



MANUFACTURING
ENGINEERING
DIVISION



Opening
Gloria Wiens
Radu Pavel

MED Centennial Celebration 1920 - 2020



MANUFACTURING
ENGINEERING
DIVISION



Welcoming Remarks
ASME President
Mahantesh Hiremath

Welcoming Remarks



MANUFACTURING
ENGINEERING
DIVISION



The History of MED

Warren DeVries

Brad Kinsey

MED History



MANUFACTURING
ENGINEERING
DIVISION



State of MED

Radu Pavel (2019-2020)

Laine Mears (2020-2021)

State of MED



MANUFACTURING
ENGINEERING
DIVISION



2020 – MED 100 (FY20 / FY21)

2019 – 2020 (FY20)




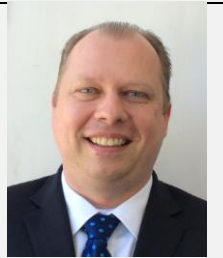

- Technical Committees – alignment with Smart Manufacturing trends
- Alignment of MSEC tracks with Technical Committees
- Advanced Manufacturing Track of IMECE merging with MED
- First Ehmman Medal Award
- Centennial Celebrations




Working through the COVID-19 Pandemic challenge
MSEC Cancelled / Papers published – ASME Courtesy

State of MED

Radu Pavel (2019-2020)

Laine Mears (2020-2021)

ASME MED Executive Committee Members (2019-2020)				
				
Chair	Vice-Chair	Program Chair	Treasurer	Secretary
Radu Pavel	Laine Mears	Moneer Helu	Frank Pfefferkorn	Barbara Linke
TechSolve, Inc.	Clemson University	National Institute of Science and Technology (NIST)	University of Wisconsin-Madison	University of California Davis
pavel@TechSolve.org	mears@clemson.edu	moneer.helu@nist.gov	frank.pfefferkorn@wisc.edu	bslinke@ucdavis.edu

		
New EC member elect	Communications	Newsletter Editor
Jarred Heigel	Mihaela (Miki) Banu	Gracious Ngaile
ThirdWave Systems	University of Michigan	NC State University
jarred.heigel@thirdwavesys.com	mbanu@umich.edu	gngaile@ncsu.edu



MANUFACTURING
ENGINEERING
DIVISION



The Technical Committees of MED (FY 20)

Additive Manufacturing

Chair: Jarred Heigel (Third Wave Systems)
Vice-Chair: Yayue Pan (U. Illinois at Chicago)

Advanced Materials Manufacturing

Chair: Srikanth Pilla (U. Clemson)
Vice-Chair: Mihaela (Miki) Banu (U. Michigan)

Biomanufacturing

Chair: Roland Chen (Washington SU)
Vice-Chair: Changxue Xu (Texas Tech U.)

Life Cycle Engineering

Chair: Nancy Diaz-Elsayed (U. South Florida)
Vice-Chair: Daniel Cooper (U. Michigan)

Manufacturing Equipment and Automation

Chair (Outgoing): Parikshit Mehta (Arconic)
Vice-Chair: Burak Sencer (Oregon State U.)
Incoming Vice-Chair: Chandra Nath (Maijker Corp.)

Manufacturing Processes

Chair (Outgoing): Wayne Cai (GM)
Vice-Chair: Ihab Ragai (PSU - Erie)
Incoming Vice-Chair: Jingjing Li (PSU-University Park)

Manufacturing Systems

Chair: Michael Brundage (NIST)
Vice-Chair: Hui Wang (Florida State U.)

Nano/Micro/Meso Manufacturing

Chair (Outgoing): Xinyu Liu (Lamar U.)
Vice-Chair: Rajiv Malhotra (Rutgers U.)
Incoming Vice-Chair: Ping Guo (Northwestern U.)

Quality and Reliability

Chair: Zeyi Sun (MUST)
Vice-Chair: Yong Wang (SUNY Binghamton)

State of MED

Radu Pavel (2019-2020)

Laine Mears (2020-2021)

FY21 – Current State of MED



MANUFACTURING
ENGINEERING
DIVISION



State of MED

Radu Pavel (2019-2020)

Laine Mears (2020-2021)

The Numbers

- Membership
 - Over 11,000 with Manufacturing as a discipline
 - Over 3000 primary members
- Conference
 - MSEC 2020
 - 226 papers, no presentation
 - MSEC 2021
 - 220 papers
 - >500 registrants (200+ students!)



MANUFACTURING
ENGINEERING
DIVISION



State of MED

Radu Pavel (2019-2020)

Laine Mears (2020-2021)

The Leadership

- Executive Committee FY21
 - Past Chair: Radu Pavel (TechSolve)
 - Chair: Laine Mears (Clemson U.)
 - Vice Chair: Moneer Helu (NIST)
 - Program Chair: Frank Pfefferkorn (U. Wisc.– Madison)
 - Treasurer: Barbara Linke (UC Davis)
 - Secretary: Jarred Heigel (Third Wave Systems)
 - **Incoming New Member (effective 07/01/2021):**
 - **Mihaela (Miki) Banu (U. of Michigan)**
- Communication: **Azadeh Seidai (Iowa State U.)**
- Newsletter Editor: Frank Pfefferkorn (UW-Madison)
- ASME Staff: Barbara Zlatnik, Andrew Koleba, Lori Lee





MANUFACTURING
ENGINEERING
DIVISION



State of MED

Radu Pavel (2019-2020)

Laine Mears (2020-2021)

The Fuel

- Technical Planning
 - MSEC 2020 = Barbara Linke, Karl Haapala
 - MSEC 2021 = Karl Haapala, Yong Chen
 - MSEC 2022 = Yong Chen, Binil Starly
- Conference Planning
 - MSEC 2020 = Sam Anand, Murali Sundaram
 - MSEC 2021 = Sam Anand, Murali Sundaram
 - MSEC 2022 = Martin Jun, Benxin Wu (Purdue)
- Technical Committees
 - 18 leaders, 2-year terms
- And so on...
 - Special events (Early Career Forum, WIAM, SMDC, Blue Sky, Panel organization)
 - Hundreds of reviewers, symposium organizers, award committee members, journal editors, SOTA authors, public policy participants, newsletter editing...



MANUFACTURING
ENGINEERING
DIVISION



Centennial Celebrations
Gloria Wiens

Centennial Celebrations



MANUFACTURING
ENGINEERING
DIVISION



Centennial Celebrations
Gloria Wiens

Centennial Celebrations

<https://event.asme.org/MSEC/About/MED-Centennial>



MANUFACTURING
ENGINEERING
DIVISION

Centennial Logo & Banner



Centennial Celebrations
Gloria Wiens





MANUFACTURING ENGINEERING DIVISION



Centennial Celebrations

Gloria Wiens

Provided by



The American Society of Mechanical Engineers



MSEC

Virtual Conference, Hosted by the University of Cincinnati

June 21, 2021 - June 25, 2021

Authors/Organizers
LOGIN

MED Centennial



The Manufacturing Engineering Division celebrates 100 years in 2020. A number of commemorative activities are planned, including a special anniversary publication, a series of articles in ASME's Mechanical Engineering Magazine, special events at the Manufacturing Science and Engineering Conference in 2021 in Cincinnati, OH.

