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Committee B09 Metal Powders and Metal Powder Products

75th Anniversary

www.astm.org/COMMITTEE/B09

ASTM Committee B09 - Metal Powders and Metal Powder Products

Seventy-Five-Year History

The formation of a standing committee on metal powders and metal powder products resulted from numerous suggestions to the Society that standardization was needed in the fast-growing powder metallurgy field, particularly to cover satisfactory methods of evaluating the unique essential properties of both the powders and the resulting compacts and finished parts. The members of the Society in the Buffalo area sponsored a Symposium on Powder Metallurgy, in Buffalo, NY, on March 3, 1943, with a resulting publication comprising the papers and discussion presented at the symposium. In view of the interest shown and in response to requests that work in this field be undertaken, a special study committee met in New York, NY, on July 22, 1943, under the chairmanship of J.R. Townsend, reviewed the situation, and recommended to the ASTM Executive Committee that a standing committee on powder metallurgy be organized, which recommendation was approved with the following scope of activities:

Scope

The formulation of specifications and methods for metal powders and metal powder products.

W.A. Reich, General Electric Co., and W.R. Toeplitz, Bound Brook Oil-Less Bearing Co., were appointed temporary chairman and temporary secretary, and an organizational meeting was held in New York, NY on February 22, 1944.

In order to adequately cover the various phases of powder metallurgy, the following subcommittee structure was approved:

- Subcommittee I on Nomenclature and Technical Data
- Subcommittee II on Metal Powders
- Subcommittee III on Metal Powder Products

Subsection:

- Bearings
- Structural Parts
- Cemented Carbides
- Friction Materials
- Electrical Parts

The later-named Subcommittee B09.07 on Friction Materials was subsequently disbanded in 1990 when these materials no longer fully utilized powder metallurgy materials and processes.

In 1985, Subcommittees B09.11 on Near Full Density Powder Metallurgy Materials (including powder forged and injection molded materials), and Subcommittee B09.12 on Rapidly Solidified Materials, were formed to address the standardization needs of these emerging technologies. After a short time, Subcommittee B09.12 was disbanded as this technology did not burgeon and no new standardization needs were identified.

B09 has maintained a liaison relationship with Committee E29 on Powder and Spray Characterization for many years, due to the obvious overlap of interest between the two committees. Recently, B09 liaison with the new Committee F42 on Additive Manufacturing was established, as this new technology uses many of B09's standards. Most recently, B09 and F42 launched a new proficiency testing program for Additive Manufacturing and Powder Metallurgy to address new uses of metal powders. B09 also maintains a loose liaison with Committee A01

on Steel, Stainless Steel and Related Alloys, which are sometimes produced by powder metallurgy methods.

Subcommittee B09.09, the U.S. Technical Advisory Group to ISO Technical Committee 119 on Powder Metallurgy, was formed in 1993. This subcommittee initially provided representation at TC119 meetings through volunteer retiree members of B09, with travel generously funded by the Metal Powder Industries Federation (MPIF). B09.09 now continues active U.S. representation in ISO via company-sponsored volunteers, with MPIF providing ISO participation fees.

Over the years, the subcommittee structure has transformed into the 8 current technical subcommittees:

B09.01 Nomenclature and Technical Data

B09.02 Base Metal Powders

B09.03 Refractory Metal Powders

B09.04 Bearings

B09.05 Structural Parts

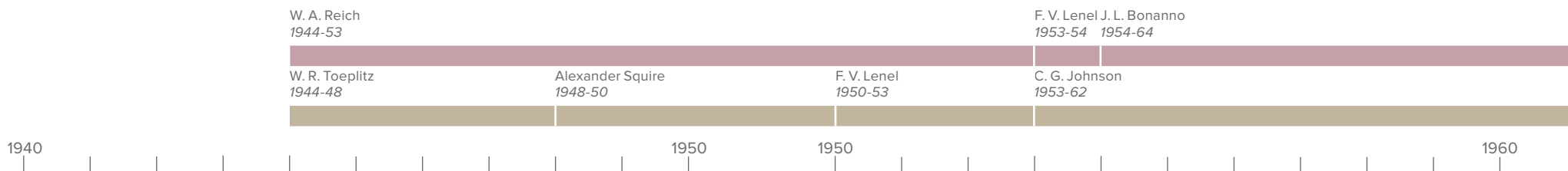
B09.06 Cemented Carbides

B09.09 US TAG for ISO/TC 119 on Powder Metallurgy

B09.11 Near Full Density Powder Metallurgy Materials

B09 Elected Officers Timeline, 1944-Present

 = Chairman	 = Second Vice-Chairman	 = Membership Secretary
 = First Vice-Chairman	 = Secretary	 = Assistant Secretary



First Standards

A tentative Specification for Metal Powder Sintered Bearings (Oil Impregnated), B202, one of the first B09 published standards, was replaced by what is now known as B439 Standard Specification for Iron-Base Powder Metallurgy (PM) Bearings (Oil-Impregnated).

