

ACADEMIC ADVISING

1. Number of current advisees:
- | | |
|------------|----------|
| Freshmen | _____ |
| Sophomores | _____ |
| Juniors | _____ |
| Seniors | _____ |
| Other | <u>3</u> |

2. Service on graduate/professional student guidance committees:
(List number of students)

	<u>Masters</u>	<u>Doctoral</u>	<u>Professional</u>
Currently enrolled or active	<u>1</u>	<u>2</u>	<u>0</u>
Degrees Awarded - total of career	<u>4</u>	<u>0</u>	<u>0</u>

3. Provide a summary of accomplishments in academic advising (reference Academic Specialist Handbook - Appendix A: Functional Description of Specialist Duties, Advancement in the System and Administrative Responsibilities, section A.5.1.1).

There is no formal requirement to perform academic advising at MSU as part of my role. Nevertheless, I supervise a student in the Master of Science in Supply Chain Management program on his project, which is railway-based. Successful graduation of the student is expected in the first half of 2018. In addition, I am an advisor to a Ph.D. candidate at the University of California at Davis and provide expertise and guidance on railway-related matters that are not available at UC Davis. The Ph.D. research is on alternative railway propulsion systems. The Ph.D. candidate is consulting regularly with me via e-mails, phone conferences, and in-person meetings. As part of the collaboration with WMG at the University of Warwick in England, I am supervising a Ph.D. candidate contributing to the International Doctorate requirements. The project is around wired and wireless charging of advanced rail vehicle propulsion systems and the candidate will visit MSU for four weeks in June/July 2018. Co-authored journal papers are anticipated outputs of the Ph.D. advising activity in addition to successful doctorate program completion of the advisees.

4. Evaluation of academic advising by unit administrator. Include advising, recruitment and retention of students; evidence of a leadership role in the advising profession; evidence of commitment to and effectiveness in promoting diversity and intellectual honesty; summary of evidence of recognition by students, peers, faculty and others within and outside MSU.

Expansion of research capabilities and outcomes is included in the mission of the Center for Railway Research and Education (CRRE) and part of _____ role. Supervision of Ph.D. candidates is a suitable, cost-effective way to expand the reach of the CRRE, increase reputation and conduct research. _____ has established relationships with other leading universities covering the transportation sector and supervises Ph.D. candidates at those institutions. The students are in frequent contact with _____ and he has been successful in creating enthusiasm for the respective projects and the rail industry. Candidates appreciate his feedback and value the regular discussion of the subject matter. One candidate is seeking frequent in-person meetings that involve his travel to MSU as he believes the time is spent in a very productive manner. The other candidate chose _____ and MSU for the international doctorate from a wide range of options due to propulsion expertise and previous, positive interactions with _____. Other possible doctoral students have approached him to explore options for programs at MSU with a rail-focus, but students did not register due to limited funds available from CRRE to support a doctoral researcher. MS supervision was primarily at the University of Birmingham on the railway masters program. Based on feedback received, students there appreciated _____'s time commitment and his interest in their successful completion of the program. The current MS student at MSU has interactions with _____ via e-mail, phone and in-person meetings. Comments from MSSCM administrators positively identified the support and commitment that he has shown for the success of the student and completion of the project.

8. Record of teaching activities for the past three years*:

[illegible]

9. Provide a summary of accomplishments in teaching (reference Appendix A: Functional Description of Specialist Duties, Advancement in the System and Administrative Responsibilities, section A.5.1.2).

Currently, there is no formal requirement to teach for-credit courses as part of my role. In the original position description, two specialty courses in railway management in the Master of Science in Supply Chain Management program were mentioned. However, these were not actively marketed or offered, and were officially removed from the course catalog in 2018.

* In determining the "past three years" the candidate may elect to exclude any terms during which s/he was on leave.

10. Record of MSU-sponsored non-credit instructional activities for the past three years:

[illegible]

Details for the last two years are provided, as I joined MSU in 2016. Previous educational activities were not sponsored by MSU, but occurred as part of employment at the University of Warwick and the University of Birmingham.

Primary instructional activity was on the Railway Management Certificate Program (RMCP). I created new lectures with specific rail content (e.g., Financial Accounting, Management Accounting, Railway as a System, Motive Power Basics, Electrification, Emerging Propulsion Systems) and assisted in updating of existing content (e.g., Transportation Principles, Rail Industry Overview, Track and Alignment). The method of instruction was MS PowerPoint presentations with illustrations and video clips. Classroom instruction was supplemented with site visits where I explained different rail technology, components, functions, and processes while linking to the covered theory in the classroom. Often my educational content encompasses topics that are difficult to teach due the subject matter either being not particularly engaging or involving complex formulas. Nevertheless, several participants have positively commented on my delivery methods helping them to stay engaged and learn content. I have also received several comments where participants expressed that they would like to see more lectures/presentations delivered by me. When content is delivered on an RMCP module by other presenters, I often contribute with comments and further explanation if and when the presenters like these contributions. Positive feedback was received from presenters and observers, mentioning that my contributions added value through additional context and enhanced learning.

in determining the "past three years" the candidate may elect to exclude any terms during which s/he was on leave.

