# Faculty Senate Minutes 01/15/2021

# Virtual Meeting via Zoom

**Zoom:** Charie Faught (Chair), Peter Lucon (Vice-Chair), John Ray, Atish Mitra (Secretary), Miriam Young, Linda Granger, Tamara Harp, Tony Patrick, Bret Robertson, Katherine Zodrow, Chris Gammon, Courtney Young, Sue Schrader, Dan Autenrieth, Ron White, Ulana Holtz, Nathan Huft, Jack Skinner, Chris Danielson

#### Quorum@ 1:30pm

I. Welcome and Minutes (https://www.mtech.edu/facultystaff/facultysenate/minutes/index.html)

Approvals for November 11, 2020 Meeting Minutes

Motion to approve and seconded. Motion **PASSED**.

**Action Items** 

- II. CRC Items
  - a. None at this time
- III. Conflict of Interest Process Change (see attached form)

It has been proposed to change the "conflict of interest" reporting process. In the new process, the faculty will fill out the form and submit it directly to the VC of Research (instead of thorough Dept Head/Dean/Director).

Discussion by senators and faculty members: It was suggested that the forms should go through the direct supervisor – as it does at present. There were concerns about why disclosures are needed for activities of family members not connected to Montana Tech.

Chair: will get back with clarifications.

IV. Bruce Madigan Emeritus (see attached information)

Nathan Huft introduced the proposal.

Motion, and seconded. Motion PASSED.

**Informational Items** 

V. Recommendation to change language in the Faculty Staff Handbook

Chair: spoke about this earlier in senate + full faculty meet. The recommendation has been approved. FS handbook not changed yet, will check when it will be done.

VI. Strengths Training

Chair reported: will send announcement about changed date to Feb 19 (was Jan 29)

VII. Faculty Development

Chair: will send out a mail, senators are requested to share its contents with departmental colleagues.

#### VIII. Montana Legislature - guns on campus

Chair: Discussed house bill 102 – allows fire arms on campus (right now, Montana Tech policy is no firearms on campus). The bill has passed the house, expected to go to senate judiciary committee next week.

Chair: propose to write a letter to go to OCHE to support Montana Tech's existing policy.

Discussion by senators: in general, senators expressed concern about this bill and (if passed) its effect on the safety on students and employees of Montana Tech. At present there is lot of mental health issues on campus, and unrestricted presence of guns will create more risks. There seems to be no benefit from this proposed change in policy, and it is not clear why this policy change was deemed necessary. Even if permits are needed, it is not clear how the policy of permits will be enforced. It was commented that mass shootings regularly happen at places where guns are restricted. It was commented that both faculty, staff and students will be at increased risk, with no clear benefit.

<u>Chair: commissioner will present in front of judiciary committee next week. The chair will send a draft letter</u> (addressed to the commissioner) to senators, and then (after incorporating comments) to the commissioner.

#### IX. Activities and priorities for the upcoming year

a. Faculty and Staff Recognition

None

b. Strategic Planning

Chair: The group had one session this morning and is working on new "mission, vision and shared values statement". The goal is to send this to a broader audience for feedback.

c. Fall semester planning

Discussion: It is hoped that employees will get vaccinated soon. There were concerns that faculty / educators been moved down in the priority list (at the state level). It was suggested that faculty senate should discuss this issue with administration. Chair: Administration is in talks with county health department. The chair will ask administration about vaccination schedule for employees.

Fall 2021 academic calendar is online

Chair: discussion item next time.

d. Review of FS Standards as Compared to MTFA Standards for Instruction, Research and Scholarly Activity, and Service

Chair: Suggested that a subcommittee be formed to discuss this issue.

Discussion by senators: Currently, only the union negotiates a contract every bargaining cycle, which is then implemented and recorded in the FS handbook. Non-union faculty have (under current procedure) no direct say in the matter. It was suggested that non-union representatives be invited by union officers to join the negotiating team.

Chair: Suggested that the provost will be requested to address the senate on this issue.