MED is seeking sponsors that would like to support these activities and be recognized as one of the supporters of the Division and the value and importance of manufacturing.



MANUFACTURING ENGINEERING DIVISION



Centennial Celebrations

Gloria Wiens

Celebration Activities in-the-works:

I. Historical perspective

- a. History of MED 100 Years Booklet
- b. Special MED article(s) in Mechanical Engineering Magazine (*see below list*)
- c. [JMSE and JMNM special issues to document manufacturing technology advancement](#) (*Pre-views were presented at MSEC 2019*)
- d. [Centennial year \(2020\) MED Award Winners](#)
- e. JMSE and JMNM special issues to document manufacturing technology advancement (*Pre-views for JMSE were presented at MSEC 2019, update presentations at MSEC 2021; Preview for JMNM was presented at IDETC-CIE/MNS 2020: Micro/Nano Robotics and Manufacturing*)

II. Forward looking of manufacturing impact to the society

- a. Programming for conferences (such as IMECE, MSEC, etc.) with manufacturing-theme activities including keynotes and technical content (panels/presentations), including
 - [ASME Virtual IMECE 2020 Manufacturing Policy Forum, Wednesday, November 18, 6:00 – 8:00 pm \(EST\)](#)
 - For more information about ASME Government Relations visit [here](#)
 - [Women in Advanced Manufacturing Forum – MSEC 2021](#)
- b. ASME Wiki Project: "Unwritten Laws of Engineering for the 21st Century" For details, see link: [ASME Wiki Project](#)

III. Engaging the manufacturing engineering community

- a. Festivities – MED reception – historical sharing at MSEC in 2021!
- b. Hands-on student activities during conferences (MSEC, IDETC/CIE and/or IMECE)
 - [IDETC-CIE Student Hackathon \(Virtual, August\)](#)
 - [IMECE Student Hackathon \(Virtual\)](#)



MANUFACTURING
ENGINEERING
DIVISION



Centennial Celebrations
Gloria Wiens

ME Magazine: MED Centennial Celebrating – Influence of the MED ON ____ series

<i>Issue</i>	<i>Author – Topic</i>
August	Laine Mears – The Influence of the MED on Industry 4.0
September	Jian Cao – The Influence of the MED on Micro-Nano Manufacturing
October / November	John Sutherland – The Influence of the MED on Environmental Sustainability
December / January	Mike Molnar – The Impact of the MED on the Manufacturing USA
February / March	Scott Smith (series closer) – The influence of the MED on the Future of Manufacturing Engineering

Celebrate the 100-Year Anniversary of the Manufacturing Engineering Division

June 21, 2021 – 6 – 8 pm (ET)

Join us for a festive two-hour program, closing out a year-long commemoration of a century of MED!

Register today and save the [details to your calendar](#)

Open to all MED members and friends, we will recognize volunteers for their impact in MED and the manufacturing community and share memories over anniversary cake and champagne (bring your own!).

[Review the Program for the Celebration](#)



MANUFACTURING
ENGINEERING
DIVISION



Centennial Celebrations
Gloria Wiens

Thank you to the MED Centennial Sponsors



MTDG
MANUFACTURING TECHNOLOGY
DEPLOYMENT GROUP, INC.

MED & Friends
Frank Pfefferkorn
Amit Bagchi

MED continues seeking sponsors that would like to support these activities and be recognized as one of the supporters of the Division and the value and importance of manufacturing.

- [Read a letter of invitation to sponsor.](#)
- [Learn more about the sponsorship opportunities.](#)





MANUFACTURING
ENGINEERING
DIVISION



MED Awards Recognition

MED Awards Recognition

Moneer Helu

Jian Cao

John Sutherland



MANUFACTURING
ENGINEERING
DIVISION



Machine Shop Division
(1920-1940)
PED (1940-1995)
MED (1995-present)
Past Chairs
Gloria Wiens


MED Past Chairs



**MANUFACTURING
ENGINEERING
DIVISION**



Machine Shop Division
(1920-1940)
PED (1940-1995)
MED (1995-present)
Past Chairs
Gloria Wiens

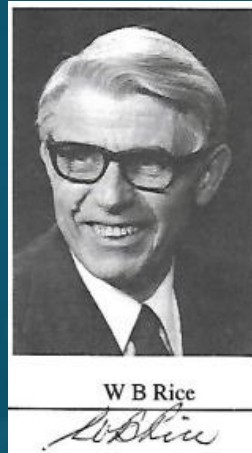
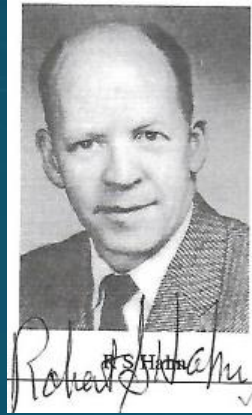
Society Year	Division Chair	Society Year	Division Chair
The "Roaring Twenties"		The War Years	
1920-1921	W. A. Viall	1940-1941	A. M. Johnson
1921-1922	O. W. Boston 	1941-1942	S. Einstein
1922-1923	F. O. Hoagland	1942-1943	S. Einstein
1923-1924	J. A. Smith	1943-1944	W. Seely
1924-1925	J. A. Smith	1944-1945	S. Einstein
1925-1926	W. F. Dixon	1945-1946	C. F. Kayan
1926-1927	J. W. Hook	1946-1947	A. C. Fegal
1927-1928	W. W. Tangeman	1947-1948	A. Weinselberg
1928-1929	L. C. Morrow	1948-1949	H. B. Lewis
1929-1930	W. J. Peets	1949-1950	L. A. Lachman
The Great Depression		Cold War	
1930-1931	F. W. Spencer	1950-1951	W. H. Oldacre
1931-1932	B. P. Graves	1951-1952	N. E. Martolletti
1932-1933	R. E. W. Harrison	1952-1953	S. M. Weckstein
1933-1934	NA	1953-1954	F. H. McBerty
1934-1935	NA	1954-1955	L. C. Lander
1935-1936	NA	1955-1956	J. F. Young
1936-1937	NA	1956-1957	H. Sizer
1937-1938	N. N. Guddara	1957-1958	F. H. McBerty
1938-1939	G. E. Nordenholt	1958-1959	L. C. Lander, Jr
1939-1940	NA	1959-1960	J. F. Young