Name _____

12. Evaluation of contributions to teaching and instructional activities by unit administrator. Include effectiveness of teaching; presentation of information; innovation and leadership in teaching/learning methods; evidence of promoting an appropriate climate of diversity and intellectual honesty in instructional settings; summary of evidence of recognition from students, peers, faculty, and others within and outside MSU.

Dr. [REDACTED]'s teaching and instructional activities are focused solely on non-credit programs. As standard practice, formal feedback is requested from participants through completion of questionnaires. Feedback has also been provided through conversations with participants, and internal and external presenters on the program.

Across his RMCP presentations, Dr. [REDACTED] has earned an average score of 4.5 (on a 5.0 scale) for both his content and delivery. He has demonstrated the ability to enthuse participants about the subjects he delivers including complex and challenging content and his passion is clearly visible. Several participants have commented positively on feedback questionnaires and in conversations on his teaching style and education methods. He has been complemented for his ability to explain difficult concepts in an accessible manner through use of examples, illustrations, photos, videos, and physical teaching aids such as models. Several participants have expressed that Dr. [REDACTED] should be teaching and presenting more topics on the RMCP.

In addition to participants, other presenters and an observer from the RMP Founders Committee have commented positively on his engaging teaching style and expertise. Also, his additions and amendments to material that other presenters have developed has been positively recognized and encouraged.

CURRICULUM DEVELOPMENT

13. List significant contributions to planning and development of curricula, academic programs and courses (reference Academic Specialist Handbook - Appendix A: Functional Description of Specialist Duties, Advancement in the System and Administrative Responsibilities, section A.5.1.3).

My curriculum development activities were related to the RMCP and custom program (Amtrak) and included supervision of a rail team member who is employed to manage and operate the railway education activities.

In 2016, the RMCP content was updated and re-focused so that individual weeks would be ready for modular delivery in 2017. Contribution of new content and delivery of existing content were part of my contributions, enabling a significant reduction in the number of external presenters on the program. Offering the program in modules started in 2017: to gain the Railway Management Certificate, all four modules have to be completed, but these do not have to be taken in sequence or completed in a single year. Also, any module could be taken as continuing professional development. The aim is to increase the number of participants as well as offering more flexibility to companies in employee time commitment and budgeting. The restructuring was part of the strategic education initiative that was developed by the rail team, initiated by me. 2017 was a difficult year for the rail industry with restructuring, redundancies, and revenue decreases due to weak coal transportation. Nevertheless, a profitable RMCP iteration took place and three people participated in individual weeks, which is in line with modularization expectations. It is anticipated that this number will increase as people and companies become aware of the new option. Visits to locations and companies relevant to the rail industry are part of the RMCP and new visits were added as part of my contribution. As mentioned in point 11, I have developed new content for the RMCP and was instrumental in the restructuring of the program. Updating and preparation of content on the RMCP delivered by others were also part of my contributions.

In addition, I supervise educational activities conducted by rail team members. _____ and I developed the curriculum for the custom program, including several meetings with MSU faculty to discuss and amend content to be relevant for the rail client. Essential railway context was added through my contributions. The custom program will be amended this year to react to client wishes and I am part of the curriculum team. Delivery of content on the custom program was part of my activities, in form of classroom teaching, instruction on a site visit, and guidance on project work while participants were here on campus.

14. Evaluation of curriculum planning and development by unit administrator. Include professional contributions and evidence of leadership; commitment to and effectiveness in promoting diversity and intellectual honesty; summary of evidence of recognition of peers, faculty and others within and outside MSU.

Curriculum redevelopment has been a critical element of Dr. _____'s initial responsibilities since arriving on campus and he has done a superb job of making significant adjustments to RMCP. The feedback on changes made to date has been very positive and we anticipate additional changes in the future.

Overall, his broader efforts in this category have been focused in four key areas: (1) invited presentations to academic and practitioner audiences; (2) positioning new ideas and the "ecosystem" concept as critical to future CRRE efforts; (3) transitioning from external, unaffiliated speakers to internal, faculty speakers; and (4) integration of business and engineering concepts. This is part of a broader strategy to position the CRRE as the "go to" place for knowledge and education related to the rail industry. Results to date have been positive, though much more will be expected in the future.

PUBLICATIONS

15. List materials authored or co-authored in support of MSU advising, MSU credit or non-credit courses, or for use in MSU service/outreach activities. The list should be chronological order by category with the most recent work listed first. Include author(s), title, date, and target audience or course.

As part of my activities, I have authored and co-authored several presentations, seminars, and promotional material (see following list for major contributions):

2017

December 2017: contributed to updates to the 2018 RMCP flyer; created a presentation for VIPP China delegation: Railway Transportation in the US: An Overview; created presentation for Hay Seminar at RailTEC, UIUC: Overview of Alternative Motive Power and Hydrogen Fuel Cell Propulsion for Rail Vehicles.

September 2017: contributed to creation of 2018 RMCP flyer.

