The Metal Powder Industries Federation (MPIF) is the voice of the North American powder metallurgy (PM) community, representing 215 member companies. As North America’s leading trade organization serving the interests of the metal powder producing and consuming industries, MPIF represents six trade associations covering various aspects of PM, metal powders, and particulate materials.

MPIF’s mission is to advance the interests of the metal powder producing and consuming industries. Members strengthen their community by working together to advance and grow the metal powder industry through the creation of industry standards and publications, annual technical conferences, exhibits, seminars, and short courses, technology transfer, management information, and more.
 Annual Report
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Executive Director’s Reflection

As we end our 73rd year, I am pleased to present my first Executive Director's Reflection highlighting developments from Princeton.

After 50 years of service, the last 14 years as executive director/CEO, C. James Trombino retired in January 2017. As only the third Metal Powder Industries Federation (MPIF) executive director, Jim guided the organization through good times and bad, leaving MPIF in excellent shape—financially, technically, and organizationally.

In 2016, when it was announced that I would be taking the reins of MPIF, I started thinking about how MPIF had affected my professional career. I quickly concluded that participation in MPIF activities was the key to success. I realized that I had attended 27 versions of the annual POWDERMET conferences; been a part of over 20 Technical Program Committees; attended or presented at numerous seminars; and met and became friends with many of the past, present, and future contributors of this great technology.

So, if participation is the key to success, what can we at MPIF do to make a difference? Well, for starters, POWDERMET2017 and AMPM2017 were our testing grounds. We introduced PM to 40 students that received National Science Foundation (NSF) grants. These students are the future of manufacturing, and now they have seen what a wonderful opportunity awaits them in the PM industry. Or, should they choose a different career path, the knowledge gained from our industry provides them another option if they are asked for a metalworking solution to a problem in the future. We also made numerous enhancements to the conference exhibit hall to increase traffic for our exhibitors who were ready to interact in discussions, and showcase the latest products and services.

For 2018, we increased our solicitation for Technical Program Committee members for POWDERMET2018 and AMPM2018. If the positive response to the solicitation is an indicator of conference participation, we should have a successful San Antonio conference! Maybe the best announcement for San Antonio is the $700 reduction in POWDERMET registration fees that are intended to attract new registrants to participate alongside our loyal attendees. We need to have our seasoned registrants mentor our incoming engineers, and the reduction in registration fees should be a great incentive. We have also announced the extension of the AMPM conference by a day, and registration for either conference allows access to both conferences. Meanwhile, NSF was so pleased with the outcome from 2017 that they are providing funding for 40 students to attend the San Antonio conferences.

Our annual POWDERMET and AMPM conferences aren’t the only places for you and your colleagues to participate. New employees should attend our Basic PM Short Course to get an overall view of the industry. It is exceptionally good for sales representatives, who will learn the technology and be exposed to the correct standardized terminology. We offer seminars on compacting/tooling, sintering, and other topics that will help grow your company's technology. We are always in need of volunteers for our standards activities. Remember, MPIF standards are industry collaborative standards. Involvement is a good way to ensure your company's voice is heard when standards are developed.

Each association has a board of directors composed of senior members that are active in driving the activities of their associations and advancing PM. Most of our associations are represented on the Industry Development Board and the Technical Board. Members of these boards are active and dedicated to marketing the PM industry and the transfer of technology. Their participation is driven by the successes of their activities.

We also launched the new and exciting Association for Metal Additive Manufacturing. The association hit the ground running with 32 members by the end of 2017. MPIF is the logical home for this association that utilizes metal powder as its feedstock. So far, the association has outlined several activities and has a good number of volunteers in place to complete the identified tasks.

Headquarters is definitely going through some changes. Personally, I think our staff in Princeton is the best in the business. If you have been participating, you likely know this. If you haven't been participating, maybe it is time to start.

Thank you for your continued support as we work together to advance the PM industry.

James P. Adams
MPIF Executive Director/CEO

www.mpif.org
Metal Powder Industries Federation’s 2017–2018 Board of Governors

MPIF President
John F. Sweet, PMT
FMS Corporation

PMPA President
Dax Whitehouse
NetShape Technologies, Inc.

MPPA President
Dean Howard, PMT
North American Höganäs, Inc.