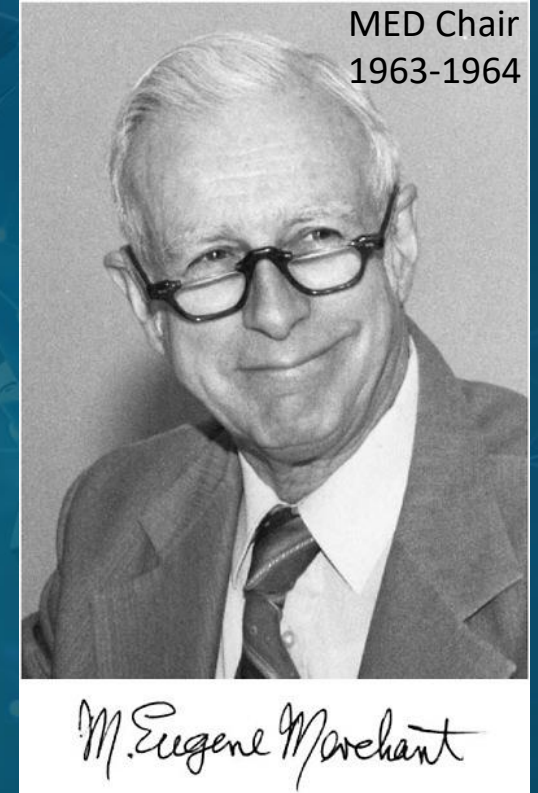
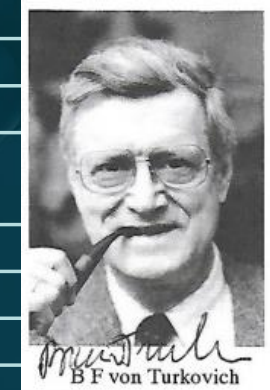
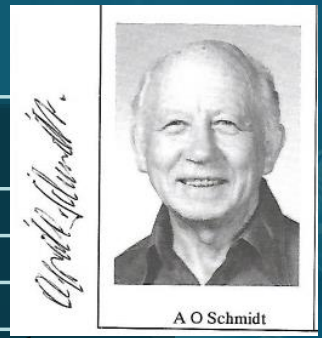
MANUFACTURING
ENGINEERING
DIVISION



Machine Shop Division
(1920-1940)
PED (1940-1995)
MED (1995-present)
Past Chairs
Gloria Wiens



The "Space Race"	
1960-1961	R. S. Hahn
1961-1962	A. O. Schmidt
1962-1963	J. Haydock
1963-1964	M. Eugene Merchant
1964-1965	E. A. Reed
1965-1966	W. F. Aller
1966-1967	L. P. Tarasov
1967-1968	R. B. Larson
1968-1969	J. C. McGinnis, Jr
1969-1970	R. O. Lane
Looking across the Pacific	
1970-1971	S. P. Rogacki
1971-1972	R. J. Andrews, Jr.
1972-1973	M. F. DeVries
1973-1974	W. B. Rice
1974-1975	G. F. Helgesen
1975-1976	B. F. von Turkovich
1976-1977	T. Altan
1977-1978	I. Ham
1978-1979	V. A. Tipnis
1979-1980	S. Ramalingam





MANUFACTURING
ENGINEERING
DIVISION



Machine Shop Division
(1920-1940)
PED (1940-1995)
MED (1995-present)
Past Chairs
Gloria Wiens



Productivity and Quality

1980-1981	D. T. Koenig
1981-1982	J. T. Black
1982-1983	R. P. McDermott
1983-1984	K. J. Weinmann
1984-1985	D. A. Dornfield
1985-1986	W. R. DeVries
1986-1987	R. Komanduri
1987-1988	G. D. Lahoti
1988-1989	B. E. Klamecki
1989-1990	M. C. Leu

Global Enterprises

1990-1991	M. R. Martinez-Heath
1991-1992	S. G. Kapoor
1992-1993	D. A. Blaser
1993-1994	N. H. Chao
1994-1995	K. F. Ehmann
1995-1996	W. E. Alzheimer
1996-1997	E. Kannatey-Asibu, Jr.
1997-1998	K. (Subbu) Subramanian
1998-1999	Gloria Wiens
1999-2000	Jay Lee



**MANUFACTURING
ENGINEERING
DIVISION**



Machine Shop Division
(1920-1940)
PED (1940-1995)
MED (1995-present)
Past Chairs
Gloria Wiens



Sustainability, Innovation and IT

2000-2001	John W. Sutherland
2001-2002	Richard J. Furness
2002-2003	Amit Bagchi
2003-2004	Jun Ni
2004-2005	Kevin Scott Smith
2005-2006	David Stephenson
2006-2007	Steven Liang
2007-2008	Michael Molnar
2008-2009	Jian Cao
2009-2010	Bin Wei

Customized, Connected and Affordable

2010-2011	Lawrence Yao
2011-2012	Matthew Bement
2012-2013	Cedric Xia
2013-2014	Brad L. Kinsey
2014-2015	Xiaoping Yang
2015-2016	Brian Paul
2016-2018	Shawn Moylan
2018-2019	Kevin Chou
2019-2020	Radu Pavel
2020-2021	Laine Mears








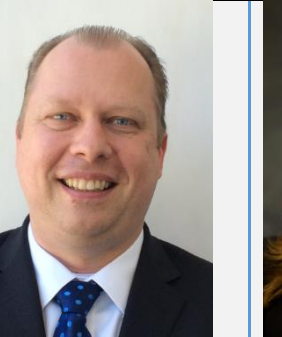

MANUFACTURING
ENGINEERING
DIVISION



Machine Shop Division
(1920-1940)
PED (1940-1995)
MED (1995-present)
Past Chairs
Gloria Wiens



ASME MED Executive Committee Members (2019-2020)

				
Chair	Vice-Chair	Program Chair	Treasurer	Secretary
Radu Pavel	Laine Mears	Moneer Helu	Frank Pfefferkorn	Barbara Linke
TechSolve, Inc.	Clemson University	National Institute of Science and Technology (NIST)	University of Wisconsin-Madison	University of California Davis
pavel@TechSolve.org	mears@clemson.edu	moneer.helu@nist.gov	frank.pfefferkorn@wisc.edu	bslinke@ucdavis.edu



MANUFACTURING
ENGINEERING
DIVISION



Editors Recognition
Radu Pavel

Editors of MED Journals



MANUFACTURING
ENGINEERING
DIVISION



Editors Recognition

Radu Pavel

Journal of Manufacturing Science and Engineering
(ISSN: 1087-1357), 1996 - Present

Journal of Engineering for Industry (ISSN: 0022-0817), 1959 - 1996

Transactions of the ASME (1.1880 - 80.1958)

- Y. Lawrence Yao (Current)
- Kornel F. Ehmann
- Shiv G. Kapoor
- David A. Dornfeld



MANUFACTURING ENGINEERING DIVISION



Editors Recognition

Radu Pavel

**Journal of
Engineering
for
Industry**

Editorial

This issue will mark the first under the direction of a new Technical Editor. THE JOURNAL OF ENGINEERING FOR INDUSTRY has changed substantially over the last several decades. In the early years the transactions periodicals were published twelve times a year with eight of the numbers appearing under the title of *Transactions of the ASME* and four as the *Journal of Applied Mechanics*. Little distinction was given to the papers in the fields comprising the JOURNAL OF ENGINEERING FOR INDUSTRY. Starting with Volume 81, in January 1959, the Transactions were published in five quarterlies—Series B was the JOURNAL OF ENGINEERING FOR INDUSTRY. Until Volume 107 the editorial function of the Journal was handled by the staff of the ASME. Each technical division publishing in the journal had a chairman for paper review who handled the peer review process and forwarded accepted papers to ASME for publication. With Volume 107, No. 3 (1985) I assumed the position of Technical Editor of the Journal. Previous Production Engineering Division paper review chairmen include Warren DeVries, Klauss Weinmann, Jay T. Black, Subbiah Ramalingam, and Vijay Tipnis. Previous to Volume 100 (1979) no associate editors/paper review chairs were listed for any division. Representing the Production Engineering Division, traditionally the strongest contributor to the JOURNAL OF ENGINEERING FOR INDUSTRY, I have tried to accommodate the many diverse interests of authors submitting papers to the journal.

