

# 2017ANNUAL REPORT

ADVOCATE. EDUCATE. INNOVATE.

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# ADVOCATE. EDUCATE. INNOVATE.

## **Dear AFS Members and Friends,**

Over the past year, with your essential support and partnership, the American Foundry Society has focused on the core areas of our mission: advocating for metalcasting, educating our industry's current and future workforce, fostering innovation, and delivering superior service to the companies and individuals that comprise our membership.

The pages of this 2017 Annual Report provide highlights of the work that AFS is doing to enhance the business climate for metalcasters, deliver world-class conferences and expositions, provide education and training in formats convenient for today's metalcasters, conduct higher-impact research, and move forward on the mission of improving the perception of metalcasting careers.

Member involvement is at the heart of the effectiveness of AFS—in our committees, at our industry and student chapters, and in our online Casting Connection community. We are pleased—and grateful—to report that member involvement is on the rise. Building on that engagement, the AFS Board of Directors is entering into strategic planning that will refine the vision for AFS moving forward. Concurrently, the professional staff has redoubled its commitment to advance the business and professional success of the membership.

In 2018, your membership benefits will continue to expand. The digital resources within the AFS Library, one of the world's best collections of its type, will become easier to access, and articles will now be free of charge to all members. A new AFS website will provide a better user experience, and convey the importance of metalcasting and the careers it offers to our society. The AFS Institute e-Learning curriculum will continue to grow, including 20 Spanish-language modules that will become available in early 2018. A series of 20 Members Only Webinars will add value to the member experience, as will a new e-newsletter to help you keep in touch with opportunities to engage with AFS. Moreover, AFS will continue to innovate in providing the best possible technical and management educational programming throughout the year.

This is a remarkable moment for the metalcasting industry, both in terms of the challenges we face, and the opportunities that await. We thank you for your involvement in AFS, and we look forward to seeing you at the Metalcasting Congress in Fort Worth in April, if not sooner. Thank you again for your involvement with AFS.

With appreciation,



Patricio Gil President



Jean Bye Vice President



**Peter Reich** 2nd Vice President



**Jeff Cook** Past President



Doug Kurkul CEO

2017 ANNUAL REPORT

# ADVOCATE.

AFS is committed to the metalcasting industry and its global influence. The society is a leader in communicating the needs, benefits and opportunities of the industry to lawmakers, regulators, and the general public.

## **Key 2017 AFS Government Affairs Victories include:**

#### AFS Fighting Back Against Regulatory Overreach

AFS continues to work to ease regulatory burdens on the metalcasting industry. To date, President Trump has issued executive orders, presidential memoranda and notices of reconsideration seeking to review, revoke or revise midnight rules and other regulations and guidance issued by the previous administration. AFS has submitted a series of comments in response to these executive orders by outlining a series of burdensome rules impacting the U.S. metalcasting industry, as well as testifying before the Small Business Administration's Ombudsman hearing in August 2017.

#### Blacklisting Rule Overturned, Marking Win for AFS Members

AFS worked with a coalition to successfully repeal the past administration's sweeping blacklisting regulation issued in 2015. which would have debarred manufacturers with possible violations of 14 separate federal labor and employment statutes from federal contracts, even if the allegations were unproven or still pending. Because the rules were repealed by the Congressional Review Act (CRA), the Executive Branch is now prohibited from re-issuing the same or similar regulations without Congressional approval.

#### Withdrawal of Clean Power Plan a Relief to U.S. Foundries

AFS and coalition partners worked diligently with the administration to advance the withdrawal and replacement of FPA's Clean Power Plan and New Source Performance Standards, enacted in 2015, AFS also was party to the lawsuit filed by 24 trade associations and 27 states. The administration announced in October 2017 that it would withdraw the Clean Power Plan, which threatened the metalcasting industry's access to affordable and reliable energy as an energy intensive industry. AFS looks forward to greenhouse gas policies made in a deliberative and transparent process that protects the industry's ability to maintain and create jobs.



A speaker addresses metalcasters at the AFS Government Affairs Fly-In.