#### X. Faculty/Staff Satisfaction Survey

Chair: Will be looking for volunteers to move this forward.

XI. Other Items

None



Department of Mechanical Engineering Montana Technological University 1300 West Park St. Butte, MT 59701

Phone: (406) 496-4460 E-mail: jskinner@mtech.edu

January 5, 2021

#### Dear Dr. Trudnowski:

I am formally nominating Dr. R. Bruce Madigan for emeritus faculty status. Dr. Madigan retired from Montana Technological University as a full professor in 2020 after 17 years in the General and Mechanical Engineering Departments. He started as an Assistant Professor in General Engineering in 2003, was awarded tenure in 2008, and served as General Engineering Department Head from 2011 to 2018. Dr. Madigan brought over 20 years of industrial and research experience to Montana Technological University. His previous experience enabled him to teach industrially-relevant courses and conduct cutting-edge research.

Upon his arrival at Montana Tech, Dr. Madigan redirected the welding engineering curriculum to focus on automated and robotic welding applications. He developed new courses, laboratory exercises, and obtained numerous equipment donations from industrial and government partners. Dr. Madigan's efforts yielded state-of-the-art welding engineering laboratory facilities and high-quality courses, both of which contributed to student success.

Dr. Madigan is well-regarded as an instructor, consistently scoring high on student evaluations. His teaching excellence was twice recognized by the American Welding Society (AWS), first in 2006 when he received the Howard E. Adkins Memorial Instructor Award and again in 2010 when he received the Plummer Memorial National Educator Award.

In addition to being an outstanding instructor, Dr. Madigan was also a productive researcher at Montana Tech. His research yielded publications and patents and supported numerous graduate students. Dr. Madigan chaired numerous graduate committees including nine MS completions and one PhD completion. He also served as a committee member in numerous other graduate committees.

Dr. Madigan also has a long-standing professional service record, including service as Vice Chairman of the Montana Section of the American Welding Society (AWS) and as a Principal Reviewer for AWS's Welding Journal Technical Paper Peer Review Committee. Dr. Madigan remains active in welding engineering, through consulting and continued professional service with AWS.





I hope you will support Dr. Madigan's conversion to emeritus faculty status in recognition of his considerable contributions to Montana Technological University and the profession. I welcome further discussion in regard to Bruce's qualifications and merit.

Best regards,

Jack L. Skinner, Ph.D., P.E. Head and Associate Professor

fal L. Shim

#### Curriculum Vitae

# R. Bruce Madigan

#### Education

1994 PhD, Colorado School of Mines, Metallurgical and Materials Engineering

1985 MS, Ohio State University, Welding Engineering

1983 BS, Ohio State University, Welding Engineering

1979 Certificate, Hobart School of Welding Technology

# **Academic Experience**

2003-present: Full-time, Mechanical Engineering Department, Montana Technological University,

2011-2018: Department Head, General Engineering Department, Montana Technological University

2013-present: Full Professor 2005-2013: Associate Professor

2008: Tenured

2003-2005 Assistant Professor

# **Teaching Coursework**

EWLD 194 Practical Welding Lab

**EWLD 314 Intro to Welding Engineering** 

**EWLD 340 Welding Process Applications** 

EWLD 440 Design of Welded Connections

**EWLD 443 Physics of Welding** 

EWLD 475 Robotic and Automated Welding

**EWLD 476 Nondestructive Evaluation** 

EWLD 488 Metallurgy of Welds

#### Non-academic Experience

2002 – present: Private Consultant in the Metallurgy, Welding and Manufacturing Industries

1998 – 2002: WeldWare, Inc., Columbus, OH, President and Chief Technical Officer

1989 – 1998: National Institute of Standards and Technology (NIST), Boulder, CO, Research Engineer

1985 – 1989: Edison Welding Institute (EWI), Columbus, OH, Research Engineer

1983 – 1985: Ohio State University, Columbus, OH, Research Associate, Welding Engineering Dept.