The journal has changed dramatically in the last six years as well. A future issue will include a 10 year index of authors and paper titles (an annual index was an early feature dropped somewhere along the way). In that index the change in journal content will become clearly evident by reading through the diversity of titles published. Whereas the Volume 81 index included a predominance of manufacturing process-oriented papers on topics such as controlled contact cutting tools, machineability and machining economics, it also included design-oriented papers on such topics as refrigeration of cooling complexes, design of helical springs and vibration of vertical pressure vessels. Recent issues of the journal exhibit the same predominance of manufacturing papers without design papers but have a diversity of topics never before seen. Manufacturing has come of age in the last decade and the Journal, as one of the oldest in the area, has benefitted from the growth. Papers published now include the entire range of manufacturing from process modeling, sensors and control, and tooling to systems and production planning. This growth has posed special challenges to the editorial staff but the net effect has been, by all measures, a stronger journal.

It is in the middle of this growth that a new editor, Professor Shiv Kapoor of the University of Illinois at Urbana-Champaign, takes charge. I have known Professor Kapoor since our graduate student days at Wisconsin. He is an experienced, dedicated, and innovative manufacturing researcher who is very well suited to the task. To the many associate editors who really have made the Journal function over the last six years of my editorship I give a hearty thanks. To Shiv Kapoor I give my best wishes and look forward to more exciting changes.

David Dornfeld
Berkeley, California
August, 1991



MANUFACTURING
ENGINEERING
DIVISION



Editors Recognition
Radu Pavel

Journal of
Engineering
for
Industry

Editorial

Since ASME began publication of its Transactions as separate journals, the *Journal of Engineering for Industry* has served the academic and industrial communities long and well. The *Journal of Engineering for Industry* has incubated a number of the ASME journals like the *Journal of Mechanical Design* and *Journal of Vibration, Acoustics, Stress, and Reliability in Design* that spun off from it. For years, the *Journal of Engineering for Industry* has been the repository of archival knowledge on manufacturing process modeling, control and sensing in manufacturing systems, as well as activities in process planning, statistical modeling and quality. For the past 15 years, these topics have been the major focus of JEI. The technological needs of the industrial community have changed along with time. Publication of state-of-the-art research has responded to meet those needs. As we approach a new century and as Technical Divisions in the Manufacturing Group celebrate their diamond jubilees, we realize that although the content of the Journal reflects the current research, the title of the Journal should be expanded to more accurately reflect that content. We surveyed a number of the Journal's constituents, including: subscribers, authors, and reviewers of the Journal. The vast majority recommended that the name of the *Journal of Engineering for Industry* should be modified to a more appropriate name as the *Journal of Manufacturing Science and Engineering*.

The steps to change the name of the Journal were taken after careful deliberation and consultation and approval from the Publications Committee of ASME, the Manufacturing Tech-

nic Group, the Manufacturing Division Executive committee, and the Associate Editors of the Journal listed on the inside cover of this issue. Beginning with the May 1996 issue, the name change will be implemented. Our plan is to refer to the Journal as the *Journal of Manufacturing Science and Engineering* (formerly the *Journal of Engineering for Industry*) during a transition period of about one year.

The *Journal of Manufacturing Science and Engineering* will continue to publish high quality papers in the areas of manufacturing systems, planning and control, manufacturing process modeling and simulation, quality and reliability, sensors and automation, material handling, textile engineering and plant engineering and maintenance. We also hope that because of its historical position as the top archival journal in manufacturing, we can attract readers in new and emerging areas of manufacturing science and technology as well. We think that the new name is a positive change for our authors, subscribers, and readers. Regardless of your feeling about the new name, what I can promise you is that you will find the highest quality work in manufacturing published in the ASME *Journal of Manufacturing Science and Engineering*.

Shiv G. Kapoor
Technical Editor
Department of Mechanical and Industrial Engineering
University of Illinois at Urbana Champaign
Urbana, IL 61801

Journal of
Manufacturing
Science and
Engineering

Editorial

of the Journal to be published under
*Journal of Manufacturing Science and
Engineering for Industry*. The
current research focus of
the Journal. Many of our
have suggested the name
continue to receive the
area.

President, Manu-
favor. Professor
mittee of the
thanks for
change. I
outgoing
rasekar,
and K.
anai, K.
puri, D.
I. Woo;
evic, C.

Efforts of the associate technical editors have been exemplary.

The topics of current interest to the *Journal of Manufacturing Science and Engineering* are: forming and shaping, melt processing, material removal and joining processes, metrology, quality and reliability, sensors and automation including cnc, robotics and manufacturing process planning, material handling, textile engineering, and plant engineering and maintenance. Papers that deal with new and emerging areas of manufacturing science and technology are especially welcome.

I hope that you will continue to submit your highest quality work to the Journal. Please feel free to contact me if you have any questions regarding the new name and send your suggestions for the Journal.

Shiv G. Kapoor
Technical Editor
Department of Mechanical and Industrial Engineering
University of Illinois at Urbana-Champaign
Urbana, IL 61801

Associate Editors of JMSE (1996-present), JEI (1959-1996)



MANUFACTURING
ENGINEERING
DIVISION



Editors Recognition

Radu Pavel

Anand, Sam	University of Cincinnati	01 May 19 To 01 May 22
Bukkapatnam, Satish	Texas A&M University	27 Oct 19 To 27 Oct 22
Chang, Robert	Stevens Institute of Technology	27 Aug 20 To 27 Aug 23
Chen, Hongqiang	GE Global Research	01 Aug 17 To 01 Aug 20
Cheng, Gary J.	Purdue University	01 May 20 To 01 May 23
Chou, Kevin	University of Louisville	01 Jul 18 To 01 Jul 21
Djurdjanovic, Dragan	The University of Texas at Austin	29 Aug 17 To 29 Aug 20
Dubé, Martine	École de technologie supérieure	15 Apr 21 To 15 Apr 24
Haapala, Karl R.	Oregon State University	27 Oct 19 To 27 Oct 22
Huang, Qiang	University of Southern California	01 Aug 20 To 01 Aug 23
Jin, Ran	Virginia Tech	01 Jul 20 To 01 Jul 23
Karandikar, Jaydeep	Oak Ridge National Laboratory	01 Jun 20 To 01 Jun 23
Korkolis, Yannis	The Ohio State University	01 Jul 18 To 01 Jul 21
Li, Jingjing	Pennsylvania State University	10 Dec 20 To 10 Dec 23
Mears, Laine	Clemson University	01 Jul 18 To 01 Jul 21
Ozel, Tugrul	Rutgers State Univ	15 Apr 21 To 15 Apr 24
Pavel, Radu	TechSolve	01 Aug 20 To 01 Aug 23
Schmid, Steven	University of North Carolina at Charlotte	16 Apr 19 To 16 Apr 22
Schmitz, Tony	University of Tennessee, Knoxville	15 Apr 18 To 15 Apr 21
Sencer, Burak	Oregon State University	17 May 21 To 17 May 24

