

**American Society
for
Precision Engineering**

1985-2019

1987, Dallas, TX

1988, Atlanta, GA

1989, Monterey, CA

1990 Rochester

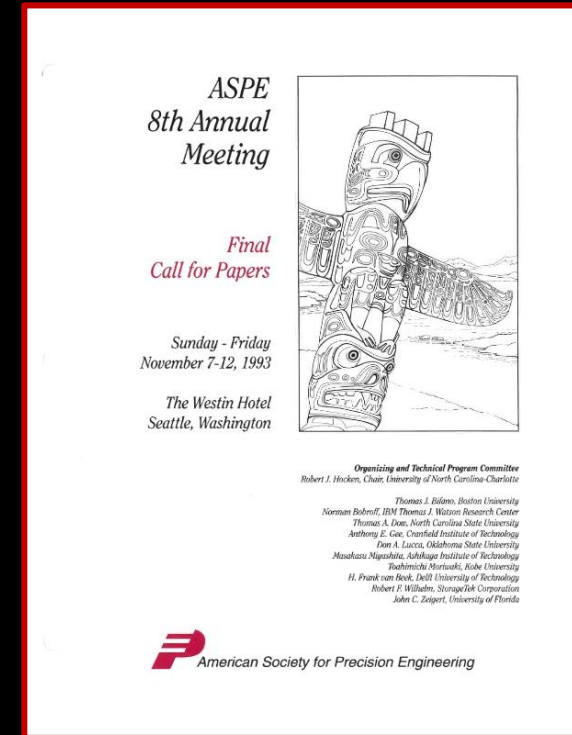
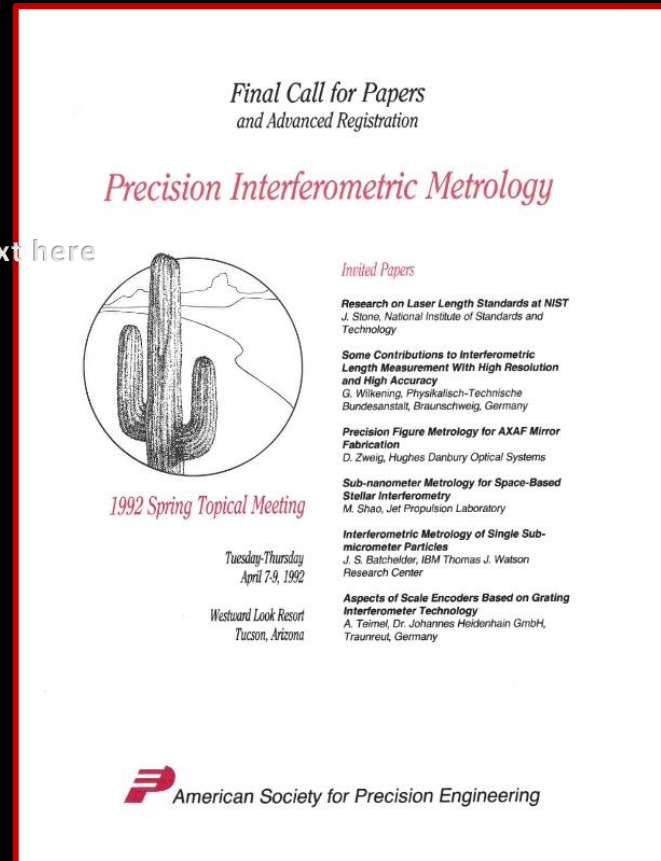


1991 Santa Fe



Cover Drawings by Erika Layne

1992 Tucson



1993 Seattle

1994, Cincinnati, OH

1995, Austin, TX

ASPE 11th Annual Meeting

Final
Call for Papers

Saturday - Thursday
November 9 -14, 1996

Monterey Convention Center and
Doubletree Hotel at Fisherman's Wharf
Monterey, California

Organizing and Technical Program Committee:
Robert C. Wilhelm, Chair,
University of North Carolina at Charlotte

Jeffrey W. Carr, IBM Corporation
Kirsten M. Carr, Ford Research Laboratory
James F. Cuffins, University of Alabama
Thomas A. Das, North Carolina State University
Joseph D. Drescher, Pratt & Whitney
Anthony E. Gee, Cranfield University
David Grigg, Digital Instruments
Andreas J. Hazelton, Sandia National Laboratory
Lowell P. Howard, Nat'l Institute of Standards and Technology
Jung-Min Lee, Seoul National University
Don A. Lacro, Oklahoma State University
Dan B. Lattrell, 3M Company
Nichole M. Miller, Michigan Technological University
Robert Palkay, Sandia National Laboratory
Stuart T. Smith, University of North Carolina at Charlotte
Togama Shigeo, Tokyo A&M University
H. Frank van den Broek, Delft University of Technology
Hong-Yang You, National Cheng Kung University

