

CAMPUS REPORT

DATE: December 19, 2018
TO: Board of Regents
FROM: Donald M. Blacketter, Chancellor, Montana Tech
RE: Campus Report for the January, 2019 Board of Regents Meeting

STUDENT ACHIEVEMENT

- Marc “Freddy” Sime, MatSci PhD Student had a paper from a portion of his MS thesis accepted for publication in Journal of Dispersion Science and Technology. The paper is entitled “Studies on the Nature of Salicyl Hydroxamate Adsorption at the Surface of Neodymium Oxide.” And was co-authored by his MS advisor, Dr. Courtney Young, as well as Dr. Avimanyu Das, both of Metallurgical & Materials Engineering.

FACULTY EFFORTS

- Dr. Courtney Young (Professor and Dept. Head) and Dr. Avimanyu Das (Associate Professor) of Metallurgical & Materials Engineering had a paper accepted for publication. Their paper is entitled “Studies on the Nature of Salicyl Hydroxamate Adsorption at the Surface of Neodymium Oxide” and was co-authored by MS students Marc Sime (MS 2018) and 2017 visiting faculty Dr. Greg Hope, Chemistry, Griffith University, Brisbane, Australia.
- Dr. Robert Pal, Associate Professor, Biological Science delivered an oral presentation (Can activation of the seed bank lead to better restoration success in areas impacted from wind-borne contamination?), and was co-author in another talk (Robinson S. B., Colman B. P., Pal R. W.: The legacy of smelter aerosols on soil physicochemical and plant community characteristics in a degraded watershed) at the Joint Conference of the Society of Ecological Restoration in Spokane, October 15-18, 2018.
- Matt Egloff gave two presentations at the Montana Joint Engineers Conference in Helena, MT, held Nov 7-9, 2018. The topic of the first was condenser heat exchanger design. The second was a history of the Wright brothers and their sister Katherine, and the development of the first powered airplanes.
- Dr. Courtney Young, Professor and Dept Head of Metallurgical & Materials Engineering concluded a 5-year effort organizing and editing the SME Mineral Processing and Extractive Metallurgy Handbook with Dr. Komar Kawatra of Michigan Tech and Dr. Robert Dunne of U of Queensland, Australia. The two-volume set will find its way into classrooms and labs around the globe. It contains chapters co-authored by others in Metallurgical & Materials Engineering at Montana Tech: Dr. Avimanyu Das (Associate Professor), Dr. Rick LaDouceur (Post-Doctorate), Dr. Jerry Downey (Professor), Dr. Hsin-Hsui Huang (Professor Emeritus), Dr. Larry Twidwell

(Professor Emeritus), Ms. Jan Chorney (MatSci PhD Student), and Gary Wilson (Metallurgical & Mineral Processing Engineering MS Student).

- Dr. Robert Pal, Associate Professor, Biological Science participated the Montana University System's Montana Research Roadshow where he presented a talk entitled "Fix it or Face it! Ecological Restoration in Butte, America" in four different locations in Western Montana (Missoula, Polson, Kalispell, Libby). The talk was designed for the general public and was delivered in high schools, senior homes, and event centers.
- Matt Egloff participated in the Fundamentals of Engineering Professional Activities and Knowledge Study (FE PAKS) meeting Oct 16-18, 2018 in Clemson, SC. This study and its review help ensure that the licensing exams meet the needs of current professional practice according to NCEES.