PMEA President
James Neill
CM Furnaces, Inc.

MIMA President
Thomas K. Houck
Carpenter Technology Group

RMA President
Todd A. Leonhardt
Rhenium Alloys, Inc.

AMAM President
Michael Marucci
GKN Powder Metallurgy

APMI President
Bruce Lindsley
Hoeganaes Corporation

MPIF Past President
Patrick J. McGeehan
Ametek, Inc.

MPIF Executive
Director/CEO
James P. Adams
The Industry Development Board (IDB) coordinates the marketing and public relations activities of the Metal Powder Industries Federation toward expanding the market for powder metallurgy parts and products. IDB strives to increase the awareness of PM technology to the consumer as the preferred metal-forming solution.

**Chairman:** John W. von Arx  
NetShape Technologies, Inc. (PMPA)

- Scott Davis, Hoeganaes Corporation (MPPA)
- Alex T. Gasbarre, Gasbarre Products, Inc. (PMEA)
- Jon-Pierre Guibor, CM Furnaces, Inc. (PMEA)
- Stefan Joens, Elnik Systems, LLC (MIMA)
- Mary Kate Johnston, Sandvik Osprey (MIMA)
- Jeff Julian, Asbury Graphite Mills, Inc. (MPPA)
- Feifei Ling, Rio Tinto (replaced Trey Klatt) (MPPA)
- David Parsons, SMC Powder Metallurgy, Inc. (PMPA)
- JoAnne Ryan, Alpha Sintered Metals, Inc. (PMPA)
- Michael Stauffer, Keystone Powdered Metal Company (PMPA)
- Trevor N. Towns, PMT, North American Höganäs, Inc. (MPPA)

The PickPM.com website underwent a massive redesign in 2016 and relaunched in 2017. The revised website includes:

- a more interactive directory of PM fabricators;
- a growing library of 50+ case studies based on annual PM Design Excellence Award components;
- a design center with educational guidance for component designers and engineers, and more.
Three Automotive Showcases were held in 2017, an increase over previous years. A select team was sent to Ford, GM, and FCA with presentations and automotive components to:

- provide an overview of designing automotive components using PM;
- discuss any existing design challenges;
- showcase in-use PM components.

Average total attendance from all three events exposed several hundred professional automotive engineers to powder metallurgy. The team has been invited back in 2018.

Additionally, work was completed on a new electronic guide to powder metallurgy, which is available online at PickPM.com. The guide provides a brief overview of:

- various PM technologies;
- resources;
- case studies;
- and directs design engineers to MPIF member companies online.

IDB also launched a new advertising campaign in 2017 aimed at design engineers. A series of ads covering different market segments that include automotive, aerospace & defense, lawn & garden/off-highway, medical & dental, hand tools & recreation, and hardware & appliances, was created to direct engineers to the website. These ads utilize award-winning components from the annual PM Design Excellence Awards.
POWDERMET2017, the 2017 International Conference on Powder Metallurgy & Particulate Materials held June 13–16 in Las Vegas, attracted over 1,000 delegates from 30 countries. The co-located fourth annual Additive Manufacturing with Powder Metallurgy (AMPM2017) conference was another hit. AMPM2017 hosted the first meeting for the formal establishment of the Association for Metal Additive Manufacturing (AMAM).

New Conference Features

The conference featured a few new concepts to enhance the overall experience.

For our exhibitors, we added the Exhibitor Game Card program, and moved all luncheon dessert courses and the Poster Display to the rear of the Exhibit Hall—all to increase traffic. Additionally, POWDERMET2018 will feature the first PM Evening Alehouse, an afterhours networking event to be held in the Exhibit Hall.

For our attendees, the Exhibitor Game Card program will continue to encourage increased networking, as well as an opportunity to win prizes.

Distinguished Service to PM Awards

(Company name in parenthesis indicates employer at time of retirement.)