Four of the original B09 test methods published in 1946 are still active within B09:

- **B212-17** Standard Test Method for Apparent Density of Free-Flowing Metal Powders Using the Hall Flowmeter Funnel
- **B213-17** Standard Test Methods for Flow Rate of Metal Powders Using the Hall Flowmeter Funnel
- **B214-16** Standard Test Method for Sieve Analysis of Metal Powders
- **B215-15** Standard Practices for Sampling Metal Powders

Newer standards published within B09 include:

- **B963-17** Standard Test Methods for Oil Content, Oil-Impregnation Efficiency, and Surface-Connected Porosity of Sintered Powder Metallurgy (PM) Products Using Archimedes' Principle
- **B964-16** Standard Test Methods for Flow Rate of Metal Powders Using the Carney Funnel
- **B988-18** Standard Specification for Powder Metallurgy (PM) Titanium and Titanium Alloy Structural Components

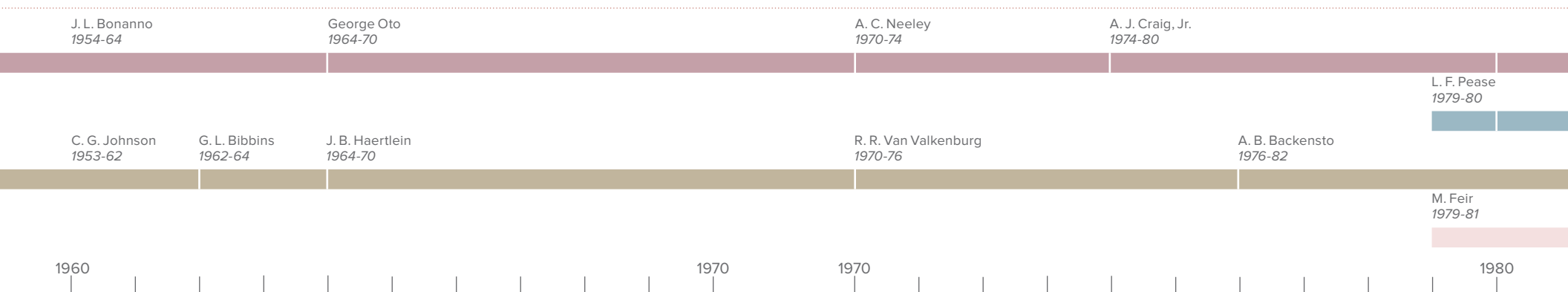
Committee B09 currently has 58 published standards. New uses for metal powders continue to challenge the committee to think about new areas in need of standardization.

B09 Leadership

B09 has been fortunate to have had excellent leadership throughout its history. The Chairman of B09 is limited to three consecutive two-year terms and most chairmen have served consecutive terms which resulted in significant longevity within the Chairman position.

Of special note is the fact that Subcommittee B09.11 on Near Full Density Powder Metallurgy Materials has had only one chairman, W. Brian James, since its inception in 1985, and that Subcommittee B09.03 on Refractory Metal Powders has had only two chairmen in its entire history, Bill Buerkel to 1992 and Frank Venskytis since 1992.

Several B09 members served in various other ASTM capacities and leadership opportunities furthering the mission of the Society. Frank Venskytis served a term on our Committee on Standards (COS) in 2000-2002 followed by Sherri Bingert serving in 2005-2007. Tony Thornton served a term as a member on COS in 2008-2010 and on our Board of Directors in 2011-2013. Mike Brisson served a term on COS in 2016-2018. Frank Venskytis also served a term on the Award of Merit Committee (which meets annually to select award recipients from the list of submitted nominations) in 2007- 2009.



Membership Awards

ASTM has established a set of awards to recognize members for their accomplishments. These awards are presented to members, typically at one of the semi-annual meetings, after nomination by their peers. ASTM International Society Awards are created by the ASTM International Board of Directors to meet specific recognition needs which have broad applications to the overall Society and therefore cannot be addressed by individual technical committees.

Award of Merit

The Award of Merit was established in 1949 by the ASTM International Board of Directors and is the highest society award granted to an individual member for distinguished service and outstanding participation in the ASTM International committee activities. Recipients also receive the honorary title of fellow.

