

CAMPUS REPORT

DATE: February 14, 2018
TO: Board of Regents
FROM: Donald M. Blacketter, Chancellor, Montana Tech
RE: Campus Report for the March 8, 2018 Board of Regents Meeting

STUDENT ACHIEVEMENT

- Rick LaDouceur, a MatSci PhD Student, will present a paper at the SME Annual Meeting covering the fundamentals of flotation modeling. His co-authors are Peter Amelunxen of AMINPRO and Dr. Courtney Young, Rick's advisor. The paper follows up on their publication at the Flotation Conference in Capetown, S. Africa.
- John Hansen-Carlson, a Senior in Metallurgical and Materials Engineering, will receive a scholarship from the Mineral & Metallurgical Processing Division (MPD) at the SME Annual Meeting, February 25-28, 2018. He is advised by Dr. Courtney Young.
- John Hansen-Carlson will also present during the MPD Poster Session at the SME Annual Meeting. His undergraduate research on coal processing with crossflow separator was advised by Dr. Avimanyu Das.
- Aleesha Aasved, a Senior in Metallurgical and Materials Engineering, will also present during the MPD Poster Session at the SME Annual Meeting based on her undergraduate research with pressurized flotation. Her undergraduate research was advised by Rick LaDouceur and Dr. Courtney Young.
- Marc "Freddy" Sime and Stephanie Trant, both MS Students in Metallurgical and Mineral Processing Engineering, will also present during the MPD Poster Session at the SME Annual Meeting based on their work to understand the fundamentals of collector adsorption on rare earth minerals. They are also advised by Dr. Young.

FACULTY EFFORTS

- Dr. Amy Kuenzi, Professor of the Biological Science was a co-author on a recent publication entitled "Interspecific comparison of hantavirus prevalence in Peromyscus from fragmented agro-ecosystem in Indiana" published in the January 2018 issue of the Journal of Wildlife Diseases.
- Matt Egloff attended the NCEES Fundamentals of Engineering (FE) Other Disciplines (OD) group meeting in Clemson, SC, Jan 11-14 to develop and review questions for that exam. He subsequently attended the FE PAKS meeting at the same location Jan 31-Feb 3 to develop the survey for the exam.
- Electrical Engineering faculty Dan Trudnowski, Matt Donnelly, and Josh Wold were awarded a 2017 R&D 100 Award which annually recognizes the top 100 innovations within the world. The innovation titled "Control System for Active Damping of Inter-area Oscillations" resulted from a multi-year research grant in partnership with Sandia National Laboratory.
- Matt Egloff performed an armorer's inspection and other maintenance on the ten M1 Garand rifles used for military funerals and other ceremonies for the Butte/Silverbow United Veteran's Council (UVC). A video was recorded on how to disassemble, inspect, clean, lubricate, and re-assemble the rifles for use by his fellow Veterans.

- Larry N. Smith, Associate Professor of Geological Engineering, gave an invited talk: *Chronology of Montana's glacial Lake Missoula: Current status*, Geological Society of America Annual Meeting, Seattle, WA October 22, 2017. He also was interviewed for and appeared in a NOVA Documentary, *Killer Floods*, which aired nationally on November 8, 2017.
- Dr. Brahmananda Pramanik, Assistant Professor of the Mechanical Engineering was a primary-author in an oral presentation (High-strain rate tensile and compressive characterization of graphite platelet reinforced vinyl ester nanocomposites), delivered at the 7th International Conference on Theoretical, Applied, Computational and Experimental Mechanics at Department of Aerospace Engineering, Indian Institute of Technology Kharagpur, India. (Authors: B. Pramanik, P. R. Mantena, A. M. Rajendran).
- Dr. Waleed Al-Rawashdeh, Associate Professor of Mathematics, is the author of the peer-reviewed paper: "Composition Operators between Weighted Bergman and S^p Spaces", *New Zealand Journal of Mathematics*, Volume 47 (2017).
- Dr. Brahmananda Pramanik, Assistant Professor of the Mechanical Engineering authored a book-chapter (Dynamic Characterization of Energetic Materials) in the Book (Energetic Materials: Advanced Processing Technologies for Next-Generation Materials) edited by Mezger, M. J., Tindle, K. J., et al. published by CRC Press, Taylor & Francis Group, (ISBN 9781138032507).
- Dr. Courtney Young is finalizing the Mineral Processing and Extractive Metallurgy Handbook with co-editors Rob Dunne and Komar Kawatra. Based on the advice of reviewers of their papers, Dr. Young invited Rick LaDouceur and Peter Amelunxen to write the Chapter on Flotation Modeling. As editor, Dr. Young will not be a co-author.
- Under the mentorship of Assistant Professor Dr. Robert Pal, Biological Science an international PhD candidate Rita Filep in Hungary (University of Pecs) defended her dissertation with a Summa Cum Laude result. The title of her dissertation is: Biogeographic perspectives of Jerusalem artichoke (*Helianthus tuberosus* L. s. l.) invasion
- The following publication includes a reflective essay and teaching materials by Dr. Glen Southergill - J. Turner, K. McDonald, M. Sheble, PJ Shea, V. Johnson, *The Adventures of Frank Little*, and *The Journal of Undergraduate Multimedia Projects*.
- Dr. Glen Southergill has been accepted for presentation to the 18th Biennial Conference of the Rhetoric Society of America in Minneapolis, MN from May 31 – June 3, 2018. His presentation will be on Dr. Southergill's conference paper, *Coding Environmental Dramatism, or Hiking the Trail Anew*.
- Dr. Glen Southergill to publish, *To Avatar: Electracy and Management of/by Circulation* in the next issue of *Textshop Experiments*.