- Iver Eric Anderson, FAPMI, Ames Laboratory
- Diran Apelian, FAPMI, Worcester Polytechnic Institute
- Sherri R. Bingert, (Los Alamos National Laboratory)
- Matthew Bulger, (NetShape Technologies, Inc.)
- Dean Howard, PMT, North American Höganäs, Inc.
- Mark D. Kesterholt, (Rio Tinto Metal Powders)
- Sydney H. Luk, Royal Metal Powders Inc.
- Glen Moore, (Burgess-Norton Mfg. Co.)
- Thomas J. Pontzer, (Gasbarre Products, Inc.)
- JoAnne Ryan, Alpha Precision Group
- Rohith Shivanath, Stackpole International (Canada)
- John Sweet, PMT, FMS Corporation

POWDERMET2017 Co-Chairs

Ryuichiro Goto
Engineered Sintered Components

Joseph Tunick Strauss
HJE Company, Inc.

AMPM2017 Co-Chairs

Christopher T. Schade
Hoeganaes Corporation

Todd Grimm
T.A. Grimm & Associates, Inc.
The National Science Foundation approved a grant program to support 40 students from U.S. colleges and universities to attend POWDERMET2017 & AMPM2017. The award covered the full conference registration fee and hotel accommodations. The program was so successful that MPIF was approved to continue the program in 2018!
2017 Management Summit & 73rd Annual Business Meeting

PM industry leaders gathered in Naples, Florida, to adopt 2018 budgets, connect face-to-face with C-level or senior management customers and suppliers, discuss industry challenges, and discover opportunities for company growth.

In addition to Board & Membership Meetings, members were provided management-focused presentations on topics including leadership and communications; hiring skilled veterans, Reservists and National Guard members; interpreting antitrust law; best practices for contracts; PM parts opportunities identified during vehicle teardown; and select indicators that have a major impact on the PM industry.

If you were not able to attend this year, we hope that you will be able to join us October 27–30, 2018 at the U.S. Grant Hotel, San Diego for the next Management Summit.
In continuing to provide the industry with the highest-quality educational programs covering all aspects of PM technologies, MPIF's Professional Development department offered several programs:

- MIM2017: International Conference on Injection Molding of Metals, Ceramics and Carbides
- Powder Metallurgy Machinability Seminar
- Basic Powder Metallurgy Short Course
- PM Parts Compacting/Tooling Seminar
MPIF’s Technical Board leads and directs efforts to advance powder metallurgy and particulate materials technology. Standing committee activities oversee roadmap, annual technical conference programming, professional development, and publications. Areas of technical liaison include APMI International and its *International Journal of Powder Metallurgy*, the Center for Powder Metallurgy Technology (CPMT), the Lightweight Innovations for Tomorrow (LIFT) program, and other industry and affiliated groups as appropriate.

**Chairman:** Blaine Stebick, Phoenix Sintered Metals LLC, who succeeded Russell A. Chernenkoff, AAM-Powertrain

Additional Tech Board members:
- John Johnson, Elmet Technologies, LLC (Roadmap);
- William R. Gasbarre, FAPMI, Gasbarre Products, Inc. (Conference Committee);
- Thomas W. Pelletiers, Kymera International (Professional Development);
- Michael L. Marucci, GKN Powder Metallurgy (Publications);
- Nicholas T. Mares, FAPMI (APMI representative);
- W. Brian James, FAPMI, *IJPM* Editor;
- John Engquist, FAPMI (CPMT representative);
- and Robert J. Dowding, U.S. Army Research Laboratory (liaison).

The 2017 update to the *PM Industry Roadmap* was published and is available at [mpif.org](http://mpif.org). Technology development priority challenges focus on high-density PM components, processing of lightweight materials, improvement in precision/accuracy/variation control, and metal additive manufacturing. Over a decade of Roadmap achievements in materials, processes, and applications are also cited.

The Technical Board vetted the qualified manuscripts from POWDERMET2017 and awarded the Howard I. Sanderow Outstanding Technical Paper Award to “Deformation Processed Al/Al,Ca Nano-filamentary Composite Conductors” by Charles Czahor, Trevor Riedemann, Alan Russell, and Iver Anderson, FAPMI, Ames Laboratory/Iowa State University. Additionally, the Best Paper Award from the AMPM2017 conference was awarded to “Direct Metal Laser Sintering/Selective Laser Melting of Tungsten Powders” by Ravi K. Enneti, Rick Morgan, Thomas Wolfe, Global Tungsten & Powders Corporation (RMA).