August 2017: co-authored presentation for RMCP: Welcome and Introduction

March 2017: creation of Railway Research and Education brochure with associated inserts for RMCP, brochure attached. Co-authored, significant contribution to text and illustrations.

February 2017: lead author for presentation at Strategies and Opportunities for Decarbonizing the World's Freight System workshop: Freight Transportation by Rail: Motive Power, Traction, and Emissions.

2016

November 2016: authored new presentation and co-author of revised presentation: Management Accounting, Economics (co-author).

October 2016: authored new presentations: Financial Accounting, Operational Models.

September 2016: authored new presentations: Track, Alignment and Switches & Crossings; Motive Power Basics; Electrification and Emerging Propulsion Systems; Concepts in Railway Operation and Control.

August 2016: updated and authored new presentations for RMCP: Organization of US Railways, Railway Systems and Management, co-authored Passenger Rail and Transit.

July 2016: creation of promotional flyer for RMCP, co-authored, significant contribution to text.

May 2016: Restructured and updated the railway website to several pages that outline the expanded rail activities. Co-authored, major contribution to text and structure, and provided photos. Current version at railway.broad.msu.edu

16. List research publications, papers, and other creative works under headings of (1) Books; (2) Book Chapters; (3) Bulletins or Monographs; (4) Articles (**for multi-authored articles, indicate how the primary or lead author can be identified**); (5) Reviews; (6) Papers read/published in conference proceedings; (7) Invited papers; (8) Artistic endeavors (exhibits, showings, scores, performances, recordings, etc.); (9) Other scholarly and creative works and activities (video production, etc.). The list should be in chronological order by category with the most recent work listed first; asterisk monographs and articles which received peer review.

see attached document

Name _____

ANTS

17. List grant and/or contract proposals authored/co-authored in last six years.* Each proposal should consist of a 2-line entry as described below. For Amount Funded, if the proposal has not been funded, type "pending" or "rejected" as appropriate.

Line 1: Title of the proposal

Line 2: Name of granting or contracting agency, date submitted, amount funded, principal/co-investigators (if not the candidate).

Grant applications submitted while at MSU are listed here. Other grants, please see attached documents.

FTA ZERO Campus

US Department of Transportation: Federal Transit Agency, Feb 21, 2017, \$298,000, pending

Hybrid Hydrogen Rail High Level System Simulation Tool 2

Austrian Research Promotion Agency (FFG), \$210,000, rejected (late submission of consortium leader, based in Austria)

RESEARCH

18. List significant contributions to research (reference ~~Appendix A: Functional Description of Specialist Duties, Advancement in the System and Administrative Responsibilities, section A.5.2~~).

Railway research started with my arrival at MSU and my primary area has been on motive power, propulsion system energy supply, and business decisions associated with the adoption of the propulsion technology. The research has been conducted as part of a team through collaborations with the University of California at Davis and the University of Warwick, United Kingdom, as well as with an industry partner based in Norway, Sintef. In addition, efforts are under way to build a consortium of partners to develop, design, instrument, and test a hydrogen fuel cell locomotive; several industry partners have already expressed support and are willing to contribute with matching funding through donation of a locomotive and personnel hours in the value of around \$1.5-2 million. The ongoing research with UC Davis is around alternative propulsion systems, such as hybrids, natural gas, and hydrogen fuel cells and their suitability for different railway services (e.g., commuter, intercity passenger, long-distance freight, switching). My activities are in supervision of a Ph.D. candidate at UC Davis, simulator development, and assistance with acquisition of data as well as ensuring academic quality. Several journal publications are planned as part of the research, the first is anticipated to be submitted in the first half of 2018. Multiple common conference presentations and co-authorship of material has been part of the project. In the research collaboration with WMG, a sophisticated tank-to-wheel and rail vehicle performance simulator has been developed, manuscript preparation is in progress. The next steps are a common submission for research grants to expand the functionality of the simulation tool and evaluate the business implications of different technologies, including identification of services where early application would be economically sensible. In June/July 2018, a Ph.D. candidate from Warwick will visit MSU as part of the project, investigating wired and wireless power transfer options for battery-powered railway vehicles. Several journal papers are anticipated as part of the collaboration. A combined project between UC Davis, Sintef and MSU is around high-level techno-economic evaluation of alternative propulsion options for mainline freight in Norway and the US, the project is about to be completed with manuscript submission. A grant submission to the NSF in collaboration with the MSU College of Engineering is being actively pursued and has started with a summary research statement, deadline Oct. 2018.

* The candidate may elect to extend the 6-year period by a length of time equal to the length of any leaves taken during the past 6 years and make a notation to this effect.

19. Evaluation by unit administrator of the contributions to research. Include research techniques; support of others in research endeavors; advancement of knowledge, public benefit, economic development; promotion of appropriate climate for creativity, diversity and intellectual honesty in the research setting; summary of evidence of recognition of peers, faculty and others within and outside MSU.