#### Ending Sue and Settle Practice Curbs Backdoor Rulemaking

EPA Administrator Scott Pruitt announced in October that the agency would end the practice of regulation through litigation to resolve legal challenges to Agency actions and inactions known as "Sue and Settle." The directive includes new procedures to increase transparency, public engagement, and accountability, such as providing advance notice to the public of any notice of intent to sue or proposed settlement agreement, allowing the public to weigh in on proposed or modified consent decrees and settlements, and to exclude attorney fees and litigation costs when settling with suing parties. AFS has been involved in efforts to rein in this practice of regulation by litigation and has long supported the Sunshine for Regulatory Decrees and Settlements Act of 2017.

Continued on next page ->

#### Repeal of 2016 Recordkeeping Rule Protects Metalcasters from Unnecessary Recordkeeping Requirements

AFS submitted comments and advocated successfully to repeal the Volks regulation, a final rule issued by OSHA in December 2016, which would have expanded from six months to five years the statute of limitations for record-keeping violations. With the repeal, OSHA may not issue citations outside the OSHA act's six-month statute of limitations. but foundries must still maintain injury and illness records for five years. Because the rules were repealed by the Congressional Review Act (CRA), the Executive Branch is now prohibited from re-issuing the same or similar regulations without Congressional approval.

#### AFS Worked Successfully for Withdrawal of Controversial Estate Tax Valuation Rules

Since the U.S. Treasury Department proposed a rule in August 2016 that would have limited valuation discounts for estate, gift, and generation-skipping transfer tax purposes, AFS actively submitted a series of comments, met with lawmakers, and worked with a coalition to oppose the rule which would have impacted a number of foundries and industry suppliers that are family-owned. In October 2017, the U.S. Treasury Department released a report announcing plans to withdraw its proposed regulations under Section 2704 of the Internal Revenue Code.

#### EPA and Corps Move to Rescind and Revise Waters of the U.S. Rule Provides Relief to Manufacturers

In 2015, EPA and the U.S. Army Corps of Engineers issued a final Waters of the U.S. (WOTUS) rule which would have dramatically expanded the scope of federal authority over water and land uses, triggering a substantial increase in permitting requirements, and leading to project delays and cost increases for the foundry industry. Litigation remains pending before the Supreme Court and the Sixth Circuit. In the meantime, the WO-TUS rule is subject to a nationwide stay. In November 2017, the EPA proposed delaying implementation of the 2015 WOTUS rule by two years (until 2020). AFS will be working with a coalition on submitting comments on this important rulemaking.



#### CLICK HERE TO VISIT MELTING POINT



CLICK HERE TO SEE A PHOTO GALLERY OF MANUFACTURING DAY 2017

### **Promoting Metalcasting as a Career**

- AFS publishes *Melting Point* magazine and website for students in grades 3-12. This resource contains information about the industry for teachers and students, as well as tips for the industry to reach out to future metalcasters. The print magazine is published twice per year and distributed locally for Manufacturing Day in October and each spring at Metalcasting Congress or CastExpo. Chapters and Corporate Members may contact AFS for copies to share when they visit or host students.
- The Future Leaders of Metalcasting group met in Defiance, Ohio, this September to support and strengthen the network of metalcasting's next generation of leadership through outreach and professional development.
- The Women in Metalcasting group continues to foster relationships and co-sponsored a session at the 121st Metalcasting Congress. In 2017, 150 women were added to the WIM distribution list, bringing the total number of WIM members to 355.
- The online Metalcasting Career Center provides a dedicated job board to connect employers and jobseekers within the industry.
- Hundreds of students participated in Manufacturing Day coordinated by AFS staff and chapter volunteers in schools and other organization events.
- AFS partners with the Foundry Education Foundation (FEF) to support its efforts for fostering metalcasting career education and advancement.

## **End-User Outreach**

- *Metal Casting Design & Purchasing* added 1,500 names to circulation through telemarketing efforts.
- Along with the six bi-monthly regular issues of *Metal Casting Design & Purchasing*, staff also produced and published the annual Casting Source Directory and the 2017 Metalcaster Prospectus, which is a special supplement that serves as a tool buyers and designers can use when sourcing cast metal components.
- AFS coordinated the Metal Casting Supply Chain Summit, which brought in more than 80 high-level supply chain managers and design engineers to discuss the current state of the U.S. casting industry.
- AFS organized the Supplier Summit for industry suppliers. More than 40 attendees joined AFS for insight on the state of the industry, case studies of successful marketers and to participate in discussions on what metal-casters want from their suppliers.
- Metalcasting Congress 2017 marked the first time The AFS Hub was presented at a non-Expo conference. The Hub was scaled down from Cast-Expo'16 and had four AFS-branded quadrants. The Hub featured the AFS Bookstore, Member Services, the AFS Institute, Industry Media Resources, a Makerspace with live 3-D printing and the Casting of the Year Display.



