



# MONTANA TECH WEEKLY UPDATE

**October 7, 2024**

## **IN THIS EDITION**

Volunteers Needed for  
Ripple's Watershed  
Science Program

Public Lecture Series

SBIR Lunch & Learn:  
Funding Your Innovation

Campus Store  
Halloween Contest

Automatic Door Lock  
Exceptions

Goldwater Scholarship  
Talent Search

FIRST Tech Challenge  
Robotics Qualifier

Adopt a Garden

Montana Tech Login  
Changes

Course Evaluation  
Changes

Changing Your  
Password

## **UPCOMING CAMPUS EVENTS**

**10/8:** Pilates w/Katie Hailer (12-1 pm, HPER 140)

**10/9:** Wellness Wednesday w/Cheyenne Crooker (2-3,  
email [ccrooker1@mtech.edu](mailto:ccrooker1@mtech.edu) for information)

**10/10:** Weights w/Blaine Berrington (12-1, HPER 140)

**10/11-13:** [Family Weekend](#)

**10/15:** Pilates w/Katie Hailer (12-1 pm, HPER 140)

**10/16:** Wellness Wednesday w/ Cheyenne Crooker (2-3,  
email [ccrooker1@mtech.edu](mailto:ccrooker1@mtech.edu) for information)

**10/17:** Weights w/ Blaine Berrington (12-1 pm, HPER  
140)

**10/19:**  
Football vs Simpson (1:00 pm, Bob Green Field)  
Volleyball vs Carroll (6:00 pm, HPER)

**10/22:**  
Pilates w/Katie Hailer (12-1 pm, HPER 140)  
Advancing Tech Forum (3:00 pm, Copper Lounge)

**10/23:** Wellness Wednesday w/Cheyenne Crooker (2-3  
pm, email [ccrooker1@mtech.edu](mailto:ccrooker1@mtech.edu) for information)

**10/24:** Weights w/Blaine Berrington (12-1 pm, HPER  
140)

**10/26:**  
Football vs Rocky (1:00 pm, Bob Green Field)  
Volleyball vs University of Providence (6:00 pm, HPER)

**10/29:**

Wellness Fair (11:00 am-2:00 pm, SUB)  
Pilates w/Katie Hailer (12-1 pm, HPER 140)

**10/30:**

Wellness Wednesday w/Cheyenne Crooker (2-3,  
email [ccrooker1@mtech.edu](mailto:ccrooker1@mtech.edu) for information)  
Volleyball vs Carroll College (7:00 pm, HPER)

**10/31:**

Weights w/ Blaine Berrington (12-1 pm, HPER 140)  
Campus Store Halloween Contest (10:00 am - 3:00 pm)



## VOLUNTEERS NEEDED FOR RIPPLE'S WATERSHED SCIENCE PROGRAM

The field season is in full swing, and if you are passionate about sharing science and the story of our watershed with East Middle School student by running a macroinvertebrate sampling, a water quality testing, or riparian assessment station, please consider volunteering for **October 8, October 11, October 22**, and/or **October 24**. Field trips times are from 8:00 am to 12:00 pm. Do you need to be an expert? Absolutely, Not. The most important thing a volunteer can have is enthusiasm. The Ripple Staff will train you at a station to ensure you are prepared to help lead students. If you have a particular station you are interested in, let us. Please sign up through our website, [cfwep.org/volunteer](http://cfwep.org/volunteer) or contact Tammy Gordon at [tgordon@mtech.edu](mailto:tgordon@mtech.edu) or 406.496.4136.

## PUBLIC LECTURE SERIES

The next public lecture will be Circular Pathways for Critical Materials through Advanced Industrial Processes presented by Dr.-Ing Nikolaus Borowski, Global Head of Sales Non Ferrous Metals & Alloys, SMS Group GmbH on **Tuesday, October 22** at 4:00 pm in the University Relations Center Poore Room *or join via Microsoft Teams—Meeting ID: 262 481 304 14 ; Passcode: 3tYNxs.*

Achieving a sustainable, carbon-neutral metals industry is imperative, and the circular economy (CE) plays a central role in this transformation. The SMS group is at the forefront of driving this shift, utilizing a comprehensive range of technologies to reshape metal-making processes worldwide. This presentation explores how the CE model—aimed at avoiding waste and promoting the

continuous re-use of resources—can minimize resource consumption, energy use, and carbon emissions, thereby enabling a sustainable future.

Given the increasing global demand for metals, especially non-ferrous ones used in daily electronic devices, innovative recycling solutions are essential. Current trends project that resource extraction will reach 180 billion tons per annum by 2050, necessitating that over 30% of these come from secondary sources. This presentation will illustrate SMS group's advanced recycling technologies, such as WEEE recycling plants and the BlueMetals technology, which are designed to maximize metal recovery while maintaining economic feasibility.

Digitalization is identified as a key enabler in optimizing resource efficiency and driving the decarbonization of metal production processes. The presentation will discuss the integration of digital twins and other digital solutions that facilitate detailed data analysis and process optimization, ultimately contributing to reduced carbon footprints.

Although achieving a fully carbon-neutral metals production is challenging due to thermodynamic and social factors, SMS group has identified five main decarbonization measures: digitalization, energy optimization, alternative fuels, electrification, and carbon capture. These strategies, along with SMS group's comprehensive recycling solutions for various metal-bearing materials, underscore the company's commitment to an environmentally responsible metals industry.

The presentation will assert the need for interconnected solutions that combine process expertise, plant design, and automation systems to meet the demands of a circular economy, thereby fostering a socially compatible and environmentally sound metal production industry.