1983 – 1985: Sensotec, Inc., Columbus, OH, Welding Engineer

1984 summer: Sandia National Lab, Livermore, CA, Co-op Engineering Intern

1979 – 1983: Klaas Machine and Manufacturing Company, Cleveland, OH, Welder/Fabricator

#### **Professional Registrations**

- Professional Engineer, State of Ohio, PE52864, 1989 Present.
- Professional Welding Engineer, International Institute of Welding, 2002-present

#### **Professional Memberships**

- ASM Welding Handbook, Arc Welding Section Editor, 2008.
- Vice Chairman, American Welding Society, Montana Section. 2004-present
- Member, American Welding Society. 1983 Present.

#### **Professional Honors and Awards**

- American Welding Society (AWS) Plummer Memorial National Educator Award, 2010.
- AWS Howard E. Adkins Memorial Instructor Award, 2006.
- United States Patents: 8 awarded (1993-2020), 3 pending applications

#### **Service Activities**

- AWS, Vice Chairman, Montana Section. 2004-present
- Principal Reviewer, Welding Journal Technical Paper Peer Review Committee. 1989 Present.

## **Graduate Student Completions**

Committee Chair - 9 MS students, 1 PhD student Committee Member – 10 MS students, 3 PhD students

#### **Recent Publications and Presentations**

"Process Mapping Software for Metal Additive Manufacturing – A Gateway to Closed Loop Melt Pool Quality & Process Control". Liquid Propulsion Subcommittee, Advance Materials Panel, Joint Army-Navy-NASA-Air Force (JANNAF). Jackson Center, Huntsville, Alabama. August 2018.

"Digital Process Control System Software for Metal Additive Manufacturing with Aerospace Alloys". Mark Cola, Darren Beckett, Lars Jacquemetton, Scotts Betts, R. Bruce Madigan. 45th Annual Review of Progress in Quantitative Nondestructive Evaluation, Burlington, Vermont. July 2018.

"Effect of Laser Scan Strategy and Post Processing on High Strain Rate Deformation Response of Additively Manufactured Stainless Steel". Brandon McWilliams, Brahmananda Pramanik, Andelle Kudzal, Bruce Madigan. TMS 2018 Annual Meeting, Phoenix, Arizona. March 2018.

"Influence of Build-angle on Charpy Impact Fracture of Laser Powder Bed 3D-printed Stainless Steel and Aluminum Cast Alloy". Brahmananda Pramanik, Kristofer Kuelper, MD. Salahuddin, Bruce Madigan. TMS 2018 Annual Meeting, Phoenix, Arizona. March 2018.

"Optimizing Processing Parameter in Laser Sintering Process by Molecular Dynamics Simulation". Bowen Deng, David Hobbs, Bruce Madigan. TMS 2018 Annual Meeting, Phoenix, Arizona. March 2018.

"Processing-microstructure-mechanical property correlation in AlSi10Mg parts produced using selective laser melting.", Edward Stugelmayer, Bryce Abstetar, K.V. Sudhakar, Ronda Coguill, Bruce Madigan. Materials Science and Technology 2017, Pittsburgh, PA. October 2017.

"Effect of Build Parameters on Microstructure of Stainless Steel Laser Additive Manufactured Components", Steven Keckler, Penn Rawn, K.V. Sudhakar, Bruce Madigan. Materials Science and Technology 2017, Pittsburgh, PA. October 2017.

"Additive Manufacturing of Stainless Steel and Aluminum alloy: Processing, Microstructure, and Material Properties". Sudhakar Vadiraja, Bryce Abstetar, Penn Rawn, Coguill Ronda, Nathan Huft and Bruce Madigan. Materials Science and Technology Conference 2016. Salt Lake City, UT. October, 2016.

"Effects of Strain Rate on the Hot Deformation Behavior and Dynamic Recrystallization in China Low Activation Martensitic Steel". Yuanyuan Fang, Xizhang Chen, Bruce Madigan Hongyan Cao, and Sergey Konovalov. Fusion Engineering and Design, Volume 103, pages 21-30, January, 2016.