Associate Editors of JMSE (1996-present), JEI (1959-1996)



MANUFACTURING
ENGINEERING
DIVISION



Editors Recognition

Radu Pavel

Wagner, Vincent	ENIT	17 Mar 21 To 17 Mar 24
Brambley, Michael	PACIFIC NORTHWEST NATIONAL LABORATORY	01 Jul 09 To 01 Jul 10
Cai, Wayne	General Motors	01 Jan 17 To 01 Jan 20
Camelio, Jaime	Virginia Polytechnic Institute and State University	01 May 13 To 01 May 16
Cao, Jian	Northwestern Univ	01 Apr 09 To 01 Apr 12
Ceglarek, Dariusz	University of Warwick	01 Nov 08 To 01 Nov 09
Chen, Dr. Shaochen	University of California San Diego	01 Apr 10 To 01 Apr 11
Cho, Dong-Woo	Pohang University of Science and Technology	01 Jun 05 To 01 Jun 08
Danai, Kourosh	Univ. of Massachusetts	08 Dec 08 To 08 Dec 09
Davies, Matthew A.	University of North Carolina, Charlotte	01 Nov 04 To 01 Nov 05
De Meter, Prof. Edward C.	The Pennsylvania State University	01 Jan 04 To 01 Jan 05
Ehmann, Kornel	Northwestern Univ	01 Jan 13 To 01 Jan 14
Endres, William J.	Michigan Technological University	01 Jan 09 To 01 Jan 10
Fromentin, Guillaume	Arts et Metiers Institute of Technology	01 Aug 17 To 01 Aug 20
Gao, Robert	Case Western Reserve University	01 Jul 12 To 01 Jul 15
Guo, Y.B.	The University of Alabama	01 Jul 15 To 01 Jul 18
Hu, S. Jack	University of Michigan	01 Aug 06 To 01 Aug 07
Huang, Yong	University of Florida	15 Oct 13 To 15 Oct 16
Joshi, Suhas S.	Indian Institute of Technology Bombay	01 May 10 To 01 May 13
Kinsey, Brad L.	University of New Hampshire	01 Jul 12 To 01 Jul 15

Associate Editors of JMSE (1996-present), JEI (1959-1996)



MANUFACTURING
ENGINEERING
DIVISION



Editors Recognition

Radu Pavel

Kurfess, Thomas	Oak Ridge National Lab	01 Jun 05 To 01 Jun 06
Kwon, Patrick	Michigan State University	01 Jul 12 To 01 Jul 15
Landers, Robert	Missouri Univ. of Science and Technology	15 Oct 10 To 15 Oct 13
Lee, Yuan-Shin	North Carolina State University	01 Jul 09 To 01 Jul 12
Levi, Raffaello	DISPEA - Politecnico di Torino	01 Nov 10 To 01 Nov 13
Li, Dr. Wei	Univ of Texas at Austin	01 Mar 11 To 01 Mar 14
Li, C. James	RPI	01 Apr 06 To 01 Apr 09
Lin, ZhongQin	Shanghai Jiao Tong University	01 Apr 10 To 01 Apr 11
Marsh, Eric R.	Penn State University	01 Mar 11 To 01 Mar 14
Melkote, Shreyes	Georgia Tech	01 Dec 10 To 01 Dec 11
Ngaile, Gracious	North Carolina State University	01 May 16 To 01 May 19
Ozdoganlar, Burak	Carnegie Mellon University	01 Mar 11 To 01 Mar 14
Paul, Brian K.	Oregon State Univ	01 Jan 05 To 01 Jan 08
Pei, Zhijian	Texas A&M University	01 Jan 16 To 01 Jan 19
Qian, Xiaoping	University of Wisconsin	01 Jul 15 To 01 Jul 18
Raman, Shivakumar	Univ. of Oklahoma	01 Jan 10 To 01 Jan 11
Realff, Mary Lynn	Georgia Institute of Technology	01 Jun 05 To 01 Jun 08
Samuel, Johnson	Rensselaer Polytechnic Institute	01 Aug 17 To 01 Aug 20
Shi, Jianjun	Georgia Institute of Technology	01 Aug 14 To 01 Aug 17
Shih, Albert	University Of Michigan	01 Jan 05 To 01 Jan 08

Associate Editors of JMSE (1996-present), JEI (1959-1996)



MANUFACTURING
ENGINEERING
DIVISION



Shin, Yung	Purdue Univ	01 Jan 08 To 01 Jan 09
Skerlos, Steven J.	University of Michigan	01 Jul 12 To 01 Jul 13
Smelser, Ronald E.	The University of North Carolina at Charlotte	01 Jan 01 To 01 Jan 04
Sutherland, John	Purdue University	
Turng, Lih-Sheng (Tom)	University of Wisconsin-Madison	01 Jul 09 To 01 Jul 12
Wang, Jyhwen	Texas A&M University	01 Apr 10 To 01 Apr 13
Wei, Bin	GE Global Research Center	01 Jul 09 To 01 Jul 12
Wiens, Gloria	University of Florida	01 Mar 10 To 01 Mar 11
Yao, Donggang	Georgia Institute of Technology	01 Jul 15 To 01 Jul 18
Yi, Allen Y.	The Ohio State University	15 Oct 13 To 15 Oct 16
Zhou, Jack	Drexel University	01 Jul 12 To 01 Jul 15

Editors Recognition

Radu Pavel



MANUFACTURING
ENGINEERING
DIVISION



Editors Recognition

Radu Pavel

Journal of Micro and Nano-Manufacturing

- Nicholas Fang (current)
- Jian Cao (founding EiC)

June 2018 – “ASME Journal of Micro- and Nano-Manufacturing (JMNM) is in its 6th publication year. I want to take this opportunity to thank the founding Editor, Professor Jian Cao for her excellent leadership and outstanding achievements during her term. Professor Cao successfully maintained a rigorous submission review process while supporting a high standard of content, and she also took excellent leadership by representing the journal at international manufacturing conferences and important industry meetings, together with the members of the Editorial Board. Thank you, Jian!”