Eagle Award-winner Rep. Robert Aderholt addresses attendees at Government Affairs Fly-In.

## **OSHA Crystalline Silica Rule/Litigation**

AFS and the National Association of Manufacturers (NAM) took OSHA to court, but despite sound and compelling legal arguments, the U.S. Court of Appeals for the D.C. Circuit ruled against AFS and NAM in December 2017. AFS is engaged in discussions with OSHA to attempt to resolve the key issues and questions the industry has regarding compliance. AFS is also providing its members with extensive compliance resources that include webinars, special features in *Modern Casting* magazine, and other materials on the AFS website to assist foundries in meeting the rule's requirements.

## **AFS Committees**

AFS committees are on the move! Along with new members and fresh projects, a new permanent Additive Manufacturing Division is now part of innovation at AFS. The division has three committees:

- 3-D Sand Printing, chaired by Jiten Shah (Product Development & Analysis LLC)
- 3-D Printed Hard Tooling, chaired by Marshall Miller (Flowserve)
- 3-D Printed Investment Cast Tooling, chaired by Tom Mueller (Mueller Additive Manufacturing Solutions)

AFS technical committees make the metalcasting world go around. Now there will be improved synergies between technical committees and the AFS shared interest group committees since the board approved a new Management Council. This new council will operate in parallel with the Technical Council (formerly Division Council). The Management Council coordinates among the Marketing, Government Relations, and HR Committees, plus the Future Leaders and Women in Metalcasting Special Interest Groups. Both Councils will report to the board on a regular basis.



The AFS Safety Committee meets at the AFS offices in December 2017.

# EDUCATE.

AFS provides talent development from entry-level to the CEO office. Through classes, in-plant and online training, reference and resource material, and various workshops, seminars and conferences, AFS helps drive the sustainability and growth of the metalcasting industry.

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## Key AFS Education Efforts Include: Conferences

The Foundry Executive & Leadership Conference was again the premier leadership event in metalcasting. The event featured energizing presentations from noted industry experts, and a stimulating look at the horizon from a technological futurist.

The 29th AFS Environmental Health & Safety Conference drew more than 160 attendees, the highest turnout in more than a decade. The event brought the metalcasting industry together to discuss the latest health and safety issues affecting the industry this year. Among the conference's topics, panelists answered attendee questions on community relations, environmental advocacy groups, and health and safety. In addition to the FELC and EHS conferences, other conferences, seminars, and webinars were held:

- AFS Labor Relations and Human Resources Conference, Clearwater, Florida
- AFS Metalcasting Supply Chain Summit, Chicago
- AFS Metalcasting Supplier Summit, Chicago
- AFS 121st Metalcasting Congress, Milwaukee
- AFS Government Affairs Fly-In, Washington, D.C.
- AFS Volunteer Leadership Training Conference, Schaumburg, Illinois
- Foundry Executive and Leadership Conference, Stowe, Vermont
- AFS Conference on Sand Casting Technology & Materials, Indianapolis
- Future Leaders of Metalcasting, Defiance, Ohio



## Webinars

- Update on OSHA's New Crystalline Silica Standard and Pending Lawsuit
- Reshoring Metalcasting
- Update on Crystalline Silica What You Should be Doing Now
- Get Ready for OSHA's Electronic Recordkeeping Rule
- Practical Steps to Maximizing Refractory Performance
- Case Studies in Additive Manufacturing for Metalcasting



CLICK HERE TO WATCH THIS VIDEO OR VISIT METALCASTINGTV.COM

## **Update from the Institute**

The AFS Institute provides opportunities for education and career advancement, networking, and knowledge transfer. Since 1957, the AFS Institute has trained more than 89,000 students in classroom and laboratory courses, a total that does not include students from in-plant training and Congress/Expo courses.

The AFS Institute is invested in partnering with members to address the issue of an aging workforce and new employees entering the industry without metalcasting-specific skills. The Institute works with members to capture the knowledge of those experts.



AFS Institute students compare notes in a recent Gating & Riser Design class.