MONTANA BUREAU OF MINES AND GEOLOGY ACTIVITY

- MBMG Director and State Geologist, Dr. John Metesh, presented **Groundwater Wells and the Difference Between Confined and Dispersed Aquifers** at the Water Policy Interim Committee Meeting in Helena, Montana on January 9, 2018.
- MBMG Ground Water Assessment Program Manager, John LaFave, presented **Montana's Experience with the National Groundwater Monitoring Network** to the Federal Advisory Committee on Water Information (ACWI) on January 17, 2018.
- MBMG Data Systems Manager II, Luke Buckley, presented **Information Design Concerns for the Internet Backbone** for a Web Design class at Montana Tech in Butte, Montana on January 17, 2018.
- MBMG Hydrogeologist, Alan English, presented **Science of Earthquakes** at the Science Technology Engineering Arts and Math (STEAM) Night at Hawthorne Elementary School in Butte, Montana on January 18, 2018.

- MBMG Hydrogeologist, Jeremy Crowley, conducted a live interview **Montana Tech Professor Seeks Land for Drone Training** with NBC Montana News at Montana Tech in Butte, Montana on January 22, 2018.
- MBMG Director of Earthquake Studies, Michael Stickney, conducted a phone interview **Series of Small Earthquakes in Flathead not Unusual** with the Missoulian Newspaper at Montana Tech in Butte, Montana on January 23, 2018.
- MBMG Director of Earthquake Studies, Michael Stickney, conducted a live interview **Butte Seismic Network Records Alaska Earthquake** with NBC Montana News at Montana Tech in Butte, Montana on January 23, 2018.
- MBMG Director of Earthquake Studies, Michael Stickney, conducted a phone interview **Small Earthquakes hit northwest Montana** with NBC Montana News at Montana Tech in Butte, Montana on January 24, 2018.
- MBMG Geologist, Dr. Colleen Elliott, presented **The Great Falls Tectonic Zone** at the MBMG Brown Bag Seminar in Butte, Montana on January 30, 2018.
- MBMG Hydrogeologist, Todd Myse, presented **SWAMP Database** at the Flathead River Commission Stream Gaging in the Flathead Basin Workshop in Kalispell, Montana on January 31, 2018.
- MBMG Ground Water Assessment Program Manager, John LaFave, participated in the National Groundwater Monitoring Network Program Board meeting in Austin, Texas on January 29 – February 1, 2018.
- MBMG Research Specialist, Mike Richter, presented **Groundwater Supply and Availability** at the Big Sky Sustainable Water Solutions Forum, in Big Sky, Montana on January 31, 2018.
- MBMG Hydrogeologist, Andrew Bobst, presented **An Overview of the Upper Jefferson Groundwater Investigation** at the Jefferson River Drought Committee meeting in Whitehall, Montana on February 1, 2018.
- MBMG Hydrogeologist, Kirk Waren, participated in the Montana Board of Water Well Contractors (BWWC) meeting in Helena, Montana on February 2, 2018.
- MBMG Hydrogeologist, Jeremy Crowley, attended the International Lidar Mapping Conference in Denver, Colorado on February 3 - 10, 2018.
- MBMG Data Systems Manager II, Luke Buckley, presented the **Luncheon Learning Series: Campus Wellness Incentives, Activities and You** at Montana Tech in Butte, Montana on February 7, 2018.
- MBMG Geologist, Dr. Colleen Elliott, presented **Tripping on the Geology Underfoot** at the Montana Tech Public Lecture Series in Butte, Montana on February 8, 2018.

- The Montana Bureau of Mines and Geology released MISC 62: 2018 Calendar: Glacier Lake Missoula and the Ice Age Floods by Montana Bureau of Mines and Geology.