Associate Editors of JMNM (2013-present)



MANUFACTURING
ENGINEERING
DIVISION



Editors Recognition

Radu Pavel

Chen, Shih-Chi	The Chinese University of Hong Kong	15 Apr 21 To 15 Apr 24
Matsumura, Takashi	Tokyo Denki University	01 Nov 19 To 01 Nov 22
Rho, Junsuk	Pohang University of Science and Technology	01 Jan 20 To 01 Jan 23
Zhang, TieJun	Khalifa University of Science and Technology	01 Apr 21 To 01 Apr 24
Coulter, John P.	Lehigh University	01 Jul 13 To 01 Jul 16
Dimov, Stefan	University of Birmingham	01 Jan 15 To 01 Jan 18
Engel, Ulf	Friedrich-Alexander-Universität Erlangen-Nürnberg	01 Jan 15 To 01 Jan 18
Jun, Martin	Purdue University	01 Jan 16 To 01 Jan 19
Lin, Liwei	UC-Berkeley	01 Jan 12 To 01 Jan 15
Lucca, Don A.	Oklahoma State University	01 Jan 15 To 01 Jan 18
Mayor, J. Rhett	Georgia Institute of Technology	01 Jan 12 To 01 Jan 14
Mead, Joey	University of Massachusetts Lowell	15 Apr 17 To 15 Apr 20
Merrill, Marriner	US Naval Research Laboratory	01 Jan 18 To 01 Jan 19
Min, Sangkee	University of Wisconsin-Madison	01 Jan 14 To 01 Jan 17
Nelson, Brad	ETH	01 Jan 12 To 01 Jan 15
Ohmori, Hitoshi	The Institute of Physical and Chemical Research	01 Jan 12 To 01 Jan 14
Sharma, Ashutosh	Indian Institute of Technology Kanpur	01 Jan 12 To 01 Jan 14
Wei, Bin	GE Global Research Center	01 Jul 13 To 01 Jul 16
Xu, Chengying	North Carolina State University	01 Jan 16 To 01 Jan 19



MANUFACTURING
ENGINEERING
DIVISION



Into the 2nd Centennial

Laine Mears
Moneer Helu

What's Next for MED?



MANUFACTURING
ENGINEERING
DIVISION



Closing Remarks & Toast
Gloria Wiens

MED Centennial Team

MED Centennial Team



MANUFACTURING
ENGINEERING
DIVISION



Closing Remarks & Toast
Gloria Wiens

MED Centennial Planning Committee

Chair: Gloria Wiens

Co-Chair: Radu Pavel

MED Chairs: Kevin Chou and Laine Mears

ASME Staff: Barbara Zlatnik

MED Centennial Celebration – June 21, 2021

Co-Leads: Laine Mears, Radu Pavel, Gloria Wiens

Program: Jian Cao, Warren DeVries, Moneer Helu, Brad Kinsey, John Sutherland

ASME Staff: Barbara Zlatnik

MED Logo

MED: Kevin Chou (Lead), Brian Paul

ASME Design Team

MED Banner

MED: Kevin Chou (Lead), Brian Paul, Radu Pavel, Gloria Wiens

NCDMM: Dean Bartles, Scott Deutsch

ASME Design Team

MED Centennial Team



MANUFACTURING
ENGINEERING
DIVISION



MED Centennial History

Warren DeVries (Lead) and Brad Kinsey (Co-Lead)

Content: MED Past Chairs and Executive Committee, and Friends

ME Magazine – 5 MED Articles

Series Title: **MED Centennial Celebrating – Influence of the MED ON _____** .

MED: Scott Smith (Lead)

Authors: Laine Mears, Jian Cao, John Sutherland, Mike Molnar, Scott Smith
ME Magazine Editorial Team

ASME Wiki Project - "Unwritten Laws of Engineering" - update

Mike Molnar (Lead), Crowd Sourcing (MED Volunteers)

ASME: Philip DiVietro (and staff)

JNMN – Invited Presentation

IDETC-CIE 2020: MNS Micro/Nano Robotics and Manufacturing Symposium

Abstract/Title: **"Micro and Nano Manufacturing Beyond 2.D"**

Authors: Jian Cao, Nicholas Fang and Irene Fassi (presenter)

Closing Remarks & Toast

Gloria Wiens

MED Centennial Team



MANUFACTURING
ENGINEERING
DIVISION



JMSE Special Issue: 100th Anniversary Issue of the Manufacturing Engineering Division

[Pre-views for JMSE were presented at MSEC 2019, update presentations at MSEC 2021]

Editor-in-Chief: Y. Lawrence Yao

Guest Editors: Laine Mears and Albert Shih

Editorial assistant: Emily R. Bosco

18 Review articles:

Authors: 89

Yusuf Altintas, Jorge F. Arinez, Moslem Azamfar, A. K. Balaji, Mihaela Banu, Kira Barton, J. J. Beaman, D. L. Bourell, Erhan Budak, Jian Cao, Srinivasan Chandrasekar, Robert C. Chang, Qing Chang, Rahul Chaudhari, Roland Chen, Gary J. Cheng, Daniel Cooper, Santosh Devasia, Mahmoud Parto Dezfouli, Jianshe Feng, Robert X. Gao, R. Ghosh, Changsheng Guo, Karl R. Haapala, Moneer Helu, Scott Hibbard, Andrew Honegger, Aihua Huang, Yong Huang, Scott Hucker, Baoyang Jiang, Martin B. G. Jun, I. S. Jawahir, Shiv G. Kapoor, Y. Kaynak, Zekai Murat Kilic, M. J. Klopstein, D. Kovar, Thomas Kurfess, Robert G. Landers, Jay Lee, Shuting Lei, Wei Li, Barbara Linke, T. Lu, D. A. Lucca, James B. Mann, Rachid M'Saoubi, Brigid Mullany, Suck-Joo Na, Saigopal Nelaturi, Jun Ni, O. Burak Ozdoganlar, Prabhakar Pagilla, O. Riemer, Dinakar Sagapuram, P. K. Saha, Christopher Saldana, Kyle Saleeby, Johnson Samuel, S. R. Schmid, Tony Schmitz, J. Schoop, C. C. Seepersad, Zhongde Shi, Albert Shih, Yung C. Shin, Jaskaran Singh, Steven J. Skerlos, William Sobel, Gabor Stepan, Tatsuya Sugihara, John W. Sutherland, Bruce Tai, Masayoshi Tomizuka, Anirudh Udupa, Koushik Viswanathan, Mike Vogler, Russell Waddell, J. Wang, Benxin Wu, Chengying Xu, Hitomi Yamaguchi, Yu-Ping Yang, Y. Lawrence Yao, Jianjing Zhang, Wei Zhang, Yu Ming Zhang, Fu Zhao