"In Process Quality assurance: a Process Monitoring and Inspection Tool for Additive Manufacturing." Vivek R. Dave, Mark J. Cola and R. Bruce Madigan. 22<sup>nd</sup> Meeting of the International Society of Air-Breathing Engines (ISABE). Phoenix, AZ. October, 2015.

"Laser welding dissimilar materials of aluminum to steel: an overview". Pengfei Wang, Xizhang Chen, Qiuhong Pan, Bruce Madigan, Jiangqi Long. The International Journal of Advanced Manufacturing Technology. Volume 87, Issue 9–12, pp 3081–3090. December 2016.

"Monte Carlo Simulation and Experimental Measurements of Grain Growth in the Heat Affected Zone of 304 Stainless Steel During Multipass Welding." Xizhang Chen, Xing Chen, Huili Xu, Bruce Madigan, and Yuming Huang. International Journal of Advanced Manufacturing Technology, Volume 80, Issue 5, pp1197-1211, September, 2015.

"Investigation of microstructures and residual stresses in laser peened Incoloy 800H weldments". Xizhang Chen, Jingjun Wang, Yuanyuan Fang, Bruce Madigan, Guifang Xu, Jianzhong Zhou. Optics & Laser Technology 57, pp 159–164. April, 2014.

"Investigation of plasma arc welding as a method for the additive manufacturing of Ti-6Al-4V alloy components". Joe Stavinoha, Wolf Robotics, Inc. and Bruce Madigan, Montana Tech. Presentation at the American Welding Society Annual Conference, Chicago, IL, November, 2013.

"Measurement and analysis of SHCCT diagram for CLAM steel." Yuming Huanga, Xizhang Chena, Zheng Shena, Bruce Madigan, Lei Yuchenga, Jianzhong Zhouc. Journal of Nuclear Materials. Volume 432, Issues 1–3, Pages 460–465, January, 2013.

"An overview of the welding technologies of CLAM steels for fusion application." Chen, X.; Huang, Y.; Madigan, B.; Zhou, J. Fusion Engineering and Design, Volume 87, issue 9, p. 1639-1646, September, 2012. (A Top 25 Paper ranked by Science Direct in 2012).

"Measurement and Simulation of Titanium Alloy Deposit Temperature in Electron Beam Additive Manufacturing." Madigan, R. Bruce, Sean F. Riley, Mark J. Cola, Vivek R. Dave, and John E. Talkington. Ninth International Trends in Welding Research Conference, Chicago, Illinois, ASM International, June 4-8, 2012.

### **Professional Development Activities**

- Externally funded research proposal development and project management
- Graduate student mentoring
- Continuing education activities for maintaining PE license
- Welding Expert Consultant covering welding and joining processes, process sensing and control, welding metallurgy, thermal heat treatment, procedure selection, development and application, materials characterization including microstructure analysis, and processing equipment design
- Professional Expert Witness for welding and joining, metallugical and manufacturing casework

# MONTANA TECHNOLOGICAL UNIVERSITY Conflict of Interest Disclosure Statement and Certification

Complete the following form and submit it to your academic dean, director or executive officer on or before **September 30**<sup>th</sup> annually. For questions concerning the information required by this form contact the Office of Research.

