CURRICULUM VITAE

Joseph P. Domblesky, Ph.D. Associate Professor of Mechanical Engineering Marquette University Milwaukee, Wisconsin

A. <u>EDUCATION</u>

B.S., Industrial & Management Systems Engineering, 1983, Pennsylvania State University, University Park, PA.

M.S., Industrial & Management Systems Engineering, 1987, Pennsylvania State University, Thesis: *Analysis of Chip Breaking Parameters in Turning*, Advisor: Paul H. Cohen

Ph.D., Industrial & Systems Engineering, 1994, Ohio State University, Columbus, OH, Thesis: *Numerical and Experimental Modeling of Multiple Pass Radial Forging of Alloy 718*, Advisor: Rajiv Shivpuri

B. HONORS AND FELLOWSHIP

Society of Manufacturing Engineers Fellowship, 1984 Young Leaders Award; The Minerals, Materials, Metals Society (TMS), 1996 Professional Engineer License (Wisconsin) Awarded, 2003

C.

Visiting Professor, College of Materials Science & Technology (Summer 2016, Summer 2017, Summer 2018, Summer 2019), Nanjing University of Astronautics & Aeronautics – Nanjing, China

D. PROFESSIONAL EXPERIENCE

Process Modeling Engineer, Walker Forge; (6/2006 -1/2007) Clintonville, WI Project Manager, Center for Tooling & Precision Components; (1993-1995) Toledo, OH

Manufacturing Engineer/Tool Room Supervisor, McInerney Incorporated, (1988-1989); Grand Rapids, MI

Manufacturing Engineer, BOC Powertrain - General Motors Corporation, (1985-1987) Lansing, MI

Welding Engineer Intern, Oldsmobile Division - General Motors Corporation, (Summer 1984) Lansing, MI

E. REFEREED PAPERS (TWO OR MORE REVIEWERS)

- Domblesky, J.P., and Shivpuri, R., "Development and Validation of a Finite Element Model for Multiple Pass Radial Forging", *Journal of Materials Processing Technology*, Vol. 55, No. 3-4, December 1995, pp. 432-441.
- 2. Domblesky, J.P., Shivpuri, R., and Painter, B., "FEM Modeling of Radial Forging of Larg00009123 12 Tf(dial)-9(F)-3(orgme32er)5(n,)-9()]TJETQq0.00000912 0 612 T reb3(a)4(s")7 12 T

Chapters titled Cold Deformation and

- 10. Domblesky, J., Investigation of Fatigue Properties for Welded Aluminum Forging Preforms", ASME International Manufacturing Science and Engineering Conference, October 2008, Evanston, IL.
- 11. Domblesky, J., "Project Assisted Learning in Engineering A Manufacturing Example", ASEE Upper Midwest Conference, October 2009, Marquette University, Milwaukee, WI.

K. <u>SCIENTIFIC MEETINGS ATTENDED</u>

- 1. International Symposium on Superalloys 718, 625, and 706. Superalloy Processing. The Minerals, Metals, and Materials Society, June 1994. Pittsburgh, PA.
- 2. The Minerals, Materials, and Metals Society Annual Meeting. Materials Processing. Anaheim, CA. February 4-8, 1996.
- 3. 31st Edward Bergman Memorial Seminar. Metal Forming and Deformation Processing. Milwaukee, WI. May 5, 1997.
- 4. The Minerals, Materials, and Metals Society Fall Meeting. Materials Processing. Cincinnati, OH, October 11-15, 1997. Session Chairman: Aluminum Alloys.
- 5. Society of Automotive Engineers. International Automotive Manufacturing Conference. Detroit, MI. May 20-22, 1997.
- 6. Wire Association International Wire Technology 1999. Atlanta, GA.
- 7. Wire and Cable Technical Symposium. Wire and Cable Technology. June 5-7, 2000. Nashville, TN.
- 8. Wire and Cable Technical Symposium. Wire and Cable Technology. May 1416, 2001 Atlanta, GA
- 9. 2001 North Midwest Section ASEE Annual Conference. Entrepreneurship Opportunities and Challenges; Innovations in Engineering Education. September 27-29, 2001, Grand Forks, North Dakota.
- 10. Wire and Cable Technical Symposium. Wire and Cable Technology. May 1719, 2003. Atlanta, GA. Session Chairman: Special Processes.
- 11. International Conference on Advanced Materials & Processing Technologies, July 8-11, 2003, Dublin, Ireland.
- 12. Forging Industry Association Technology Conference and Exposition, Chicago, IL, November 2005.
- 13. Society of Automotive Engineers Aerotech Conference and Exposition, Fort Worth, TX, October 2005. This presentation received an Excellence in Oral Presentation Award from SAE.
- 14. SUR/FIN Technical Conference, American Electroplaters and Surface Finishers Society, Milwaukee, WI, September 2006.
- 15. ASME International Manufacturing Science and Engineering Conference, October 2008, Evanston, IL.