Dr. [REDACTED]'s research is applied specifically to the railway sector, with a particular focus on motive power and the associated energy supply chain. He is recognized as a global expert in hydrogen fuel cell applications for rail vehicle propulsion (Hydrail). His activities relate to the development of new drive systems, including component sizing and selection, performance evaluation such as acceleration and energy consumption, and environmental impact analysis covering greenhouse gas emissions and local air quality. These evaluations are conducted through sophisticated simulator developments and measurements of prototype/demonstrator vehicles to provide information and guidance to railways, agencies and regulators regarding future investment, business cases and regulation. He has been awarded several prizes for his research, including a best paper prize in the Journal of Rail and Rapid Transit. Currently, the primary method for research is through collaboration with industry and other universities, including supervision of doctoral students. This is an effective method to achieve high impact while managing his limited time for research. Dr. [REDACTED] has been contacted and interviewed about his research for trade publications based on his unique expertise. Several industry partners are willing to be part of consortia for funding applications while having committed a substantial amount in matching funds. In addition, he is in contact with the US Department of Energy Fuel Cell Technologies Office regarding workshops and collaboration for fuel cell applications in the railway sector.

PUBLIC SERVICE/OUTREACH

20. List significant contributions in the area of public service/outreach (reference Arakawa Specialist Handbook - Appendix A: Functional Description of Specialist Duties, Advancement in the System and Administrative Responsibilities, section A.5.3).

My outreach activities that are primarily educational, such as on the RMCP, and are listed under Teaching (10 and 11). Below is a list of other outreach activities.

- (1) Associate Editor of the journal 'Proceedings of the Institution of Mechanical Engineerings Part F: Journal of Rail and Rapid Transit'. The journal is peer-reviewed and has the highest impact factor of any rail-dedicated academic publication.
- (2) Reviewer for various journals, including the Journal of Power Sources, International Journal of Logistics, and International Journal of Electrical Power and Energy Systems.
- (3) Member of the organizing team of several conferences (e.g., Midwest Rail Conference 2017, Michigan Rail Conference 2018, International Hydrail Conference 2018).
- (4) Invited member of the Transportation Research Board AR020 Committee on Passenger Rail Equipment and System Integration.
- (5) Several site visits / meetings to rail or rail-related organizations (aside from the RMCP visits), including: CSX North Baltimore Intermodal facility, Austrian Railways, Pacific Harbor Railway, General Motors (fuel cell research), Lake State Railway, Conrail, Progress Rail (EMD), Siemens, and Chicago Transit Authority.
- (6) Representation of railway activities at several conferences, including at booths (e.g., Railway Interchange, American Association of Railroad Superintendents, and Midwest Rail Conference).
- (7) Was interviewed several times by various publications (e.g., MSU The Engaged Scholar, The Bent of Tau Beta Pi, and Materials World).
- (8) Commenced collaboration with other universities: University of California at Davis, The University of Warwick, Michigan Technological University (conference organization). Early stage collaboration with the University of Illinois at Urbana-Champaign and the University of British Columbia.
- (9) Started discussions with the Fuel Cell Technologies Office at the US Department of Energy regarding fuel cell applications for railway vehicles, possibility of organization of a common workshop.
- (10) CRRE became a NuRail Affiliate Member through my efforts, enhancing our reputation among other universities with rail groups.

- Evaluation of public service/outreach activities by unit administrator. Include delivery of educational and technical information, expertise and services to individuals, business, industry, government, educational institutions or other organizations such as galleries, museums, libraries; evidence of leadership; promotion of an appropriate climate for diversity and intellectual honesty in service/outreach settings; a summary of evidence of recognition by clients, peers, faculty and others within and outside MSU.

A significant part of Dr. [REDACTED]'s time is spent raising awareness and building reputation of the CRRE to promote its capabilities within MSU, the rail academic community and the railway industry. For the first time, the railway program has a brochure that outlines its activities and capabilities. Further, booth representation at conferences has taken place under his leadership, which involved creation of banners and procurement of promotional items. The web presence of the CRRE has been drastically improved through creation of a website with several pages, and starting of social media interactions. He is a valued member of conference organizing teams and frequently receives invitations to participate, which strengthens the CRRE brand. Invitations to serve on committees, as panel moderators and as associate editor of the most highly respected peer-reviewed railway journal are indicators of his abilities and reputation in the rail academic community. These directly contribute to the reputation and visibility of the CRRE.

ADMINISTRATIVE ACTIVITIES

- List significant contributions in the area of administration (reference Academic Specialist Handbook - Appendix A: Functional Description of Specialist Duties, Advancement in the System and Administrative Responsibilities, section A.6).

- (1) Expanded the rail team, hired [REDACTED] (full-time) and [REDACTED] (full-time). Responsible for supervision and personnel management. Created the CRRE and moved it from Supply Chain Management to the Dean's Office to enable broader rail engagement (e.g., with the passenger rail sector and other MSU colleges). Provide strategic direction for railway activities and expansion plans. Responsible for budget and finance of CRRE.
- (2) In 2016, RMCP had the highest number of revenue generating participants since program start in 2007, due to early marketing efforts and reputation increase. Achieved significant RMCP operating ratio reduction, from 103% in 2015, to 64% in 2016, to 53% in 2017, increasing bottom line results and converting a loss into a profit. Substantial cost reduction through content coverage with CRRE team members and choice of different accommodation options.
- (3) Manage the relationship with the Founders Council, including major donors. Primary donor commented positively on development and direction of CRRE.