A plan has been developed to mentor the 2018 National Science Foundation Student Grant and CPMT/Axel Madsen recipients at the San Antonio conference. Tech Board members will interact with the designated students prior to, during, and after the conference to help students understand PM, offer a window into the PM industry, and report back to staff on how our industry is perceived and what we can do to attract the students into the manufacturing industry.

The Tech Board also keeps abreast of research and development activities at universities and institutions on a global basis by tracking participation at the annual MPIF/APMI technical conferences. The next issue of the triennial report on research and development activities at universities and institutions on a global basis by tracking participation at the annual MPIF/APMI technical conferences. The next issue of the triennial report on R&D activities, available equipment, and contacts at U.S. National Laboratories is planned for release to MPIF members later in 2018.

The 2018 Technology Assessment will address Machinery Sensors & Information Technology and will first be presented as a Technology Scan for MPIF members during POWDERMET2018—San Antonio.
As a worldwide source of PM publications, MPIF produces textbooks, standards, monographs, proceedings, manuals, reprints, videos, and digital downloads, and other educational material. In 2017, MPIF produced the below publications.

**MPIF Standard 35–PF Materials Standards for PF Steel Parts, 2017 Edition**

This standard provides the design and materials engineer with the latest engineering property data and information available in order to specify materials for components made by the powder forging (PF) process.

**Sintering Science: A Historical Perspective**

Sintering Science: A Historical Perspective, by Randall German, FAPMI, traces the history of sintering science from key early developments, outlines the core sintering models, and projects forward. It helps understand the eventual success of computer simulations, as well as the inherent limitations.

**Advances in Powder Metallurgy & Particulate Materials–2017**

Published annually, 2017’s proceedings of the POWDERMET2017: International Conference on Powder Metallurgy & Particulate Materials, June 13–16, Las Vegas, Nevada, contains 94 technical papers encompassing over 1,000 pages in a fully searchable PDF in a format that preserves the original color in all figures.

**AMPM2017 Conference Presentations**

This compilation of presentations is from the fourth annual conference focused on Additive Manufacturing with Powder Metallurgy (AMPM2017), and features 59 technical presentations and 12 technical manuscripts presented by worldwide industry experts during the conference.

**Powder Metallurgy: A Vibrant Industry, a Reliable Technology and a Promising Future**

Created by the Industry Development Board, this new guide provides an overview of various PM technologies, resources, case studies, and directs design engineers to MPIF member companies online. The guide is connected to the PickPM website as an electronic resource; however, it can also be ordered in print. Contact Dora Schember for order details at dschember@mpif.org.
Trade Association Updates

Technological advancements within the PM industry have resulted in major changes within the Federation’s trade associations. The Isostatic Pressing Association (IPA) dissolved at the conclusion of 2017 in no small part due to the formation of the Association for Metal Additive Manufacturing (AMAM). Many former IPA members have become charter members of this newest trade association, while other IPA members were absorbed into other Federation associations.

Powder Metallurgy Parts Association

Dax Whitehouse, NetShape Technologies, was elected to serve as president of the Powder Metallurgy Parts Association (PMPA). Membership reached 49 members: 40 corporate and 9 overseas associate members.

The 2017 Spring Management Meeting was held during POWDERMET2017 in Las Vegas. The meeting attracted 27 attendees from 20 member companies.

The Fall Business Meeting was held in conjunction with the MPIF 2017 PM Management Summit.

The recipients of the PMPA Safety Awards for 2016 based on data submitted in the Statistics and Benchmarking Program were as follows:

2016 Large Company Recipients
- Capstan Atlantic
- Federal-Mogul Sintered Products

2016 Small Company Recipients
- Bestmetal Corportion
- Compax Inc.
- Keystone Powdered Metal Company – Cherryville, NC
- Precision Sintered Parts, LLC
- Western Sintering Co., Inc.
- Yillik Precision Carbide

2016 No Lost Time Accidents
- AAM—Powertrain – Subiaco, AR
- Bestmetal Corportion – Woodstock, IL
- Capstan Atlantic – Wrentham, MA
- Compax Inc. – Anaheim, CA
- Federal-Mogul Sintered Products – Waupun, WI
- Keystone Powdered Metal Company – Cherryville, NC
- Precision Sintered Parts, LLC – Tulsa, OK
- Western Sintering Co., Inc. – Richland, WA
- Yillik Precision Carbide – Ontario, CA

The next meeting will be held in conjunction with POWDERMET2018 on June 18, 2018.