16. ASEE Upper Midwest Conference, October 2009, Marquette University, Milwaukee, WI.

L. <u>MEMBERSHIP IN LEARNED SOCIETIES</u>

Wire Association International	1998-2010
American Society of Mechanical Engineers	2005-2007
Society of Manufacturing Engineers	1996-2007
Institute of Industrial Engineers	2000-2001
i ASM International	1993-1997
The Minerals, Metals, and Materials Society	1993-1997

M. RESEARCH GRANTS AWARDED

2019-2021	Pending	MWERC - Advanced Die Casting Initiative Phase 2
2018-2020	\$78,515	FIERF - Laboratory Testbed to Develop "Smart" Robotic Forge
		Press Tenders
2017	\$33,000	MWERC – Advanced Die Casting Initiative Phase 1
2017	\$5,000	Milwaukee SPE – Plastics Curriculum Development
2016-2017	\$31,625	FIERF – Hydraulic Press Update & Experimental Investigation
		of Die Surface Friction
2015-2016	\$18,035	FIERF – Heavy Duty Truck Lightweighting & Mass Reduction
2013-2014	\$33,000	FIERF – Investigation of Temperature Measurement in Hot
		Forging
2011-2012	\$23,000	FIERF – Feasibility of Reheating in Large Ring Rolling
2011-2015	\$25,000	AIST – Ferrous Curriculum Development Grant
2010-2011	\$15,000	FIERF – Investigation of Machining Marks in Die Tooling
2007	\$2,000	NSF - Short Course Fellowship
2005-2006	\$5,000	WSGC - Aerospace Manufacturing Initiative
2005-2006	\$10,000	FIERF - Welded Forging Preforms
2003-2004	\$15,000	FIERF – Pilot Study of Friction Welded Preforms
2003	\$20,000	TRW Corp. – Flow Stress Modeling Nickel Alloys
2001-2002	\$5,904	WSGC- Investigation of FCAW in Space Welding
2001-2002	\$3,102	WSGC- Incorporating Space Science in Engineering Cou
2001	\$13,500	Browne & Sharpe Corp Metrology in Manufacturing
1999-2003	\$80,036	NSF - Re-engineering the Manufacturing Lab
1998-1999	\$23,500	Milwaukee Electric Tool Corp Sawzall Project Phase I a
1997-1998	\$3,500	Miller Electric – Development of a Welding Process Laboratory
1996	\$3,000	Textron Corp Optimization of Wire Drawing Variable

Panel Judge for The Minerals, Materials, and Metals Society Student Composite Material Design Competition, Cincinnati, OH. 1996.

Member, TMS "Shaping & Forming", Materials Design & Mfg. Committee Division (MDMD). 1997

Wire Association International

Served on Ferrous Management Committee IndustronNBT* n92p(Tf0 g4x3{C})-0912Te) TJE7

Served on Technical Committee

Served on Education Committee

Board of Directors Midwest Chapter Wire Association International (3 Year Term)

Conference Activities

- Session Chair, Aluminum Mechanical Properties II, TMS Annual Meeting, 1996, La Jolla, CA
- Session Chair, Welding & Joining I, Advanced Materials & Processing Conference, Las Vegas, NV. August 2006
- Organizing Committee, NAMRC 2006, Milwaukee, WI. May 2006
- Session Chair, Sensors in Manufacturing, NAMRC 2006, Milwaukee, WI. May 2006
- Session Chair, Materials Forming, ASME International Manufacturing Science and Engineering Conference, October 2008, Evanston, IL

Industrial Outreach

Instructor (2003- 20014) – Fundamentals of Forging. Sponsored by Forging Industry Association (CleveIndustry Association (Cleve

Instructor and Course Developer (1998), Fundamentals of Sheet Metal Forming, Sponsored by A.O. Smith Corporation for engineering personnel at Tower Automotive; Milwaukee, WI.

Academic Contributions

- Developed a new course; Metal Forming (INEN 159/MSEN 279)
- Developed a Welding Processes Laboratory Facility (now located in the Academic Support Facility) for MEEN/INEN 143 and INEN 185 which included acquisition of modern materials joining power supplies and ancillary process equipment donated by Miller Equipment Corp. which is an OEM manufacturer located in Wisconsin.
- Developed Manufacturing Learning Factory Laboratory Facility (located in the Academic Support Facility) for MEEN/INEN 143 which included refurbishment

Engineering and Performance, International Journal of Material Forming, International Journal of Pressure Vessels & Technology, International Journal of Robert Evans (5/03) Master of Science, Mechanical Engineering, **Thesis**: Fundamental Analysis of Vibratory Finishing Feng-Feng (5/99), Master of Science, Mechanical Engineering, **Thesis**: Numerical Modeling of the External Thread Rolling Process

Robyn Knie (12/09) Master of Science, Mechanical Engineering, Non-Thesis Option Megan Shaefer (5/09) Master of Science, Mechanical Engineering, Non-Thesis Option Jeremy Wittig (5/09) M