The 1996 American Society for Precision Engineering Annual Meeting will provide a forum for presentation and discussion of new technical information and achievements in precision engineering. The meeting will introduce new techniques, processes, and products while identifying engineering problems in measurement, control, and fabrication that are at the current limits of achievable precision. The program includes a series of oral presentations and poster paper presentations, tutorials on precision engineering topics, exhibits displaying the state of the art in precision engineering, a commercial session for industrial presentations, an open forum, several social events, and tours of local precision engineering facilities.

Papers are being solicited in the technical areas listed. Topics related to education or historical perspectives on precision engineering are also appropriate. Papers will be considered for oral presentation or poster presentation.

Two student scholarships will be available to full-time graduate students enrolled in an accredited university. The grants will include waiver of conference registration and tutorial fees, and a stipend to assist with travel, lodging and meal expenses. Application deadline is March 15, 1996. For forms and guidelines contact ASPE Headquarters.

Technical Topic Areas:
Computational Metrology
Controls and Sensors
Dimensional Metrology
Grinding, Polishing, and Lapping
Instrument and Machine Design
Interferometry
Machining and Machine Tool Metrology
Microelectromechanical Devices
Modeling and Simulation of Precision Processes
Nanotechnology
Novel Processes
Optics
Precision Component Fabrication
Scanned Probe Microscopy
Surface Metrology