Name:	Dept:
Position:	Phone #:
By signing below you are	Certification  certifying:
1. You have r	ead and understand Montana Tech's "Conflict of Interest and Financial Disclosure" policy, as revised 6/8/2015.
2. You either	(check one box below):
a. :	Have no relationships or financial interests that are or could be perceived to be in conflict with your duties and responsibilities to Montana Tech in sponsored research, in professional activities, or in family relationships (nepotism).
OR	
b. :	Have potential conflicts of interest as described in the statement below.
	Disclosure Statement
	ring significant financial interests or relationships (check all applicable interests and relationships), and I attach supporting the street person, business enterprise or entity involved and the nature and amount of the interest and/or relationship:
Salary or other pather pathe	ayment for services (e.g., consulting fees or honoraria) from any business entity that exceeded \$5,000 during
Equity interests ( \$5,000 or greater ownership interes Any relationship the employee par Income from inte	e.g., stocks, stock options, or other ownership interests) in any publicly traded entity valued in excess of r than 5% ownership, or a combination of stock and income from that entity that exceeds \$5,000/year. Any st in a non-publicly-traded entity (such as a start-up company), regardless of its value. With an entity that would be affected by the employee's research, or could be directly affected by a decision ticipates in at Montana Tech or involving Montana Tech funds. Ilectual property rights (e.g., patents, copyrights, and royalties) paid by any source other than Montana Tech is paid for or reimbursed by another organization and which is related to my Institutional Responsibilities;
government ager Service as an adv decides policy for	r, that the disclosure requirement does not apply to travel that is reimbursed by a Federal, State, or local icy, or an institution of higher education. risor, consultant, or in another capacity with a public or private agency that grants money to Montana Tech or grants that could materially affect Montana Tech's eligibility for funds from that agency.
operations of a co	onsulting position, board membership, or role as agent or representative of or participant in the day-to-day ommercial enterprise active in field(s) related to the employee's Montana Tech responsibilities. or authority to influence the hiring, salary, promotion, retention, or tenure or other employment benefits of ar
	member or a close business associate or employee of an entity in which the employee or family member has
•	of yours or a family member's with an entity that is or could become a vendor or supplier to Montana Tech.
<ul> <li>To cooperate in</li> <li>Meet privately wrequirements m</li> <li>To comply with</li> </ul>	isclosure on an annual basis and any time new reportable significant financial interests are obtained. the development of a Conflict Management Plan, if determined necessary by the University. With the Research Office if applying for or receiving funding from the Public Health System (e.g. NIH) and comply with additional andated by PHS. any conditions or restrictions imposed by the Montana Tech to manage, reduce, or eliminate actual or potential conflicts of the award, if applicable.
Signed:	Date:
Reviewed by Vice Chance	ellor for Research: Date:

See Conflict Management Plan

Other: \_\_\_\_\_

Disposition:

No Conflict

Montana Tech
POLICIES
PERSONNEL

Policy: Conflict of Interest and Financial Disclosure

Date Adopted: 12-18-1998

Revised: 8-15-2013 1-8/2021

Effective Date: 9-01-2013

Approved By: Donald M. Blackketter Les P. Cook

#### I. Introduction

Montana Technological University of the University of Montana [hereafter referred to as "Montana Tech"] actively encourages interactions with both the public and private sectors as an important component of its research, education, and public service activities. Research, educational, and public service activities supported by grants, contracts, or gifts from public and private entities and individuals provide a valuable source of funds, equipment, and topics for Montana Tech activities. Professional interactions, including consulting arrangements, between faculty and governmental entities and private businesses, advance Montana Tech's ability to provide a high-quality research and educational experience for students, and thus enhance their employment opportunities. Montana Tech's licensing of technology, assisting in new business start-ups, and other forms of technology transfer to both public and private entities, are critical to meeting society's needs.

This policy describes Montana Tech's principles for identifying and managing potential conflicts and for eliminating real conflicts of interest. It is accompanied by procedures for reviewing, eliminating, and managing such conflicts.

# II. Policy

Montana Tech and its employees are committed to conducting themselves and their activities in accordance with the highest standards of integrity and in compliance with state and federal ethics and conflict -- of -- interest laws and regulations and with Montana University System Board of Regents policy. Montana Tech is responsible to ensure that potential conflicts of interest are identified and for managing or eliminating them so that they do not improperly affect Montana Tech, decisions made by Montana Tech, or any Montana Tech research, education, and public service activities. The purpose of this policy is simultaneously to comply with state and federal regulations those (including of the Public Health http://www.gpo.gov/fdsys/pkg/FR-2011-08-25/pdf/2011-21633.pdf), to ensure the integrity of research and sponsored work, to maintain public trust and confidence, and to protect the University and its faculty, staff, and students. Compliance with this policy is required by all full-time and parttime Montana Tech employees, including students who receive compensation from Montana Tech and students or others who design, conduct, or report research, educational, or public service activities of Montana Tech