23. Evaluation of administrative activities by department chairperson/school director.

While administration is not listed specifically in Dr. [REDACTED]'s position description, it is an essential responsibility in supporting the four main components of his position. Significant cost reductions in the RMCP have been achieved under his leadership, converting a loss to a net contribution for the program. The expansion plans required additional resources, so he hired full-time administrative support and a full-time academic specialist. Creation of the CRRE with expanded scope and the move to the Dean's Office enabled coverage of the entire rail sector, including passenger and transit, leading to the attraction and creation of a custom program for Amtrak (which provided additional positive contribution). The primary donor has taken positive note of the direction and activities of the CRRE and has a good relationship with Dr. [REDACTED] including frequent phone conversations and meetings.

COMMITTEE SERVICE

24. Indicate significant committee service and contributions under the following headings:
1) Unit/department, 2) College, 3) University and 4) National/International.

(4) International

- Member of the organizing team for the 13th International Hydrail Conference, which will be held in Rome, Italy, in June 2018
- Invited member of the Transportation Research Board AR020 Standing Committee on Passenger Rail Equipment and System Integration
- Associate Editor (invited) for the Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit

(4) National

- Member of the organizing committee for the inaugural Midwest Rail Conference, held in Kalamazoo, August 2017
- Member of the organizing committee for the Michigan Rail Conference, to be held in Saginaw, August 2018

(2) College

Member of a reappointment review committee

25. Participation in professional associations/organizations/committees/societies.

<u>Name of Society/ Organization</u>	<u>Office & Committee Assignments</u>	<u>Meetings Attended (Year)</u>	<u>Check if on Program</u>
#Institution of Mechanical Engineers Part F: Journal of Rail and Rapid Transit	Associated Editor	Teleconference 2017	
#Transportation Research Board (TRB) AR020 Committee on Passenger Rail Equipment and Systems Integration	Invited Member	Teleconferences (2017) Annual TRB Meeting 2017 and 2018	
#American Railway Engineering and Maintenance-of-Way Association	Member	2017 Annual Meeting / Railway Interchange	
#Institution of Engineering and Technology	Member	No meeting requirement	
#International Hydrail Conference Committee	Invited Member	Annual Conference 2016, 2017 Teleconferences 4	
#Midwest/Michigan Rail Conference Committee	Member	Teleconferences 10 Conference 2016, 2017	

26. List other professional development activities including attendance at conferences, workshops and seminars, enrollment in a degree granting program, etc.

2018 January, Annual Meeting of the Transportation Research Board, Washington, DC. 2017 November, Rail Trends Conference, New York, NY. 2017 November, Hydrail Symposium, Toronto, Canada. 2017 September, Railway Interchange, Indianapolis, IN. 2017 August, Midwest Rail Conference, Kalamazoo, MI. 2017 July, Annual Meeting of the Association of Railroad Superintendents, St. Louis, MO. 2017 July, Passenger Rail Education Symposium, Los Angeles, CA. 2017 June, International Hydrail Conference, Graz, Austria. 2017 February, Strategies and Opportunities for Decarbonizing the World's Freight Systems workshop, Pittsburgh, PA. 2017 January, Annual Meeting of the Transportation Research Board, Washington, DC. 2016 August, Michigan Rail Conference, Marquette, MI. 2016 July, Annual Meeting of the Association of Railroad Superintendents, Pittsburgh, PA. 2016 July, International Hydrail Conference, Birmingham, United Kingdom. 2016 June, Rail Insights Conference, Chicago, IL. 2016 May, North American Rail Shippers Conference, Arlington, VA. 2016 May, Supply Chain Logistics Management Executive Program, Lansing, MI.

27. List awards and/or honors received.

Best PhD Prize 2013. School of Electronic, Electrical and Computer Engineering, College of Engineering and Physical Sciences, The University of Birmingham.

Richard Herbert Innes Prize 2016. Best paper on locomotive engineering. Journal of Rail and Rapid Transit.

28. Summarize any other significant contributions which have not been covered elsewhere.

Attach copies of internal letters of recommendation and letters of external peer review.

**MICHIGAN STATE
UNIVERSITY****Specialist - Outreach-Fixed Term**Posting Number (EBS Ref. #) **481846**

Posting Number (EBS Ref. #): 481846
Link to Position Request Form in SAP: [https://SECPORTAL.EBSP.MSU.EDU/irj/portal#Actions-Process_Browser?
&REFERENCE_NUMBER=000000481846](https://SECPORTAL.EBSP.MSU.EDU/irj/portal#Actions-Process_Browser?&REFERENCE_NUMBER=000000481846)

POSITION REQUEST

Classification Title:* Specialist - Outreach-Fixed Term
Working Title/Rank: Director of Corporate and Student Relati
EBS Job Number: Specialist - Outreach-Fixed Term
Number: 20001700