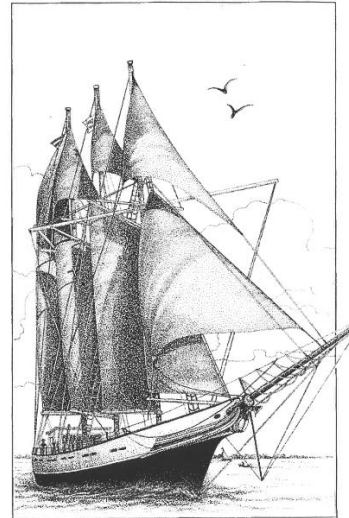


1996 Monterey, CA



1997 Norfolk, VA

1997 ANNUAL MEETING
OCTOBER 5-10, 1997
NORFOLK, VIRGINIA
AMERICAN SOCIETY FOR PRECISION ENGINEERING

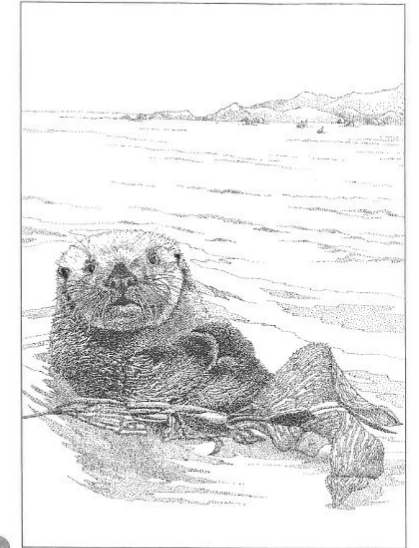


1998, St Louis, MO



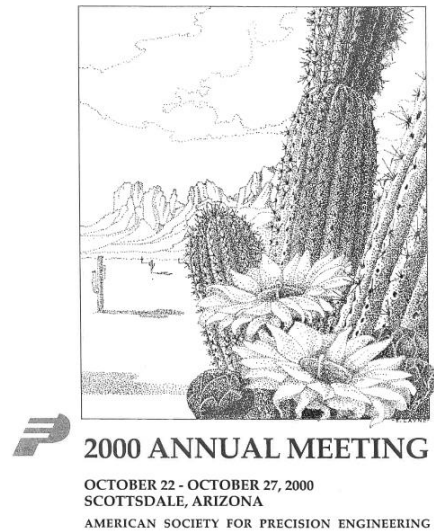
1999 Monterey, CA

1999 ANNUAL MEETING
OCTOBER 31 - NOVEMBER 5, 1999
MONTEREY, CALIFORNIA
AMERICAN SOCIETY FOR PRECISION ENGINEERING



ITAL COPY

2000 Scottsdale



2001 ANNUAL MEETING
NOVEMBER 10 - NOVEMBER 15, 2001
CRYSTAL CITY, VIRGINIA
AMERICAN SOCIETY FOR PRECISION ENGINEERING

2001 Crystal City,
Arlington, VA



2002 St. Louis, MO

2003, Portland, Oregon

2004, Orlando, Florida

2005, Norfolk, Virginia

2006, Monterey, California

2007, Dallas, Texas

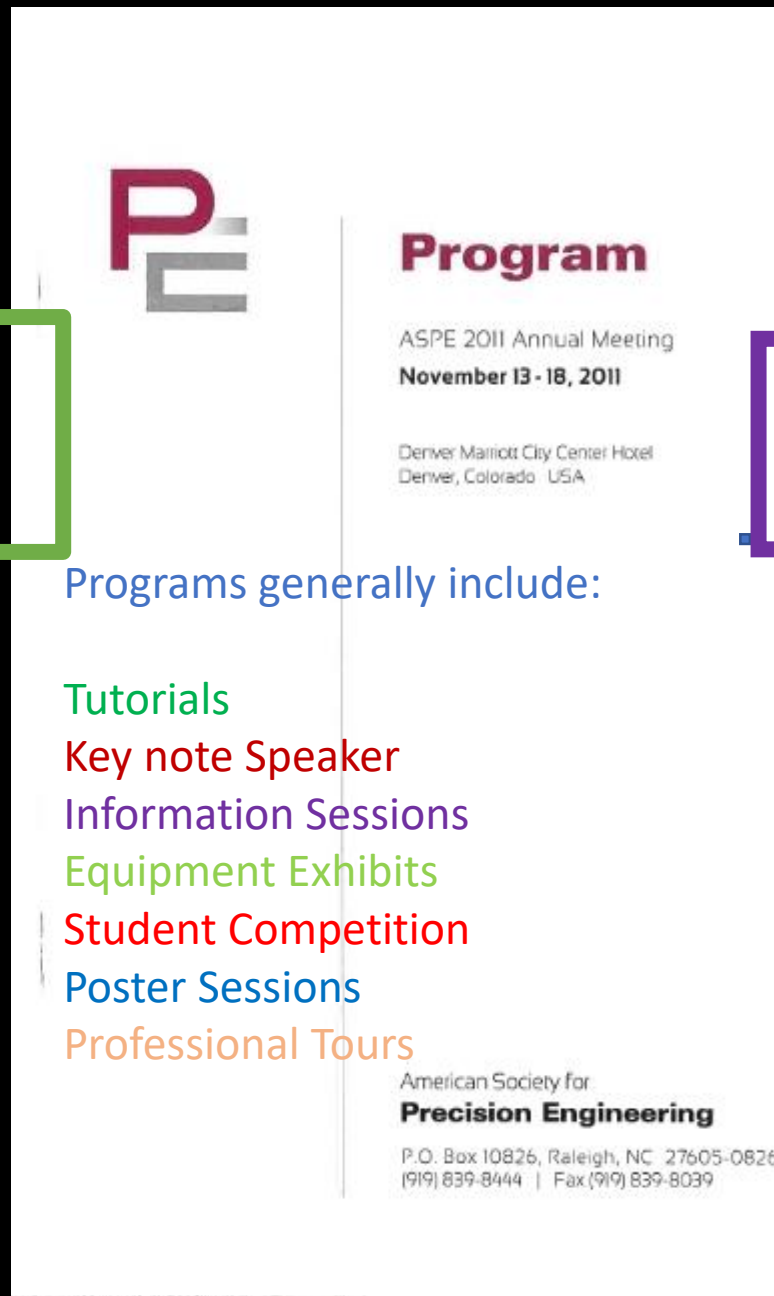
2008, Portland, Oregon

2009, Monterey, California

2010
Atlanta



2011
Denver



2012
San Diego

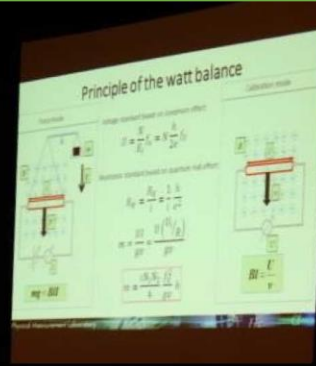
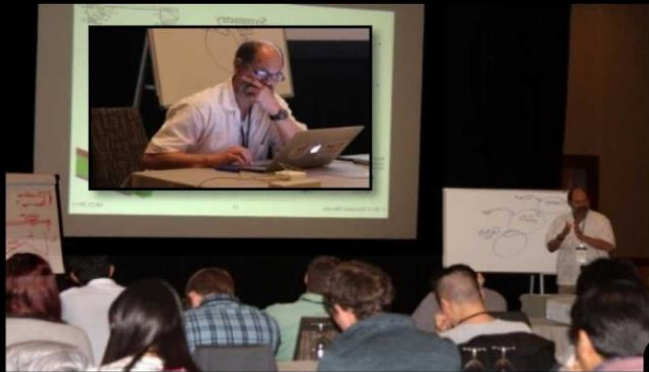




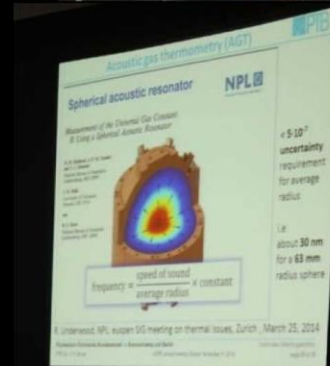
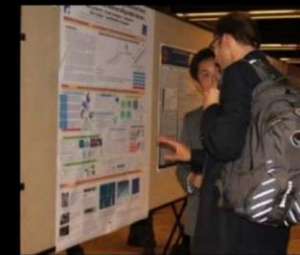
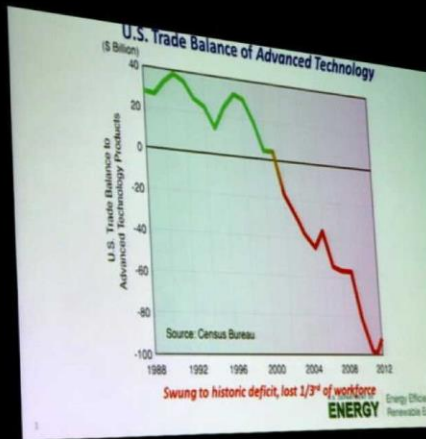
ASPE Meeting - 2013

Minnesota Hyatt
Science Museum,
Poster Session






ASPE 2014 Boston



ASPE Lifetime Achievement Award



Thomas A. Dow
North Carolina State University


The ASPE Lifetime Achievement Award is presented to individuals who have made significant contributions to the field of Precision Engineering. Dr. Thomas A. Dow is regarded worldwide as a founding father, a leading spokesperson and a top expert in the field of precision engineering.

After receiving his PhD degree from Northwestern University in 1972, Dr. Dow joined the Tribology Section of Battelle Columbus Laboratories and worked there for ten years. His seminal publications and ASME-published text on the mechanics of lubrication and wear in sliding contacts lead to the ASME Lubrication Division Newkirk Award in 1976 for contributions to metrology. These activities were his entry points into what was then the brand new field of precision engineering.