**Conflict of Interest.** A conflict of interest occurs when there is a potential divergence between the employee's private interests and professional obligations to the Montana Tech, such that an independent observer might reasonably question whether the employee's professional actions or decisions could be influenced by considerations of personal gain (financial or otherwise). Potential conflicts of interest that involve the employee, spouse, domestic partner, and dependent children must be disclosed as if they applied directly to the employee. Examples of conflicts that must be disclosed include the following:

- Salary or other payment for services (e.g., consulting fees or honoraria) from any business entity that exceeded \$5,000 during the past 12 months.
- Equity interests (e.g., stocks, stock options, or other ownership interests) in publicly traded entity valued in excess of \$5,000 or greater than 5% ownership, or a combination of stock and income from that entity that exceeds \$5,000.
- Any ownership interest in a non-publicly-traded entity (such as a start-up company), regardless of its value.
- Any relationship with an entity that would be affected by the employee's research, or could be directly affected by a decision the employee participates in at Montana Tech or involving Montana Tech funds.
- Income from intellectual property rights (e.g., patents, copyrights, and royalties) paid by any source other than Montana Tech.
- Any travel which is paid for or reimbursed by another organization and which is related to my Institutional Responsibilities; provided however, that the disclosure requirement does not apply to travel that is reimbursed by a Federal, State, or local government agency, or an institution of higher education.
- Service as an advisor, consultant, or in another capacity with a public or private agency that grants money to Montana Tech or decides policy for grants that could materially affect Montana Tech's eligibility for funds from that agency.
- Management or consulting position, board membership, or role as agent or representative of or participant in the day-to-day operations of a commercial enterprise active in field(s) related to the employee's Montana Tech responsibilities.
- Supervision and/or authority to influence the hiring, salary, promotion, retention, or tenure or other employment benefits of an immediate family member or a close business associate or employee of an entity in which the employee has an ownership interest
- Any family or financial relationship with an entity that is or could become a vendor or supplier to Montana Tech, provided however that the disclosure requirement does not apply to being solely a customer or client of such entity.

The following interests are not considered conflicts and do not require disclosure:

- Income or travel payments from occasional seminars, workshops, or lectures sponsored by public or non-profit entities.
- Income or travel payments from service on advisory committees or review panels for public or non-profit entities.
- Financial interests arising solely by reason of investment in a business by a mutual fund, pension, or other institutional investment fund over which the employee does not exercise control.
- Salaries, royalties, or other remuneration received from or through Montana Tech.

• Equity interests of less than 5% ownership and a market value below \$5,000 (aggregated for the employee and immediate family) in a publicly-traded company.

Certification and Disclosure. All employees must provide a written certification and disclosure of conflicts of interest, potential conflicts of interest, and situations which could be perceived as a potential conflict of interest. The disclosure must be made at least annually, and updated promptly whenever new potential conflicts arise. In this disclosure statement, the employee certifies that he/she has read and understands this policy, and whether or not he/she has any relationships or financial interests described above, or other relationships or interests that could be perceived as being in conflict with his/her professional responsibilities at Montana Tech. If he/she has potential conflicts, these conflicts must be disclosed on the form or in an attached statement. The written disclosure must be reviewed and acknowledged by the employee's supervisor, dean, or director and by the Vice Chancellor for Research.

When a potential conflict of interest is disclosed, the Vice Chancellor for Research determines with the responsible Vice Chancellor whether a conflict exists, and they determine and whether the appropriate action is to waive the conflict, or to manage the conflict, or to require the conflict to be eliminated. The Vice Chancellor may consult with the responsible Vice Chancellor or dean to inform this determination. A conflict that is not prohibited by statute or regulation may be waived on the basis of a written determination of the following: that the potential conflict of interest is so remote or so small that there is no probability for bias; that any resolution beyond disclosure would be ineffective or inequitable; or that any bias reasonably expected would be outweighed by the interests of research progress, public health or welfare, or technology transfer. A conflict of interest that cannot be waived must be addressed by taking actions or imposing restrictions that will eliminate, reduce, or manage the conflict of interest. These actions and restrictions are to be described in a written Conflict Management Plan, signed by the employee, the supervisor, and the Vice Chancellor for Research.