Closing Remarks & Toast

Gloria Wiens

MED Centennial Team



MANUFACTURING
ENGINEERING
DIVISION



Closing Remarks & Toast
Gloria Wiens

2020 ASME-CIE Hackathon (in conjunction with IDETC/CIE 2020)

Organizers: CIE SEIKM Technical Committee (Bryan O'Halloran, Yan Lu, Zhuo Yang, Zhenghui Sha), Chris McComb, Dehao Liu, Faez Ahmed, Anh Tran; IDETC/CIE Organizing Committee (Andreas Muller, Jim Schmiedeler)

Judging Team: Lucia Mirabella, Anant Mishra, Brandon Lane, Yan Lu, Michael Lawton, Rahul Rai, Dazhong Wu

ASME Staff: Barbara Zlatnik, Jessica Barnes, Andrew Koleba, Timothy Graves

Sponsors: ASME/TEC, CIE; and MED-endorsed

MED Representatives: William Emblom, Radu Pavel

2020 ASME-CIE Hackathon (in conjunction with IMECE 2020)

Organizers: ASME-CIE Hackathon Committee (Zhenghui Sha, Yan Lu, Zhuo Yang, Chris McComb, Dehao Liu, Faez Ahmed, Anh Tran, Bryan O'Halloran, Dazhong Wu, Binyang Song); IMECE Organizing Committee (Chris Depcik, Marriner Merrill)

Judging Team: Lucia Mirabella, Anant Mishra, Brandon Lane, Yan Lu, Michael Lawton, Rahul Rai, Dazhong Wu

ASME Staff: Barbara Zlatnik, Jessica Barnes, Andrew Koleba, Timothy Graves

Sponsors: ASME/TEC (DMM & ESS), CIE, MED, IMECE/AMT

AMT Host: William Emblom

MED Centennial Team



MANUFACTURING
ENGINEERING
DIVISION



Closing Remarks & Toast
Gloria Wiens

IMECE 2020 – Virtual Manufacturing Policy Forum

Co-Organizers: Shawn Moylan, Gloria Wiens

Advanced Manufacturing Track (AMT) Host: William Emblom

Moderator: Thomas Kurfess

Panelists: Asha Balakrishnan, Andy Bicos, Connie Lausten, Marc Santos, Steven Schmid

Sponsors: ASME Manufacturing Public Policy Task Force, IMECE/AMT

ASME Government Relations: Anne Nadler

MSEC 2021 – Women in Advanced Manufacturing (WIAM) Forum

Organizers: Annie Dian-Ru Li (Lead), Megan McGovern, Maya Reslan, Barbara S. Linke, Gloria Wiens

Workshop Moderator: Crystal Morrison

Panelists/Speakers: Jennifer Fielding, Jian Cao, Delcie Durham, Chandra Brown, Sarah Krasley

Post Forum: Brigid Mullany (SME), Suzy Marzano (SME), Emily Boyd (VOLT)

Sponsors: ASME/TEC, MED, SME



MANUFACTURING
ENGINEERING
DIVISION



Closing Remarks & Toast
Gloria Wiens

MED Centennial Team

Thank you to the MED Centennial Sponsors



MTDG

MANUFACTURING TECHNOLOGY
DEPLOYMENT GROUP, INC.

MED & Friends
Frank Pfefferkorn
Amit Bagchi

ASME Event Sponsors/Hosts

Technical Engineering Communities (TEC)

Divisions: MED and CIE; plus IMECE/AMT

External: SME, MSEC/NAMRC 2019 and 2020-21 Conference Hosts



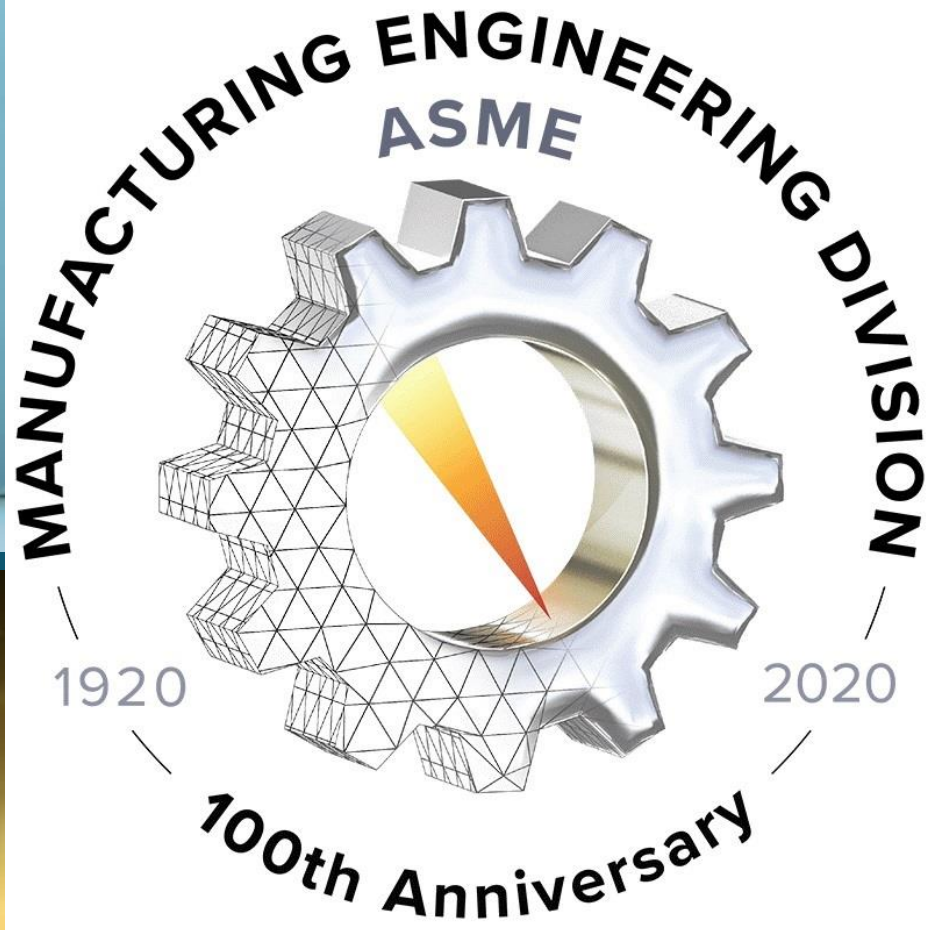
MANUFACTURING
ENGINEERING
DIVISION



Closing Remarks & Toast
Gloria Wiens

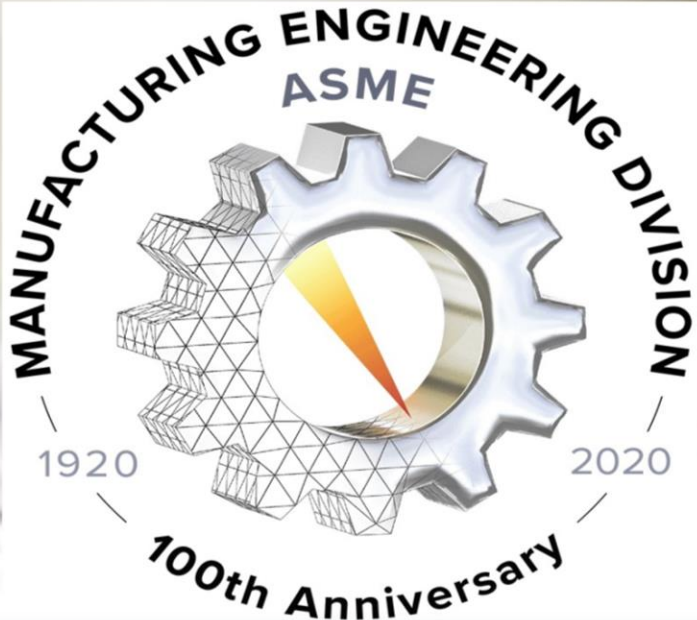
MED 75th (1995)





CHEERS
TO
100
YEARS!