Dr. Dow joined the faculty at North Carolina State University in 1982 and established the first national academic research center, Precision Engineering Center, dedicated to precision engineering research and education. Dr. Dow's most notable early work was the development and demonstration of the fast-tool servo for machining non-rotationally symmetric optical surfaces. He was one of the first to integrate this concept into a diamond turning machine and the technique has since become indispensable in many ultraprecision applications. His work on servomechanisms and force transduction in diamond machining laid the foundation for his subsequent analytical, numerical, and experimental research on mechanisms of material removal at nanometer length scales. He is well known for developing models and measurement methods that relate achievable surface finish to diamond tool sharpness and nanoscale cutting forces. He developed a theory for ductile response in nominally brittle materials that led to a counterintuitive but now widely accepted model for ductile regime grinding. His landmark paper on that topic has been cited more than 500 times by others in the field. More recently he also developed models and experimental methods to study other new technologies such as vibration assisted machining and nanocoating.

Professor Dow's sustained commitment to precision engineering education has had a remarkable impact on the field. His inspiring pedagogy and rigorous educational approach has helped to launch the careers of dozens of aspiring precision engineers. He has always engaged all of his students in "active learning," well before that practice was popularized in engineering curricula. His students take field trips to organizations to see firsthand the challenges and opportunities associated with careers in precision engineering. His advisees generally feel more like apprentices than students. He works side by side with them in the lab, sharing insight and guiding progress. His broad practical mechanical engineering experience serves both as a model and as a resource.