Association Administrator: James P. Adams

Metal Powder Producers Association

The Metal Powder Producers Association, under President Dean Howard, North American Höganäs, Inc., continues to represent the global metal powder manufacturers with 23 members: 12 corporate and 11 associate.

The 2017 Winter Business Meeting (WBM) was held March 22–23. Thirty-eight representatives enjoyed two days of meetings, presentations, and a tour of the GE Center for Additive Technologies Advancement (CATA). There was something for everyone when it came to presentations—safety issues, PPE, arc flash concerns, refractories, and hydrogen handling. Registrants also learned about the recently concluded ASM International Atomization Roadmap. The 2017 WBM Organizing Committee included Jeff Julian, chairman, Asbury Graphite Mills, Inc.; Dave Johnson, mentor, North American Höganäs, Inc.; John Dluhos, Royal Metal Powders, Inc.; and Jill Spaulding, Kymera International.

The Fall Business Meeting was held in conjunction with the 2017 PM Management Summit. Twenty individuals from eleven member companies attended the Summit. MPPA membership provides information for the following statistics:

- Wage & hour survey every third year (last based on 2015)

The recipients of the 2016 Safety Recognition Program were as follows:

Zero Recordable Incidences: Large Company
- Hoeganaes Corporation

Zero Recordable Incidences: Small Company
- Advantage Metal Powders, Inc.

No Lost-Time Accidents: One year
- Advantage Metal Powders, Inc., Ridgway, PA
- Asbury Graphite/Cummings-Moore Graphite, Djetroit, MI
- Hoeganaes Corporation, Cinnaminson, NJ
- Gallatin, TN
- Milton, PA
- Ridgway, PA (Arc Metals)

- Magnesium Elektron Powders
- Luxfer Magtech, Inc.
- NJ
- PA
- Tamaqua, PA
- Stoney Creek, St. Marys, PA

The next meeting will be held in conjunction with POWDERMET2018 on June 18, 2018.

Association Administrator: James P. Adams
Trade Association Updates

Powder Metallurgy Equipment Association

The Powder Metallurgy Equipment Association, under President James H. Neill, CM Furnaces, Inc., had another steady year with PMEA membership at 51: 22 corporate and 29 associate members.

A Membership Meeting was held during POWDERMET2017—Las Vegas. Discussions included a review of Industry Development Board activities; Technical Board activities; the upcoming PM Compacting/Tooling seminar; and the strong financial health of the association. It was also decided that PMEA will sponsor a 90-minute PM Evening Alehouse reception to close out the first day of exhibits during POWDERMET2018. This will give the exhibitors additional non-compete time to meet with attendees in the hall and drive traffic to the hall.

Metal Injection Molding Association

The Metal Injection Molding Association, under President Thomas K. Houck, Carpenter Technology Group, holds strong at 32 members with a healthy reserve and budget.


The Fall Business Meeting was held in conjunction with the MPIF 2017 PM Management Summit.

The next Membership Meeting will be held in conjunction with the MIM2018 conference, March 5–7, 2018 in Irvine, California.

The MIMA Website Committee, chaired by Stefan Joens, Elnik Systems, has been working to redesign the MIMA website to improve navigation, update content, and provide a modern look. All MIMA members were solicited and encouraged to submit videos of the process and to provide images of parts to enhance the website.

The MIMA Conference Grants Committee, chaired by Mike Stucky, Norwood Injection Technologies, reported that conference grants were awarded to six students to attend MIM2017 in Orlando. Each recipient was required to provide a 10-minute presentation at the conference. For 2018, MIMA will provide seven student grants that will include registration for the PIM Tutorial. The grants are funded by a portion of the prior year’s conference revenue.

The MIMA Marketing Committee, chaired by Bruce Dionne, Ruger Precision Metals, formed a strategic marketing plan to identify markets to target and how to promote MIM to those markets. Estimates for marketing materials, exhibit displays, and specific conferences/trade shows were utilized to determine 2018.

Association Administrator: Paul Sedor

Refractory Metals Association

The Refractory Metals Association, under President Todd A. Leonhardt, Rhenium Alloys, Inc., wrapped up the year with 14 members.