James A. Thomas President’s Leadership Award

The ASTM President’s Leadership Award was established by the ASTM Board of Directors in 2007 to recognize extraordinary leadership within the first five years of an individual’s association with ASTM International. This award is to acknowledge individuals who, early in their ASTM career, have significantly advanced the Society’s mission through extraordinary accomplishment, example, and vision. The Award signifies the promise of continued success of ASTM International, made possible through the inspiration and positive contributions of new volunteers.

Frank W. Reinhart Award

This Society Recognized Award is administered through the ASTM Committee on Standards (COS) and is given to a technical committee, subcommittee, or ASTM International member who has made an outstanding and unusual contribution to ASTM International in the area of terminology standardization.

Award of Merit

1958	Fritz V. Lenel	1994	J. Charles Webster
1960	William A. Reich	1996	Victor C. Straub
1962	Frederick N. Rhines	1999	James W. Kratofil
1964	Carl G. Johnson	2000	Frank J. Venskytis
1965	Joseph L. Bonanno	2001	W. Brian James
1978	William A. Buerkel	2004	Anthony W. Thornton
1985	Norbert A. Arnold	2010	Harry D. Ambs
1986	Athan Stosuy	2011	Craig W. Hudson
1987	Arthur B. Backensto	2015	Sherri R. Bingert
1989	Leander F. Pease	2018	Joseph Tauber
1991	William C. Muller		

James A. Thomas President’s Leadership Award

2015	Jane LaGoy
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Frank W. Reinhart Award

2017	W. Brian James
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Service Award COS

2002	Frank J. Venskytis
2007	Sherri R. Bingert
2010	Anthony W. Thornton
2018	Michael J. Brisson

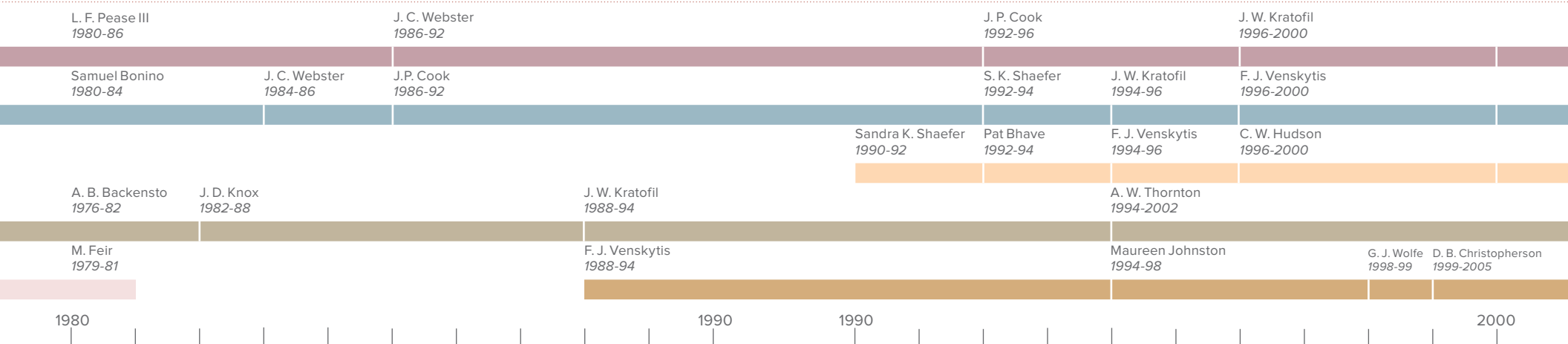
Service Award

Board of Directors

2013	Anthony W. Thornton
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Howard Sanderow Memorial Award for Meritorious Service

2009	Howard Sanderow
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Award of Appreciation

1998	Harry D. Ambs
1998	William Q. Judge
1999	Leander F. Pease
2000	James W. Kratofil
2002	Pat Picariello
2004	Vernon C. Potter
2005	Craig W. Hudson
2005	Norbert A. Arnold
2005	William A. Buerkel
2005	W. Brian James
2006	Harry D. Ambs
2006	William Q. Judge
2006	Erhard Klar
2006	James W. Kratofil
2006	Michael P. Schloder
2007	Denis B. Christopherson
2008	Thomas M. Kennedy
2009	W. Brian James
2012	Craig W. Hudson
2018	Roland T. Warzel III

Award of Recognition

Award of Merit Committee

2009	Frank J. Venskytis
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Distinguished Service Award

1994	Fritz V. Lenel
1999	William A. Buerkel
2000	Arthur B. Backensto
2001	O. W. Reen
2001	Anthony W. Thornton
2002	Erhard Klar
2005	Dale R. Peterson
2006	William A. Buerkel
2008	Sherri R. Bingert
2012	Harry D. Ambs
2013	W. Brian James
2013	Thomas M. Kennedy
2014	Roland T. Warzel III
2015	Dale R. Peterson
2015	Joseph Tauber
2017	Tessa F. Stillman