Pay Grade Level:
Personnel Subarea: FAS- Fac./Acad Staff
Salary / Wage: Salary Commensurate with Experience
Employee Group (Union/Non-union): Union
Employee Sub Group: AN Academic Staff
Contract Type (FAS): Fixed Term
Job Group/EEO Code: 70F
Requisition Reason: Resignation
Position Type: Faculty/Academic Staff
ruitment Process:* Faculty Academic Staff

POSITION DETAILS

Major Administrative Unit / College:* Eli Broad College Of Business
Primary Department: Department Of Supply Chain Management 10008570
Additional Department(s):
County Work Location:* East Lansing
Administrative Address: N Business Complex
Building:
Employment Percent: 100.00
Work Schedule: STANDSAL
Work Hours
(if non-standard or variable, please specify): STANDARD 8-5
Flex or Limited/Term End-Date?: ☐ Yes ☒ No
End Date/Limited Term:
Flex Period:

POSITION DESCRIPTION

Position Snapshot: The Department of Supply Chain Management is seeking a detail-oriented self-starter to serve as a Specialist-Outreach, also known as Director of Corporate and Student Relations. The director is responsible for industry awareness, program development, recruiting coordination, student advising, and managing corporate membership and activities of the Supply Chain Council.

Posting Text:

Working/Functional Title

Director of Corporate and Student Relations

Position Summary

Michigan State University's Eli Broad College of Business, Department of Supply Chain Management, has an opening for a full-time fixed-term academic specialist to serve as Director of the department's Corporate and Student Relations office.

The Corporate and Student Relations Office (CSRO) supports undergraduate education beyond classroom learning, with activities that are an integral part of the excellent Supply Chain Management (SCM) program for which MSU is universally known and respected. The CSRO acts as a liaison between corporate contacts and students seeking internship, co-op, and full-time employment opportunities. The office also serves as a link between company representatives who are interested in developing relationships with the faculty in the SCM department.

The CSRO director's job responsibilities include:

- managing corporate relations and serving as the primary interface between the department and the approximately 250-300 firms that recruit from MSU annually;
- serving as departmental liaison to employers and Broad Career Management; involving appropriate faculty; and communicating, publicizing, and keeping Broad College Advancement apprised of company visits;
- outreach to firms to develop internships and full-time placements;
- collaborating with University and Broad College Advancement to increase external funding for scholarships and student events/trips; this includes working with the Advancement offices to attract corporate membership for the Supply Chain Council;
- organizing and managing activities of the Supply Chain Council, including events to increase engagement between senior SCM leadership in firms, professors and SCM students; coordinating the SCM Career Fair, which brings in 120 firms for full-time employment and internship recruiting;
- creating enhanced industry awareness of the excellence of the SCM program; aid the development team in funding initiatives, including visibility at national conferences;
- supporting company relations activities associated with the SCM Association (student organization);
- advising students with career preparation for full-time employment, internship opportunities, scholarship funding opportunities, student events, and corporate trips;
- representing the department to, 1) evaluate admittance into the SCM undergraduate major; 2) select SCM scholarship awardees; and 3) serve on college committees to support corporate relations management;
- supporting and enhancing existing undergraduate co-curricular activities and developing new (as needed) offerings to support MBA SCM concentration students;
- coordinating and grading (where appropriate) an internship co-op course and multiple 1 credit corporate electives.

Required Degree

Bachelors -Business or Engineering

Minimum Requirements

The position requires:

- A bachelor's degree, preferably in business or engineering
- 10 years of experience in supply chain management or supply chain related field
- Excellent computer skills, including Excel, Word, PowerPoint, Outlook and Adobe
- Excellent communication skills, both written and verbal

Desired Qualifications

The ideal candidate would be a self-starter, detail oriented, willing and able to pitch in when and however needed.

Required Application Materials

CV and cover letter

Special Instructions

Review of applications will begin on January 2, 2018 and continue until the position is filled.

For additional information, please contact Dr. [REDACTED]@msu.edu; 517-353-6381).

Department website: <https://supplychain.broad.msu.edu/>

POSTING DETAILS

Is this a no-post?:

☐ Yes ☒ No

Is this a pre-select?:

☐ Yes ☒ No

Open Until Filled?:

Open Until Filled

If a search firm will be used, please provide the firm details:

HEADCOUNT MANAGEMENT (Pool Posting)

Positions:

	Position no	Applicant	Application status
1	30387834		Hire documentation completed

SEARCH / SELECTION COMMITTEE

Search/Selection Committee Chair:

Email address: @MSU.EDU

Affirmative Action Advocate:

Search/Selection Committee Members:

Recipient

Lear Corporation Career Services 10008511:

Department Of Supply Chain Management 10008570:

ADDITIONAL VIEWERS

Additional users to view applicant materials:

Recipient

Privileges

No user selected.

USERS AND APPROVALS

Compliance panel facilitator:

Staffing Coordinator

Backup 1:

Email address: @MSU.EDU

Staffing Coordinator

Backup 2:

No user selected.

Primary Staffing Coordinator:*

Email address: @MSU.EDU

HR Analyst:*

Email address: @MSU.EDU

Completed by MSU HR -
Do not modify:*

To be selected by MSU HR ONLY

Please complete this form and attach it to all requests to establish a specialist position.