The 2017 Spring Business Meeting was held May 4 in Knoxville, Tennessee, and included two tours—the Oak Ridge National Laboratory (ORNL) main facility, and a related ORNL facility, the Manufacturing Demonstration Facility (MDF). The MDF tour provided a hands-on look at current technologies and materials. Opportunities to collaborate with MDF were discussed to develop materials, equipment, software, and capabilities.

The 2017 Fall Meeting was held in Alexandria, Virginia, on October 4. In addition to the review of association activities, the meeting included three informative presentations: “U.S. Industrial Base Issues with the 115th Congress,” “Conflict Minerals Update—Where Do We Go From Here,” and “National Stockpile Update.”

A date has not been set for the 2018 Spring Meeting.

Association Administrator: Paul Sedor
Trade Association Updates

Formation of the Association for Metal Additive Manufacturing

AMAM The formal establishment of the Association for Metal Additive Manufacturing (AMAM) began during POWDERMET2017—Las Vegas in June. The association is composed of companies that lead the direction of the metal AM industry. Member companies will be involved with activities that will guide the future of the metal AM industry; enable interaction with industry colleagues including competitors, suppliers, and more; create and maintain industry standards; market the industry to the public; and develop activities such as publications and training.

Membership is open to manufacturers of metal AM components, metal AM raw material suppliers, and equipment manufacturers and service providers that support metal AM.

Four committees have been formed and are already hard at work. The committees are:

- **Environmental, Health & Safety:** Initial priorities include safe powder handling and the identification and distribution of safety/health information to member companies.

- **Marketing:** Initial priorities include gathering information from end users on high-priority commercialization priorities, the development of case studies to show additive strengths and capabilities, and the development of an AMAM-specific website.

- **Membership:** Currently established to identify and pursue prospective members.

- **Technical:** This committee will focus on standards development and technical outreach to AMAM member companies and end users.

As a byproduct of the creation of AMAM, the Isostatic Pressing Association dissolved. Members of the IPA were absorbed into other associations such as AMAM and MIMA.

AMAM began 2018 with 32 charter members.

Association Administrator Matthew Bulger.

A Sampling of Charter Members

![A Sampling of Charter Members]
Trade Association Updates

AMAM Board of Directors

AMAM President
Michael L. Marucci
GKN Powder Metallurgy

Christopher T. Adam, PMT
Carpenter Technology Group

Animesh Bose, FAPMI
Desktop Metal

Robert M. Gasior
Arconic Technology Center

Geoffrey Gatton
Rolls-Royce North America

Stuart Jackson
Renishaw, Inc.

Eric M. Johnson
Deere and Company

Juha Kotila
EOS Finland

Ashley Nichols
3D Materials Technologies

James P. Adams
MPIF Executive Director/CEO
MPIF Balance Sheet
(in thousands of dollars)

<table>
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<th>Category</th>
<th>Amount</th>
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<tbody>
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<td>Cash/Investments</td>
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<tr>
<td>Other Current Assets</td>
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<tr>
<td>Fixed Assets</td>
<td>55</td>
</tr>
<tr>
<td>Other Assets</td>
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<tr>
<td><strong>Total Assets</strong></td>
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<tr>
<td>Current Liabilities</td>
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<tr>
<td>Fund Balance</td>
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<tr>
<td><strong>Total Liab. &amp; Fund Bal.</strong></td>
<td><strong>$3,845</strong></td>
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** Reserve goal balance of 30%–40% of total MPIF operating expenses

Association Reserves

<table>
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<tr>
<th>Association</th>
<th>2017 Projection</th>
<th>2018 Budget</th>
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<tbody>
<tr>
<td>PMPA</td>
<td>35%</td>
<td>41%</td>
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<td>MPPA</td>
<td>32%</td>
<td>33%</td>
</tr>
<tr>
<td>PMEA</td>
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<td>82%</td>
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<tr>
<td>MIMA</td>
<td>99%</td>
<td>55%</td>
</tr>
<tr>
<td>RMA</td>
<td>55%</td>
<td>46%</td>
</tr>
<tr>
<td>AMAM</td>
<td></td>
<td>22%</td>
</tr>
</tbody>
</table>

** Reserve goal balance of 20%–30% of association operating expenses

MPIF finances are monitored by a financial oversight committee, chaired by Richard Pfingstler, Atlas Pressed Metals. Members include Rodney Brennan, Metco Industries, Inc., and Thomas G. Gasbarre, Gasbarre Products, Inc. The committee, reporting to the Board of Governors, assists in establishing and maintaining sound accounting practices and procedures.