Cheers
to 100
Years!



ASME® 2021 MSEC
Manufacturing Science and
Engineering Conference

CONFERENCE
June 21–25, 2021
HOSTED BY
University of Cincinnati
Cincinnati, OH, USA





MANUFACTURING
ENGINEERING
DIVISION



Open Mic
Gloria Wiens

OPEN Mic



MANUFACTURING
ENGINEERING
DIVISION



MED Centennial
Sponsor

Dean Bartles





MANUFACTURING
ENGINEERING
DIVISION



Trivia
Gloria Wiens

In 1995, MED established an annual Student Manufacturing Design Competition (SMDC) with its inaugural event as part of the MED 75th anniversary celebration. MED had the honor of the President of ASME, Daniel Koenig (114th president and first former division chair to serve) presenting the awards during the MED dinner.

Name the 1st place winner(s) of the inaugural competition?

- a) D. Kennedy, J. Chinn – Lake Superior University
- b) R. Ivester – University of Massachusetts – Amherst
- c) L. Locke, G. Gandhi, J. Garcia, J. Thomas, R. Hay, J. Lee – University of Florida
- d) J. Koppers, C. Hoffman – Rensselaer Polytechnic Institute



MANUFACTURING
ENGINEERING
DIVISION



Trivia
Gloria Wiens

Answer: b)

Robert Ivester 1995

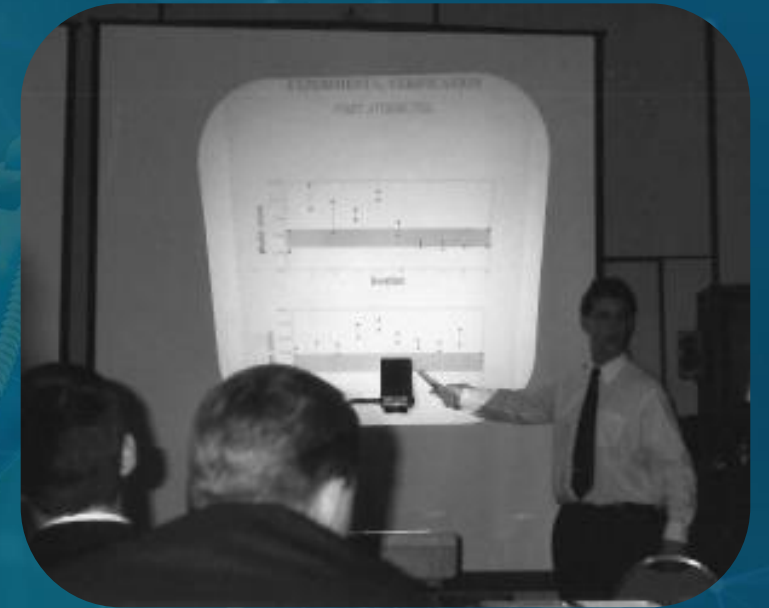


PHOTOGRAPH (LEFT TO RIGHT)

Back row:
Daniel Koenig, President of ASME
Robert Ivester, University of Massachusetts (1st Place Winner)
William Connelly, Western Washington University
Bill Alzheimer, Chair of ASME Manufacturing Engineering Division
Brian Rulifson, North Carolina State University
James W. McDowell, Jr., University of Cincinnati
Jason Harris, University of Idaho
Dwight Blaser, General Motors
Gloria Wiens, Organizer of ASME/MED Student Manufacturing Design Competition

Front row:
Geoffrey Case, Western Washington University (3rd Place Winner)
Scott Savoie, Drexel University
Jason Sontheimer, Drexel University
Kedrick Robinson, Southern University
Tom Bonkenburg, Rensselaer Polytechnic Institute
Sean Harris, University of Idaho

Nov. 16, 1995





MANUFACTURING
ENGINEERING
DIVISION



MED Centennial
Sponsor

Krishnamoorthy (Subbu) Subramanian

STIMS
Institute

Science based **T**echnology,
Innovation and **M**anagement **S**olutions



BLUEPRINT
2000





MANUFACTURING
ENGINEERING
DIVISION



Trivia
Radu Pavel

In 2018, the ASME DMM Segment Leadership Team awarded the Manufacturing Engineering Division \$8,400 from its TEC Development Fund to support the proposal for a “Forum on Women in Advanced Manufacturing”.

Who prepared and submitted the proposal for Woman in Advanced Manufacturing Forum that takes place at MSEC since 2019?

- a) Brad Kinsey
- b) Shawn Moylan
- c) Kevin Chou
- d) Barbara Linke



MANUFACTURING
ENGINEERING
DIVISION



Trivia
Radu Pavel

ANSWER

a)

b)

c) Kevin Chou

d)





MANUFACTURING
ENGINEERING
DIVISION



MED Centennial
Sponsor

MED & Friends

Frank

Pfefferkorn



MANUFACTURING
ENGINEERING
DIVISION



Trivia
Laine Mears

In what year was ASME MSEC first co-located with the SME NAMRC conference (hosts of said conference ineligible to answer)?

- a) 2006
- b) 2009
- c) 2011
- d) 2013

Bonus: What was the venue?



MANUFACTURING
ENGINEERING
DIVISION



Trivia

Laine Mears

In what year was ASME MSEC first co-located with the SME NAMRC conference (hosts of said conference ineligible to answer)?

a) 2006

b) 2009

c) 2011

d) 2013

← ← **ANSWER**

Bonus: What was the venue?

Oregon State University (OSU)



MANUFACTURING
ENGINEERING
DIVISION



MED Centennial
Sponsor

MED & Friends

Amit Bagchi



MANUFACTURING
ENGINEERING
DIVISION



Trivia
Gloria Wiens

ASME Staff:

Millie DeVita
Noha El-Ghobashy
Barbara Zlatnik



52%

1991-1992 PED Executive Committee Members: (Left to Right) Shiv G. Kapoor, Dwight A. Blaser, Mildred H. DeVita (ASME Liaison), William E. Alzheimer, Nien-Hua Chao and Kornel F. Ehmann.



MANUFACTURING
ENGINEERING
DIVISION



Open Mic
Gloria Wiens

OPEN Mic Others want to share?



MANUFACTURING
ENGINEERING
DIVISION



Hangout



&

Mingle