## **Resources & Publications**

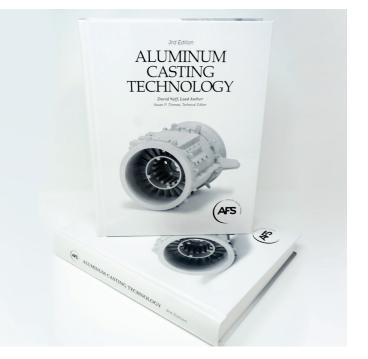
#### New and updated titles:

- Aluminum Casting Technology, 3rd Edition
- AFS Transactions 2017 Volume 125
- Green Sand Additives, 3rd Edition
- Manual de Defectos de Fundicion: Aleaciones Ferrosas (Casting Defects Handbook: Iron & Steel/Spanish)
- 2017 Buyers Guide
- 2017 AFS Metalcasting Forecast & Trends
- 2017 Casting Source Directory
- 28th Environmental, Health & Safety Conference
  Proceedings

Several AFS periodicals served the metalcasting industry and supply chain. *Modern Casting* provid-

Teachable skills are determined from industry feedback, and in combination with expert metalcasting knowledge, professional curriculum with hands-on activities is developed and delivered to students consistently and successfully.

Today, students and their employers may have many different goals for achievement and requirements for training costs, time, and travel. The Institute applies a multifaceted approach to training delivery, with both e-Learning and instructor-led opportunities.



Aluminum Casting Technology has been newly updated.

ed monthly editorial coverage of the metalcasting industry's news, trends, and best practices. *Metal Casting Design & Purchasing* Magazine provided casting supply chain information to casting customers. *Global Casting* reached the global metalcasting community. The *International Journal of Metalcasting (IJMC)* was a vehicle for technology transfer of recent metalcasting research. *Melting Point* reached high school students with valuable insight into a career in metalcasting.

Over 3,000 names were added to circulation for *Modern Casting* and *Metal Casting Design & Purchasing* through telemarketing efforts.

### e-Learning

E-Learning modules are designed to teach one new skill when and where the need demands, with simulated exercises supported by industry expertise. Because the modules are focused on a skill, a student's time is optimized to quickly deliver training.

In 2017, the Institute released 37 new e-Learning modules, reaching a total of 70 by the end of the year. Three of those modules were part of the Spanish language translation development project. By the end of 2018, 20 of the Introduction to Metalcasting, casting defects, green sand, and iron modules will be released in Spanish. The courses are hosted online on the AFS Institute's learning management system, which provides electronic transcripts for all e-Learning achievements. Student activities mirrored the exponential growth of e-Learning modules launched. Over the course of the year, the number of unique logins to the system tripled, and those students completed 2,045 learning activities.



### **Classroom Courses**

The Institute offers 38 unique instructor-led courses teaching skills in the general categories of basic metalcasting, quality control and improvement, and design and sourcing. Courses cover topics specific to molding methods for both sand and permanent mold as well as the alloys of aluminum, copper, iron, and steel. This past year, the most popular classroom courses were Gating and Riser Design 101, and the newly launched Gating and Riser Design 201, Casting Cost Estimating, Introduction to Metalcasting, and Casting Defects Analysis.

The Institute worked with the AFS membership department to relaunch the chapter-sponsored training program. The efforts were put forth to streamline the process for both chapters and the Institute and improve the offerings to achieve chapters' educational goals. Chapter-sponsored courses are AFS Institute courses selected by the chapter and held at an appropriate training facility in their region. With the proper facilities, all Institute courses are available for selection. AFS Institute and marketing staff manage the administration and marketing at the national level. Local chapters select the course, date, and location, and manage marketing efforts in their region. In May, the Tennessee Chapter hosted a sold-out Casting Defects Analysis course in Chattanooga. This chapter-sponsored approach allowed students who may not have time or be able to travel far to achieve professional development goals and meet other metalcasters in their area. This chapter-sponsored course program brings immediate impact, high value, unbiased skills training for a large group, minimizing travel and providing networking opportunities.

In-plant training is no longer limited to Introduction to Metalcasting and Casting Defect Analysis. In fact, only one of the six in-plant training courses held last year was the Introduction course. The 218 students trained at three different facilities gained new skills in varied topics of gating and riser design, 3-D sand printing, green sand and nobake molding.

The Institute continues to listen to feedback from membership to drive improvement and bridge gaps in metalcasting workforce development.