In 2017 MPIF enjoyed projected revenues of $3.5 million, with approximately 64% coming from conferences, courses and seminars, publication sales, and other nondues activities. Membership dues provided 36% of Federation revenues.
Membership continues to hold strong for the Federation’s associations. While IPA was dissolved at the end of 2017, these companies were rehomed within other associations—many finding a new home with AMAM.

MPIF’s organization and governance structure continues to focus its resources and talent toward addressing its mission. It endeavors to promote its member companies to the marketplace as well as build awareness and improve the technology infrastructure necessary to continue industry growth.
Outlook for 2018

A Year of Positive Change

2018 is anticipated as a big year for MPIF full of updates and additions to increase membership benefits and raise public awareness of powder metallurgy.

Enhanced Conferences

- Lowered registration fees for full-conference attendees are anticipated to boost overall attendance rates and encourage an increase in first-time delegates.
- The PM Design Excellence Awards Luncheon has been moved to the first day of the POWDERMET2018 conference to extend viewing of the award-winning components showcased in the parts display.
- The AM/PM Café will continue in the Exhibit Hall and will serve post-luncheon dessert, providing increased networking opportunities with exhibitors.
- The Exhibitor Game Card program will continue for a second year.
- A PM Evening Alehouse—sponsored by the PMEA—will take place after the last block of technical sessions on Monday, ending the first day with a 90-minute reception in the Exhibit Hall.
- AMPM2018 now includes a third full-day of technical sessions.
- The National Science Foundation has again awarded 40 U.S. college and university students grants to attend POWDERMET2018 & AMPM2018. These students will be mentored by members of MPIF’s Technical Board before, during, and after the conference.
- For the second year in a row, MIMA is sponsoring seven college students to attend MIM2018 to network with industry professionals and present their current research.

Anticipated Standards & Publications

- MPIF Standard 35 - Materials Standards for PM Structural Parts, 2018 Edition
- Advances in Powder Metallurgy & Particulate Materials—2017
- AMPM2018 Conference Presentations

Industry Development Board

- The Automotive Showcases continue to gain traction with plans to repeat and enhance presentations at key automotive manufacturing companies.
- The PickPM website continues with new enhancements, including plans to restyle the Find a Fabricator's directory and update the graphics with new photography.
- New marketing flyers and a LinkedIn campaign on “Demonstrated Success” stories will be added on the PickPM website for PM fabricators to distribute to potential end users.

Increased Multimedia

- A revitalized and interactive MPIF website. While the website underwent a facelift in 2016, the upcoming iteration will include an expanded Members’ Only area open to all MPIF membership with special pages for boards and committees to help increase the interactivity between member volunteers and headquarters staff.

- The MIMA website is also under construction by the MIMA Website Committee with plans to launch in 2018.
- Redesigned FocusPM and Management Briefs e-newsletters, with a special version of the PM Management Briefs that will be made available to the full staff of our member companies.
- PM educational videos continue to be produced.

Enhanced Publication Opportunities

A digital library of PM publications is on the horizon for 2018. The project will contain a searchable database of thousands of PM papers presented during MPIF conferences and World Congresses, or published in the International Journal of Powder Metallurgy. This mammoth undertaking will encompass all MPIF documents back through 1944. The library will be open to MPIF members and nonmembers, though members will receive a discounted rate. Stay tuned for further updates.

PM Pulse Survey Responses

The recently completed annual MPIF PM Industry Pulse Survey was again a success, with 58% of the corporate members responding from all 6 MPIF associations. Most associations had well over a 50% response rate, led by the Metal Powder Producers Association and Powder Metallurgy Equipment Association with 69% and 67%, respectively.

Launched 10 years ago, the Pulse helps MPIF better identify industry trends while simultaneously serving as a benchmark for annual comparison. Each association’s membership was surveyed this past September and the results consolidated for the Federation. The consolidated results are utilized to better assess our industry. The original data was shared with attendees at the 2017 PM Management Summit in Naples, Florida.

