dooley, PE,
Immediate Past President*

Each year for nearly 100 years, MSE has worked with the Montana State University (MSU) Norm Asbjornson College of Engineering to provide the Gold Medal Award to an outstanding graduating engineering senior. Each spring the College of Engineering requests that departments submit one nomination from each engineering discipline. A college selection committee, comprised of faculty, staff, and students, reviews all of the nominations submitted and selects three finalists. Members of the Montana Society of Engineers then interview the finalists to select the winner.

The criteria used to select outstanding seniors are:

- Distinguished academic record,
- Involvement in extracurricular activities,
- Leadership in extracurricular activities,
- Commitment to the practical use of the sciences in the execution of engineering work,

- Promise of service to their profession with integrity, devotion to high standards, and a sense of obligation to humanity.

This April 12th, Cammy Dooley and Mindy Espinosa had the privilege of interviewing three outstanding candidates: **Andrew Johnson** (Civil Engineering), **Kelsey Thomas** (Chemical Engineering), and **Jaclyn Wing** (Mechanical Engineering). As in each of previous annual interviews, interviewers were again humbled by the intelligence, dedication, and optimism of these graduating engineers. There was no doubt they will each impact the world for the better.

It was agreed that **Jaclyn Wing** most exemplified the selection criteria. All candidates excelled scholastically. Jaclyn stood out in her commitment to public involvement with her participation in the Society of Women Engineers (SWE), Future Leaders Team (FLT), College of Engineering Ambassadors, MSU Women in Engineering

Advisory Board Member, Alpha Omicron Pi (AOP) (chapter Treasurer and Vice President), and Engineers Without Borders. While maintaining a 3.89 GPA in engineering, she made time to engage with prospective students and their families, she has met with Alumni, been a leader within her classes and AOP. She is also perusing a minor in Mechatronics, which is fueling her desire to understand and apply engineered solutions to problems. Jaclyn now looks forward to a career in Mechanical Engineering.

MSE can remain confident that Jaclyn, Andrew and Kelsey, as well as all other MSU engineering graduates, will have great achievements and make all of us proud in the years and decades to come.

Jaclyn’s award was announced by Dean Brett Gunnink at the College of Engineering Recognition Ceremony on May 3.

Congratulations Jaclyn!



GOLD MEDAL

The Gold Medal Award was developed by and awarded by the Montana Society of Engineers to the outstanding graduating engineering student at Montana State University and Montana Tech for nearly 100 year.



<http://www.mtengineers.org/>

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Dan Munson, MathCount Coordinator

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Crystal Kuntz, JEC Committee Chair

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Dan McCauley, MT PE HOF Chair

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Articles for 3rd Quarter 2019 newsletter
are due on September 10, 2019 to the MSE



More About MSE

Montana Society of Engineers' mission is to protect and promote professional engineers. One of the ways that MSE promotes engineering is by recognizing those that have the greatest impacted on the profession. Former MSE President Doug Brekke dreamed and envisioned a "PE Hall of Fame". Doug's enthusiasm and hard work made this a reality by securing wall space for plaques recognizing those nominated at the MSU – School of Engineering.

Inductees to date:

2002
John H. Morrison, PE, LS
Ben F Hurlbut, PE

2003
W. Paul Schmechel, PE
Leland J Walker, PE
2004
Harold S. "Sonny" Hanson, PE

2005
Robert L Sanks, PhD, PE

2006
Eldon R. Dodge, PhD, PE
Joseph A Maierle, PE, LS

2007
Fred F Videon, PhD, PE

2008
Daniel T. Berube, PE

2009
Willis J. Wetstein, PE

2010
Wilbur J. Bennington, PE

2011
Ralph L. "Roy" Prussing, PE

2012
Alex G. Drapes, PE

2013
Theodore T. "Ted" Williams, PE

2014
Lewis M Chittim, PE, LS

2015
Frank E. Perusich, PE

2016
Lloyd Berg, PhD, PE

2017
Daniel M McCauley, PE

2018
Theodore "Ted" Lang, PhD, PE

With the passing of Doug Brekke in 2017, Dan McCauley volunteered to Chair the PE HOF Committee and has taken the process to a new level with on-line nomination process and refining of the selection process. The 2019 inductee(s) will be announced next month and be honored at the Engineers Honor Awards Banquet Wednesday – November 6th during the 2019 Joint Engineers Conference.