1. Specify minimum level of formal education and work experience or other qualifications required to meet the performance standards associated with this position.

Education (degree(s) and discipline or field of study): Master's or Ph.D. degree in transportation, engineering, or supply chain management with a strong focus in railway management.

Experience (number of years and type): five years working for a railroad or with significant management interactions with the railroad industry.

2. For outreach duties, specify the information being transferred and the audience: The Railway Management Prgm. specialists will generate new research regarding trends and practices in the rail industry. Using this research, the outreach role is to present the material in MSU and other executive development programs & in other industry activities including national/international industry conferences.

The following questions apply to the current academic year:

3. For teaching duties, specify whether: ☒ Credit ☒ Non-credit ☒ On-campus ☐ Off-campus

If credit, specify course number and number of credits: 6 credits; courses TBD

4. For research duties, is the person in this position specified as the principal or co-principal investigator on a research grant or contract? ☒ Yes ☐ No

PLACEMENT GUIDELINES (Use when listing duties and responsibilities on back of this form.)

1. TEACHING/ADVISING/CURRICULUM DEVELOPMENT

Teaching specialists provide instruction for credit courses. Teaching and related class preparation, grading, student evaluation, etc., are substantial continuing dimensions of ongoing responsibilities (i.e., occupying at least 30% of the time). These specialists are the instructors of record on each portion of courses on a regular basis entailing the time commitment referenced above. Occasional teaching assignments cannot satisfy assignment to this specialist category.

Advising specialists devote the preponderance of their time (50%+) to advising students on course selection, degree requirements, majors, etc., and/or to other instructional activities, e.g., tutoring, interpreting for students with disabilities or bilingual students, advising on academic developmental needs, and developing instructional strategies to assist academic progress. Advising may include career counseling, but this is incidental to the major focus of course and curriculum advice.

Curriculum development specialists provide content-related support to course, curriculum and/or instructional development activities. At least 30% of time must be devoted to these activities to satisfy assignment to this specialist category.

Beyond the assignments referenced above, time may be spent on research, administration, outreach, or other activities.

2. RESEARCH

Research specialists take a lead role on research projects, including developing grant proposals, and directing the research project with designation as principal investigator or performing position responsibilities which require a doctorate degree.

3. OUTREACH

Outreach specialists are responsible for disseminating the knowledge resources of the University to meet the knowledge needs of people outside the University.

Their work involves providing non-credit educational programs to off-campus students or client groups, including course development and presentation, and/or providing a linkage for those outside the University to identify and access faculty knowledge, resources, and research results. This can involve technology transfer which provides a linkage between external University publics and faculty research resources to help resolve complex technological issues and/or share technological or scientific knowledge. These duties must involve a time commitment of at least 30%.

In addition to these responsibilities, outreach specialists may be involved in proposal writing, resource identification, and data gathering. Outreach specialists also can be designated as principal investigators. They can be appointed through any college as part of the newly decentralized Lifelong Education program or through a college which has technological/research resources to share with the outside public.

DESCRIPTION OF DUTIES

Summarize the primary purpose of the position in a few sentences (i.e., why does the job exist?): The position exists to provide research and outreach leadership to guide MSU's Railway Management program. The program was created to extend MSU's leadership in supply chain management to include the managers and potential recruits for an industry that is taking a major role in enhancing sustainability.

List the duties and responsibilities of the position. Specify percentage of time devoted to each duty during the year and categorize each duty using this key: Tch = Teaching Credit Course; Adv = Advising; Cur = Curriculum Development; Rsc = Research; Out = Outreach Education or Technology Transfer; Oth = Other. Indicate particularly important duties and responsibilities by placing an asterisk (*) in the priority box. See front of form for placement guidelines.

EXAMPLES

	Tch	Adv	Cur	Rsc	Out	Oth	
#1 <u>25%</u> Priority ☒				✓			Serve as a principal investigator to conduct research in the area of composite materials fabrication.
#2 <u>30%</u> Priority ☐					✓		Provide in-service education programming for teachers and staff throughout the state.

	Tch	Adv	Cur	Rsc	Out	Oth	
#1 <u>25%</u> Priority ☐	X						Teach the railway management specialty courses for the MS in Supply Chain Management specialty masters program.
#2 <u>5%</u> Priority ☐			X				Change the course structure and content for the railway management specialty courses for the MS in Supply Chain Management.
#3 <u>35%</u> Priority ☐				X			Obtain Federal, state, and private sector grants to research practices and trends for the railroad industry. Develop and present papers and thought leadership documents for industry.
#4 <u>35%</u> Priority ☐					X		Develop and teach in management education programs and conferences to educate railway managers.
#5 <u>0%</u> Priority ☐						X	
% TOTAL Tch <u>25%</u> Adv <u>0%</u> Cur <u>5%</u> Rsc <u>35%</u> Out <u>35%</u> Oth <u>0%</u>							

USE ADDITIONAL PAGES IF NECESSARY

Publications

Below is a list of my published contributions in peer-reviewed journals and at conferences as well as a list of invited contributions to conferences or provision of a seminar. Three other manuscripts intended for journal publications are currently being prepared. Lead author(s) in **bold**.