Appeals. If an employee believes the conditions or restrictions imposed in the Conflict Management Plan are inappropriate, the employee may appeal or request reconsideration. The employee initiates an appeal by sending a written request to the Vice Chancellor for Research with a copy to his/her supervisor and the Vice Chancellor in his/her reporting chain. Students copy the department chair and dean for their major program. The Vice Chancellor for Research will refer the appeal to a Conflict of Interest Review Committee (CIRC), and will consider the CIRC's recommendation in revising the Conflict Management Plan. If the employee believes there is justification for further review, he/she must follow the standard appeal process in effect for Montana Tech Employees.

Conflict of Interest Review Committees (CIRCs). The Vice Chancellor for Research will determine wither a CIRC should be organized to assist in reviewing the potential for conflicts of interest regarding research and gifts. The Vice Chancellor for Research will organize a CIRC to assist in reviewing an employee's appeal regarding conditions or restrictions imposed in his/her Conflict Management Plan. The Vice Chancellor will consult with the employee's Vice Chancellor and for appeals by faculty members, with the Faculty Senate Chairperson and the member's dean to select and appoint CIRC members. Three-quarters of the CIRC's voting members will be from the applicable department(s) or area(s). Some of the members should be individuals with experience with approved external relationships. The principal objective for the CIRC is to help guard Montana Tech employees and Montana Tech from engaging in activities where the risk to integrity and reputation outweighs the value of the activity to academic and societal goals. Relevant

factors to consider are the nature of the financial or other interest, where and when the relationship commenced, recent changes in the relationship's conditions, the likelihood of a conflict of interest (will the results of the activity likely affect or be affected by the significant financial or other interests), mechanisms to ensure integrity (peer review, other independent research sites, and independent monitors and controls), the importance of the proposed activity, and the availability of alternatives to avoid the conflict of interest.

**Compliance.** Montana Tech expects employees to comply fully, accurately, honestly, and promptly with all requirements of this policy and with applicable federal and state regulations. Breaches of this policy include, but are not limited to: submitting an intentionally incomplete, erroneous, or misleading Disclosure form, failing to submit a Disclosure form annually or when a new conflict arises, and failing to provide additional information requested, and failing to comply with the conditions specified in a Conflict Management Plan. Violation of this policy may be the basis for discipline, which, if necessary, will be imposed in accordance with applicable campus and Montana University System policies and any applicable collective bargaining agreement. Potential sanctions may include, but are not limited to the following:

- Letter of admonition;
- Ineligibility to submit grant applications;
- Withholding of research approvals or privilege of supervising graduate students;
- Suspension;
- Non-renewal of probationary appointment; and
- Termination.

Recordkeeping and Reporting. The signed disclosures, waivers, and Conflict Management Plans are kept on file by the Research Office, in original paper copy or electronic form for a minimum of three years after they are created, for a minimum of three years after the completion and closure of any sponsored project they involve, or until the resolution of any action by Montana Tech or government agencies related to the records or projects, whichever is longer. All records will be maintained in a manner to protect sensitive and confidential information consistent with state and federal law. The Vice Chancellor for Research will report to external sponsoring agencies as required by the agencies the existence of any conflict of interest found by Montana Tech along with actions taken to manage, reduce, or eliminate the conflict. To the extent required by law or requested by the sponsor, the Vice Chancellor for Research will inform the University of Montana Legal Counsel, the Chancellor, and the affected sponsor whenever Montana Tech is unable to manage or satisfactorily resolve any conflict of interest related to the sponsor's activities at Montana Tech.