50-Year Service Award

Honorary B09 Membership

2003	William A. Buerkel
2003	Norbert A. Arnold

Anniversary Milestones

The following active members have served on Committee B09 for at least the number of years indicated below:

50 years

Leander F. Pease

40 years

Dale R. Peterson
Cynthia L. Freeby

35 years:

Frank Venskytis

30 years

W. Brian James
Kenneth H. Moyer
Suresh Shah
Michael Pohl
Michael P. Marra

25 years

Tony Thornton
Craig Hudson

20 years

Sherri R. Bingert
Michael P. Schloder
Peter G. Blaine
Denis B. Christopherson
Douglas Pease
Joseph Tauber

15 years

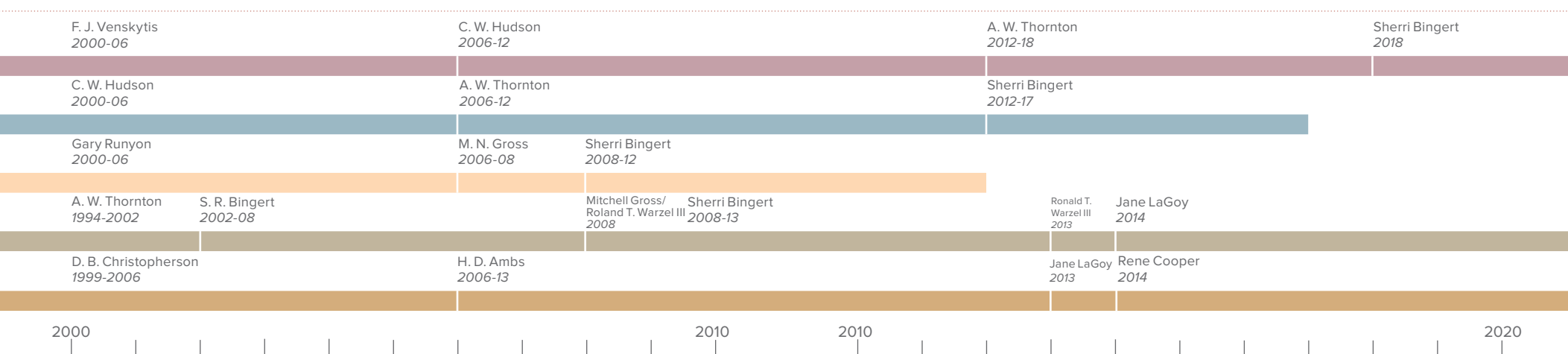
Bart J. Nelson
David Milligan
James K. Wimer
Daniel Merritt
Matthias Thommes
Peter A. DePoutiloff
Tessa F. Stillman
Carl J. Dorsch
Vinay M. Desai
Thomas M. Kennedy

10 years

Haijun Wang
Thomas Pfingstler
Roland T. Warzell III
Lin Cheng
Tesfaye Tefera
John Barr
Charles G. Thibault
John A. Shields

5 years

Jane LaGoy
Christine L. Mahlon
Michael L. Mihalec
Jeremy Koth
Rene M. Cooper
Nelson Bairos
Guohong Xiao
Wen Gao
Akihiro Sato
Dennis N. Scharer
Trent R. Smith
Erdem A. Ural
Paul Reinert
Joseph T. Strauss
Scott L. Davis
Ian W. Donaldson
Michael J. Brisson
Pengyue Zhang
Aderemi Olajide
Mark B. James
Kevin Bauer
Caitlin Farrell



Meeting Locations

Since the initial meeting in the mid-1940s, Committee B09 meets twice each year. Almost from its inception until 2017, B09 met independently in the Ft. Lauderdale, FL, area in the spring, as, initially, airfares were cheaper from the Northeast (where many of the members were from), off-season hotel rates were cheaper, and good golfing opportunities were available. In fact, in its earlier years, B09 often met on Sunday afternoons and evenings, with morning and evening meetings during the week, leaving the weekday afternoons free for golf – or beach activities for the non-golfers. The Rustic Inn Crab House in Ft. Lauderdale became a traditional dinner venue, and, indeed, the B09 Chairman's gavel is a crab-smashing mallet from the Rustic Inn. More recently, Committee E29 on Powder and Spray Characterization has met along with B09 because of the mutual interests of B09 and E29 members. Fall meeting locations of both B09 and E29 are usually in ASTM International's October Committee Weeks, wherever they occur.