Dr. Dow was one of the founders of the American Society for Precision Engineering and has acted as the Executive Director for the past 30 years.



Program

30th ASPE Annual Meeting
November 1-6, 2015

Hyatt Regency Austin
Austin, Texas, USA

American Society for
Precision Engineering

P.O. Box 10826, Raleigh, NC 27605-0826
(919) 839-8444 | Fax (919) 839-8039


ASPE Lifetime Achieve- ment Award



ASPE 2015

2
0
1
5

2016,
Portland,
Oregon



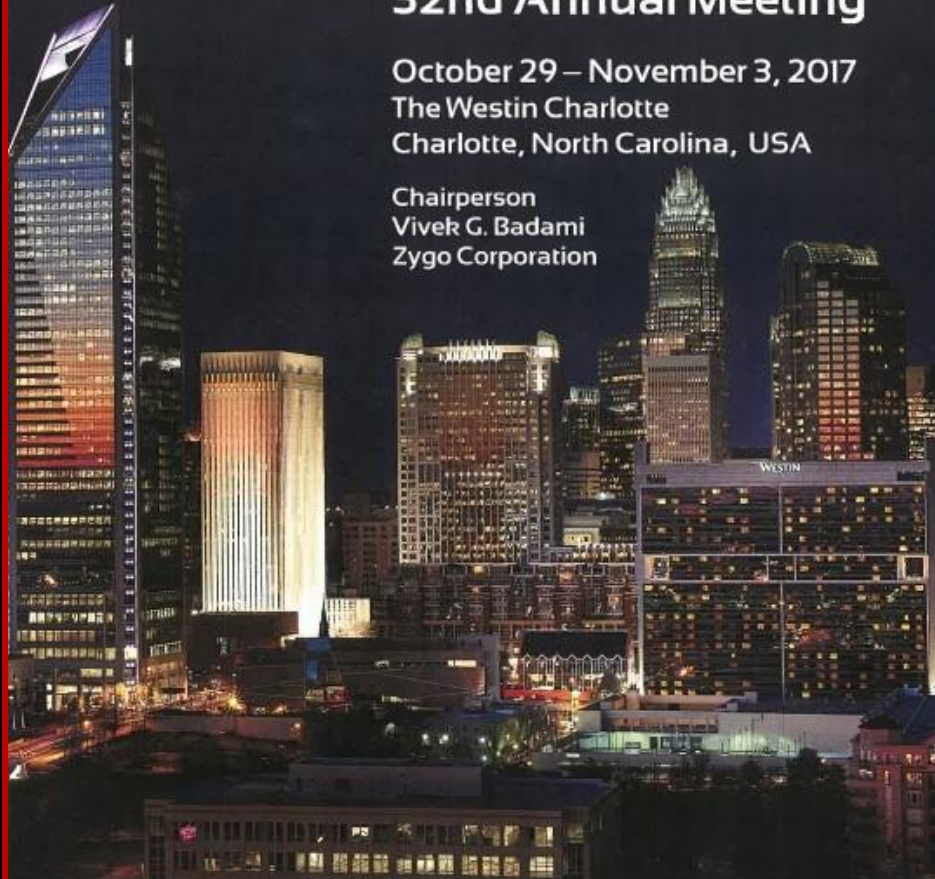
American Society for
Precision Engineering

2017

32nd Annual Meeting

October 29 – November 3, 2017
The Westin Charlotte
Charlotte, North Carolina, USA

Chairperson
Vivek G. Badami
Zygo Corporation



301 Glenwood Ave., Suite 205, Raleigh, NC 27603
P.O. Box 10826, Raleigh, NC 27605-0826
(919) 839-8444, www.aspe.net



American Society for
Precision Engineering

33rd Annual Meeting

November 4-9, 2018
Red Rock • Casino • Resort • Spa
Las Vegas, Nevada, USA

Chairperson: Kate M. Medicus
Optimax Systems, Inc.



301 Glenwood Ave., Suite 205, Raleigh, NC 27603
P.O. Box 10826, Raleigh, NC 27605-0826
(919) 839-8444, www.aspe.net

Photo courtesy of Las Vegas News Bureau

2017, Charlotte, NC

2018, Las Vegas

Tom is Presented
The Legacy Award, 2018

Tom retires from Executive Director
position
after 33rd annual meeting.



ASPE
Pittsburgh
2019

Education

Empowerment

Understanding

Friendships