Nikolaus has extensive experience in the metallurgical industry, specializing in non-ferrous metals. Currently, he serves as the General Manager for the Non-Ferrous Metals and Alloys department at SMS group GmbH, overseeing projects aimed at delivering innovative solutions for the industry. In his previous roles as a Project Manager, he led several innovative industrial projects optimizing and developing the metal and e-waste recycling processes. He holds a Ph.D. from the Institute of Process Metallurgy and Metal Recycling (IME) at RWTH Aachen University, where he managed innovative projects contributing to advancements in the field of e-waste, metal and lithium-ion battery recycling. With a strong commitment to sustainability and decarbonization, Nikolaus is dedicated to shaping the future of the non-ferrous metals industry.

## **SBIR LUNCH & LEARN: FUNDING YOUR INNOVATION**

The Montana Innovation Partnership (MTIP) works with entrepreneurial

researchers and small businesses across Montana competing for over \$4 billion in non-dilutive federal funding grants and contracts awarded annually through America's Seed Fund - the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) program.

Join us in the Copper Lounge on **October 30** from 12:00 pm to 1:30 pm for this free Lunch & Learn to learn more about SBIR/STTR, how the program works, technologies that you use every day that were developed using this type of funding, Montana success stories, and free resources available to Montana tech-entrepreneurs and startups to help navigate the competitive application process.

**Agenda:**

Grab lunch at the dining hall on us as we kick off with an interactive discussion about SBIR program basics

Who and what is right for this type of funding

Best practices to get started like understanding the potential market, building a strong team, and which agencies to consider

Resources available to early-stage founders and investigators to help them prepare competitive proposals

Q&A with the MTIP Program Director

**Who should attend:**

University researchers interested in partnering with SBIR/STTR applicants

- Anyone planning to prepare an SBIR/STTR proposal
- Inventors and Innovators considering pathways to commercialize their technology
- Anyone interested in learning more about the SBIR/STTR programs
- Service providers or business partners supporting SBIR/STTR applicants

Register [here](#).

**CAMPUS STORE HALLOWEEN CONTEST**

The Campus Store is having a Halloween Contest on **October 31** from 10:00 am to 3:00 pm. Prizes will be awarded.

## **AUTOMATIC DOOR LOCK EXCEPTIONS**

Do you have an event or a class coming up, and will need the automatic doors to your building unlocked outside of their regularly scheduled times? Do you need your building to lock down earlier than usual for a week? The DiggerCard Center is here to help! Simply email [mhaldane@mtech.edu](mailto:mhaldane@mtech.edu) with all the pertinent details, and Mike can make the necessary adjustments for you! Questions? Concerns? Email Mike Haldane in the DiggerCard Center and he will happily assist you!

## **GOLDWATER SCHOLARSHIP TALENT SEARCH**

Please share the below with any student you think would be interested.

### **Are you a:**

Sophomore or Junior (graduating in December 2025 or after)?  
Math, Science or Engineering Major  
With an Outstanding GPA (>3.8)  
Who intends to pursue Graduate Studies and a career in research?

### **Would you like to be:**

Montana Tech's 2025 Goldwater Nominee  
With the chance to win \$7,500 in scholarship funding  
Lifelong recognition for being among the nation's best?

Email Dr. Marisa Pedulla at [mpedulla@mtech.edu](mailto:mpedulla@mtech.edu) today to set up an appointment.

## **FIRST TECH CHALLENGE ROBOTICS QUALIFIER**

On **November 22nd and 23rd**, Montana Tech will be hosting the FIRST Tech Challenge Robotics Qualifier. The event needs volunteers to help judge, set up, take down, referee, queue etc. To volunteer click [here](#).

## **ADOPT A GARDEN**

We are looking for garden lovers that would like to take a break and get outside occasionally to maintain one of the garden areas on campus. It would entail weeding, deadheading, possibly planting, and basic upkeep of the flowers, bushes, etc. We also have flower pots that could be adopted, this would entail working with the grounds crew to choose plants and to plant the pots each spring. If you are interested in adopting one of the garden areas on campus, please contact Stephanie Cook at: [scook@mtech.edu](mailto:scook@mtech.edu). Thank you!

## **MONTANA TECH LOGIN CHANGES**

In order to bring multi-factor authentication to all users in the most cost effective

manner, Montana Tech will be transitioning from Shibboleth/DUO to Microsoft Authentication/MFA.

Both systems use the same backend so your password will carry with you throughout the process. This project is being done in phases, with this being the 'TRANSITIONAL' phase.

Once this phase is complete, we will provide further information on what to expect and when. See what you can expect the login screen to look like during the transition and learn more about this project at [Article - Authentication-Transition P... \(teamdynamix.com\)](#).

If you have questions after reviewing the article? please email IT Helpdesk at [ithelpdesk@mtech.edu](mailto:ithelpdesk@mtech.edu), or phone at 406-496-4244.

### **COURSE EVALUATION CHANGES**

The Online Course Evaluation method is now the default method for conducting course evaluations.

Previously if you wanted to have your course evaluation conducted via paper, you did not need to perform any action as that was the default. **This year the process has changed.**

Instead of opting in for the online course evaluation, you will need to opt out if you prefer to have your course evaluation conducted via the paper method. Directions are listed below.

If you prefer the online method no action is necessary.

If you want to conduct your evaluation via paper, you will need to navigate to <https://webapps.mtech.edu/surveys> and delete your course from the list.

If you need further assistance, please contact our IT Helpdesk at 496-4244.

### **CHANGING YOUR PASSWORD**

With the Holiday season fast approaching, Information Technology would like to remind you to reset your password before the break. Passwords expire yearly, so if you do not reset your password prior to the break, you may return to an expired password.

For directions on how to reset your password, navigate to [kb.mtech.edu](http://kb.mtech.edu) and search for 'password reset'. If you need further assistance, please contact our IT Helpdesk at 496-4244.