CAMPUS HAPPENINGS

- Matt Egloff gave the keynote address at the Veterans day Ceremonies in Butte, MT on November 11, 2018. The topic was his grandmother's first fiancé, who was killed 25 days before the armistice in the final battles of the First World War. https://mtstandard.com/news/local/butte-veterans-day-service-honors-both-veterans-and-their-families/article_aa080844-3f65-5854-ab55-071d2c8a4883.html

MONTANA BUREAU OF MINES AND GEOLOGY ACTIVITY

- MBMG Hydrogeologist K. Waren presented a Brown Bag Seminar – A Comparison of Steady-State, Monthly, and Daily Stress Period Groundwater Models for the Big Sky Alluvial Aquifer, Butte, Montana, October 30
- MBMG Geologist Dr. C. Elliott participated as a Station Leader for CFWEP Field Trip for East Middle School 7th Graders, Butte, Montana, October 26
- MBMG Geologist C. McDonald presented **Clark Canyon Landslide near Dillon, Montana** Geological Engineering Class, Butte, Montana, November 1
- MBMG Director Dr. J. Metesh attended the National Water Quality Monitoring Council Meeting, Boise, Idaho, November 5-8
- MBMG Geologist Dick Berg presented posters on **Magmatic Fragmentation of Sapphire Xenocrysts in a Basaltic Trachyandesite Sill Near Helena, Montana** and **Unravelling the Geological Mysteries of Montana's Sapphire Deposits**, 2018 GSA Annual Meeting, Indianapolis, Indiana, Nov. 5, v. 50, no. 6.

- MBMG Research Division Chief Dr. M. Gotkowitz presented **Aquifer characterization for Avoiding Radium-enriched Groundwater**, 2018 GSA Annual Meeting, Indianapolis, Indiana, v. 50, no. 6.
- MBMG Hydrogeologist D. Blythe presented at the Science Olympiad Water Quality, at Chief Joseph Middle School, Bozeman, Montana, November 7 and 13
- MBMG Research Division Chief Dr. M. Gotkowitz attended The National Academies of Sciences Committee on USGS Laboratories, Menlo Park, California, November 8-9, 2018.
- MBMG Director of Earthquake Studies M. Stickney was interviewed for: Alaska Earthquake Similar to Past Quakes in Montana: NBC Montana, by Jayda McClendon; 79 Earthquakes have been recorded in Manhattan Montana since October 2; Newstalkgvo.com, by Nick Chrestenson, November 7, 2018; and Alaska earthquake recorded on Butte seismograph: KXLF News Channel, by John Emeigh
- MBMG Hydrogeologist J. Crowley hosted Quantum Spatial for a seminar on LIDAR mapping in Montana, Butte, Montana, November 13
- MBMG staff-member J. Johnson presented a Brown Bag Seminar, **Matlab and the Geology Toolbox**, Butte, Montana, November 13
- MBMG Director Dr. J. Metesh attended the Western State Seismic Policy Meeting, Sacramento, California, November, 15-16, 2018.
- MBMG Hydrogeologists K. Waren and J. Rose presented **Big Sky Groundwater Hydrogeologic Investigation and Groundwater Models for the Meadow Village Alluvial Aquifer** at the Gallatin Local Water Quality District Board Meeting, Bozeman, Montana, Nov. 1, and the Big Sky County Water & Sewer District Board Meeting, Big Sky, Montana, Nov. 20
- MBMG Director of Earthquake Studies M. Stickney, with co-authors N. McMahon, W. Yeck, R. Aster, H. Martens, and H. Benz, published **Spatiotemporal Analysis of the Foreshock–Mainshock–Aftershock Sequence of the 6 July 2017 Mw 5.8 Lincoln, Montana, Earthquake**: Seismological Research Letters, doi: <https://doi.org/10.1785/0220180180>
- MBMG Scientist Dr. K. Scarberry presented Mesozoic - Cenozoic Igneous Geology and Related Mineral Deposits in the Butte North 30' X 60' Quadrangle, Southwestern Montana, at the Colorado School of Mines Geology and Geological Engineering, Van Tuyl Lecture, Golden, Colorado, December 6
- MBMG Ground Water Assessment Program Manager J. LaFave attended the National Ground Water Association Ground Water Summit and NGWMN Board Meeting, Las Vegas, Nevada, December 3-6
- MBMG Ground Water Assessment Program Manager J. LaFave presented Montana's Ground Water Assessment Program to the NW Montana Sanitarians' Association Meeting, December 8