The MPIF membership continues to recognize the Pulse as a worthwhile activity. The PM industry’s overall sales forecast nearly mirrors responses from last year. 71% of the respondents anticipate an increase, compared with 73% last year, with 98% projecting sales to increase or remain the same.

Matching last year’s anticipated increase in workforce, two-thirds of the consolidated respondents expect the 2018 workforce to increase. Meanwhile, 43% of respondents expect a wage increase of 3% or more, while no company reporting anticipating a decrease in wages.

Primary factors cited as presenting significant challenges to our members’ businesses are: the lack of skilled workers, which is a continuous problem; global competition; the expansion of PM applications; and customer requirements. The greatest challenges to manufacturing/engineering include: reduce time-to-market; increasing throughput; new material development; capacity expansion; and continuous improvement.

The complete MPIF consolidated results can be reviewed by visiting the Members Only area on the MPIF website.

www.mpif.org
POWDERMET2018
International Conference on Powder Metallurgy & Particulate Materials
June 17–20, 2018 • Grand Hyatt San Antonio

TECHNICAL PROGRAM
Over 200 worldwide industry experts will present the latest in powder metallurgy and particulate materials.

TRADE EXHIBITION
The largest annual North American exhibit to showcase leading suppliers of powder metallurgy, particulate materials, metal additive manufacturing processing equipment, powders, and products.

SPECIAL CONFERENCE EVENTS
Including special guest speakers, awards luncheons, and evening networking events.

Visit POWDERMET2018.ORG for details.
**Dates to Remember**

**Conferences**

**MIM2018**
International Conference on Injection Molding of Metals, Ceramics and Carbides
Irvine, California • Hotel Irvine
March 5–7, 2018
www.MIM2018.org

**AMPM2018**
Additive Manufacturing with Powder Metallurgy
San Antonio, Texas • Grand Hyatt San Antonio
June 17–20, 2018
www.AMPM2018.org

**POWDERMET2018**
International Conference on Powder Metallurgy & Particulate Materials
San Antonio, Texas • Grand Hyatt San Antonio
June 17–20, 2018
www.POWDERMET2018.org

**2018 PM Management Summit**
San Diego, California • US Grant Hotel
October 27–30, 2018
www.mpif.org

**WORLD PM2018 Congress**
Beijing, China • China National Convention Center
September 16–20, 2018
worldpm2018.medmeeting.org/en

**AMPM2019**
Additive Manufacturing with Powder Metallurgy
Phoenix, Arizona
June 17–20, 2018
www.mpif.org

**POWDERMET2019**
International Conference on Powder Metallurgy & Particulate Materials
Phoenix, Arizona
June 23–26, 2019
www.mpif.org

**2019 PM Management Summit**
Miami, Florida • Intercontinental Miami
October 26–29, 2019
mpif.org

**AMPM2020**
Additive Manufacturing with Powder Metallurgy
Montréal, Canada
June 27–July 1, 2020
www.mpif.org

**WorldPM2020**
World Congress on Powder Metallurgy & Particulate Materials
Montréal, Canada
June 27–July 1, 2020
www.mpif.org

**Tungsten Refractory & Hardmaterials Conference**
Montréal, Canada
June 27–July 1, 2020
www.mpif.org

**Seminars & Short Courses**

**Basic Powder Metallurgy Short Course**
State College, Pennsylvania • Penn Stater Conference Center Hotel
August 13–15, 2018
www.mpif.org

**Sintering Seminar**
State College, Pennsylvania • Penn Stater Conference Center Hotel
September 25–26, 2018
www.mpif.org
Focusing on metal additive manufacturing, this conference will feature worldwide industry experts presenting the latest technology developments in this fast-growing field.

TOPICS WILL COVER:
- Materials
- Applications
- Technical Barriers
- Process Economics
- New Developments

EXHIBITION:
- Trade Show Featuring Leading AMPM Suppliers
- New Extended Non-Compete Hours with Networking Reception

PERSPECTIVES FROM:
- End Users
- Toll Providers
- Metal Powder Producers
- Equipment Manufacturers
- R&D from Academia and Consortia

Manuscripts are optional; however, all submitted manuscripts will be considered for the AMPM2018 Best Paper Award.

Visit AMPM2018.org for more details