Initial Meeting Locations

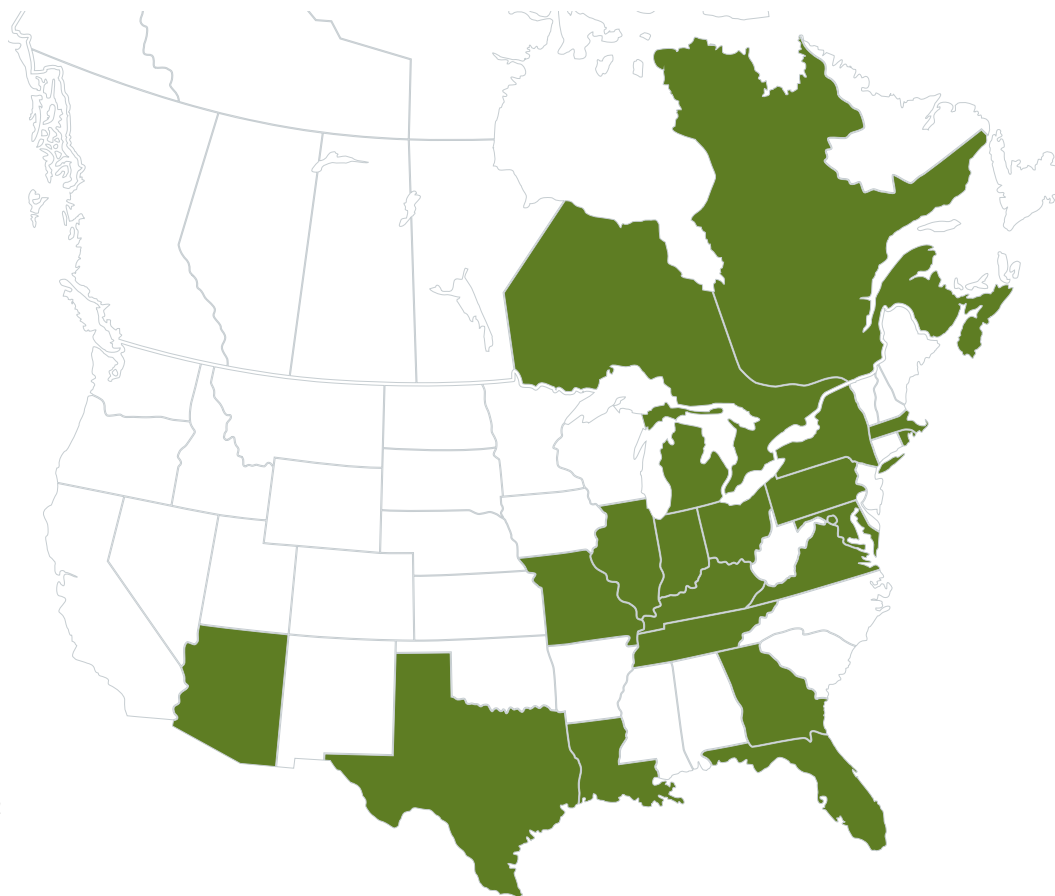
Illinois
Chicago - 1946

New York
Buffalo - 1947
New York City - 1944, 1947

Pennsylvania
Pittsburgh - 1946

Meeting Locations Since 1981

Arizona Phoenix - 1994	Louisiana New Orleans - 1996, 1999, 2010, 2014, 2017	Quebec Montreal - 1991
Florida Fernandina Beach - 2018, 2019 Fort Lauderdale - 1982, 2008, 211, 2012, 2013 Hollywood - 2009, 2010, 2014-2017 Jacksonville - 2013 Orlando - 2000, 2016 Tampa - 2003, 2007, 2011, 2015	Maryland Baltimore - 1989	Rhode Island Providence - 1982
Georgia Atlanta - 2006, 2009, 2012	Michigan Detroit - 1990	Tennessee Nashville - 1983, 1985
Kentucky Louisville - 1986	Missouri St. Louis - 2008	Texas Dallas - 1993, 2001, 2005
	Ohio Cincinnati - 1987	Virginia Norfolk - 1995, 1998, 2002
	Ontario Toronto - 1988	Washington, D.C. - 2004, 2018
	Pennsylvania Philadelphia - 1981, 1984 Pittsburg - 1992 West Conshohocken - 1997	



ASTM INTERNATIONAL

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Committed to serving global societal needs, ASTM International positively impacts public health and safety, consumer confidence, and overall quality of life. We integrate consensus standards – developed with our international membership of volunteer technical experts – and innovative services to improve lives... Helping our world work better.

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