Journal (all peer-reviewed)

- * [redacted] et al. (2017) Development of a very light rail vehicle. *Proceedings of the Institution of Civil Engineers - Transport*, 170(4), 1-12. doi: 10.1680/jtran.16.00038
- [redacted] (2016). Catenary Free Battery Electric Operation with Opportunity Charging for Light Rail Networks. *IEEE Transportation Electrification Community eNewsletter*
- [redacted] et al. (2016). Development and design of a narrow-gauge hydrogen-hybrid locomotive. *Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit*, 230(1), 181-192. doi: 10.1177/0954409714532921
- Authors in alphabetical order by last name. I was the lead author of the paper.
 - The described locomotive was developed by a team and my responsibilities included systems engineering, documentation, and writing of the journal paper. We were awarded the prize for the best paper in May 2014 by the College of Engineering and Physical Sciences, endowed at GBP 1,000.
 - We awarded the Richard Herbert Innes Prize of the Institution of Mechanical Engineers Railway Division in 2017, endowed at GBP 200. The prize recognizes the best paper on locomotive engineering.
- [redacted] (2016). Conceptual Propulsion System Design for a Hydrogen-Powered Regional Train. *IET Electrical Systems in Transportation*, 6(2), 56-66. doi: 10.1049/iet-est.2014.0049
- [redacted] (2014). Performance evaluation of the hydrogen-powered prototype locomotive 'Hydrogen Pioneer'. *Journal of Power Sources*, 250(0), 120-127. doi: 10.1016/j.jpowsour.2013.10.134.
- [redacted] (2013). Feasibility of discontinuous electrification on the Great Western Main Line determined by train simulation. *Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit*, 227(3), 296-306. doi: 10.1177/0954409712461341
- [redacted] (2012). Rail Freight in 2035 - Traction Energy Analysis for High Performance Freight Trains. *Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit*, 226(6), 568-574. doi: 10.1177/0954409712441753
- [redacted] (2012). Well-to-Wheel Analysis for Electric, Diesel and Hydrogen Traction for Railways. *Transportation Research Part D: Transport and Environment*, 17(1), 28-34. doi: 10.1016/j.trd.2011.09.002.

Conferences

- [redacted] (2018, April). *Executive Development: Railway Management Education*. Paper accepted for presentation at the International Seminar for Railway Education and Training, Birmingham, UK in April 2018.
- [redacted] (2015). *Very Light Rail Development*. Paper presented at the 10th International Hydrail Conference, Mooresville, NC, USA.
- [redacted] (2013) *Hydrogen for Railway Traction*. Paper presented at the 8th International Hydrail Conference, Toronto, ON, CA.
- [redacted] (2012) *Hydrogen on Track*. Paper presented at the 7th International Hydrail Conference, Birmingham, UK.
- [redacted] (2011). *The Utilisation and Penetration of Hydrogen to Power Railway Vehicles*. Paper presented at Low Carbon Earth Summit, Dalian, China.
- [redacted] (2011). *The Utilisation and Penetration of Hydrogen to Power Railway Vehicles*. Poster presented at the 7th Annual International Conference: Generating the Hydrogen Fuel Cell Society, Birmingham, UK.
- [redacted] (2010). *The Penetration and Utilisation of Hydrogen to Power Railway Vehicles*. Paper presented at the 6th International Hydrail Conference, Istanbul, Turkey.
- [redacted] (2010). *Review and Assessment of Hydrogen Propelled Railway Vehicles*. Paper presented at the 4th International Conference on Railway Traction Systems (RTS 2010), Birmingham, UK.

Invited Contributions

[REDACTED] (2017). *Overview of Alternative Motive Power and Hydrogen Fuel Cell Propulsion for Railway Vehicles*. Seminar delivered at RailTEC – University of Illinois at Urbana-Champaign, IL, USA, December 8. Recording available at <https://youtu.be/n48esivzdq0>

[REDACTED] (2017). *Hydrogen-Powered Railway Vehicles (Hydrail): A Vision*. Paper presented at the 12th International Hydrail Conference, Graz, Austria.

[REDACTED] & Isaac, R. (2017). *Freight Transportation by Rail: Motive Power, Traction, and Emissions*. Paper presented at the Strategies and Opportunities for Decarbonizing the World's Freight System Workshop, Pittsburgh, PA, USA.

[REDACTED] (2016). *Hydrogen for Railway Traction: A PhD at the Birmingham Centre for Railway Research and Education*. Paper presented at the 11th International Hydrail Conference, Birmingham.

[REDACTED] & Little, N. (2016). *Strategic Supply Chain Management: Insights and Opportunities for Rail Shippers and Providers*. Paper presented at the North American Rail Shippers Association 2016 Annual Meeting, Arlington, VA, USA.

[REDACTED] Kent, S., Hillmanssen, S., & Roberts, C. (2014). *Hydrogen for Railway Propulsion*. Paper presented at the New Zealand Rail 2014 conference, Auckland, New Zealand.