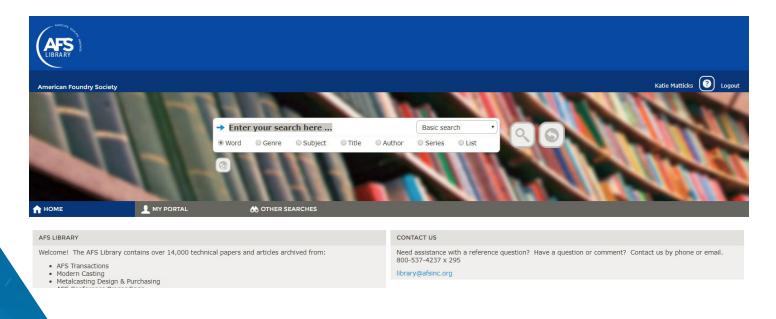
# INNOVATE.

AFS advances the industry with tools, resources, leadership, and direction for better research, better processes, and better practices.

# Key AFS innovation efforts include:

## **AFS Library**

AFS members benefit from the AFS Library, one of the world's best metalcasting collections. Since AFS is committed to innovation and cutting-edge research, the library has moved to a dedicated library management platform for improved access. The new software makes it easier to access the digital collection and offers responsive design, allowing users to view the library on almost any device. The online library also offers a catalog of the physical collection of industry-wide trade journals and publications. All AFS Individual and Corporate Memberships come with free access to the online library. This new member benefit will provide members with better access to all library records.



## Cutting-Edge Research

AFS has streamlined the process used for bringing research proposals from the idea stage to the Research Board for final consideration. This new process reduces the amount of time needed for vetting proposals.



#### CLICK HERE TO VISIT CASTINGCONNECTION

## U.S. Department Of Defense; American Metalcasting Consortium (AMC)

AFS had two projects funded through the U.S. Department of Defense, Defense Logistics Agency. This funding had been ongoing for five years and ended in October 2017. AFS has submitted two projects for potential funding for the next five years.

The first project is development of statistically validated material property data for cast alloys for inclusion into Metallic Materials Properties Development and Standardization handbook (MMPDS). The aluminum alloy A206 in T4 and T71 tempers was presented at the MMPDS fall meeting for inclusion into the handbook. These steel alloys will be fully characterized, and mechanical properties will be submitted for inclusion into MMPDS. Inclusion of these and other casting alloys in MMPDS will enable these alloys to be used in more applications, such as aerospace and military applications. This is helpful in increasing the casting market with conversions from forgings and/ or weldments.

The second project is developing properties for alloys to be included in the AFS Casting Alloy Data Selection tool (CADS). This database is on the AFS website and provides casting design engineers with a searchable database of qualified alloy properties. New alloy data is developed through AFS-funded research and added to the database. An additional module is under development that will include properties of sand molds.



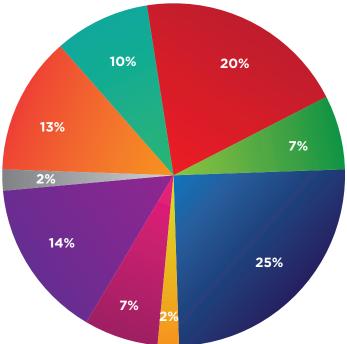


The new AFS website is set to go live in January 2018. Be on the lookout for the new design!

## **New Website**

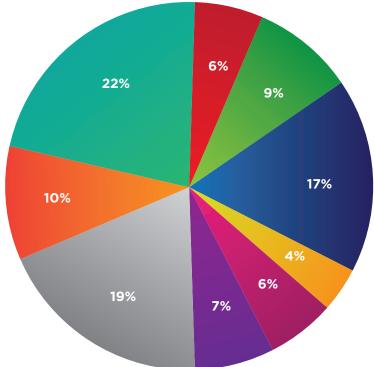
Currently, no website in North America adequately conveys the great careers available in metalcasting and the strong contributions that metalcasters make to the manufacturing economy. AFS is developing a new version of afsinc.org that will advance those goals, as well as deliver a better user experience for all audiences—foundrypersons, suppliers, castings purchasers, students, educators, policymakers, and journalists. The project goals are to: 1) Better communicate the importance of metalcasting and the value of castings; 2) Clearly communicate the value proposition of AFS and engage more participation; 3) Deliver a positive experience to site visitors; and 4) Improve the ease and efficiency of back-end site administration. Project completion is slated for this winter.

## 2016-2017 AFS and The Institute Financials



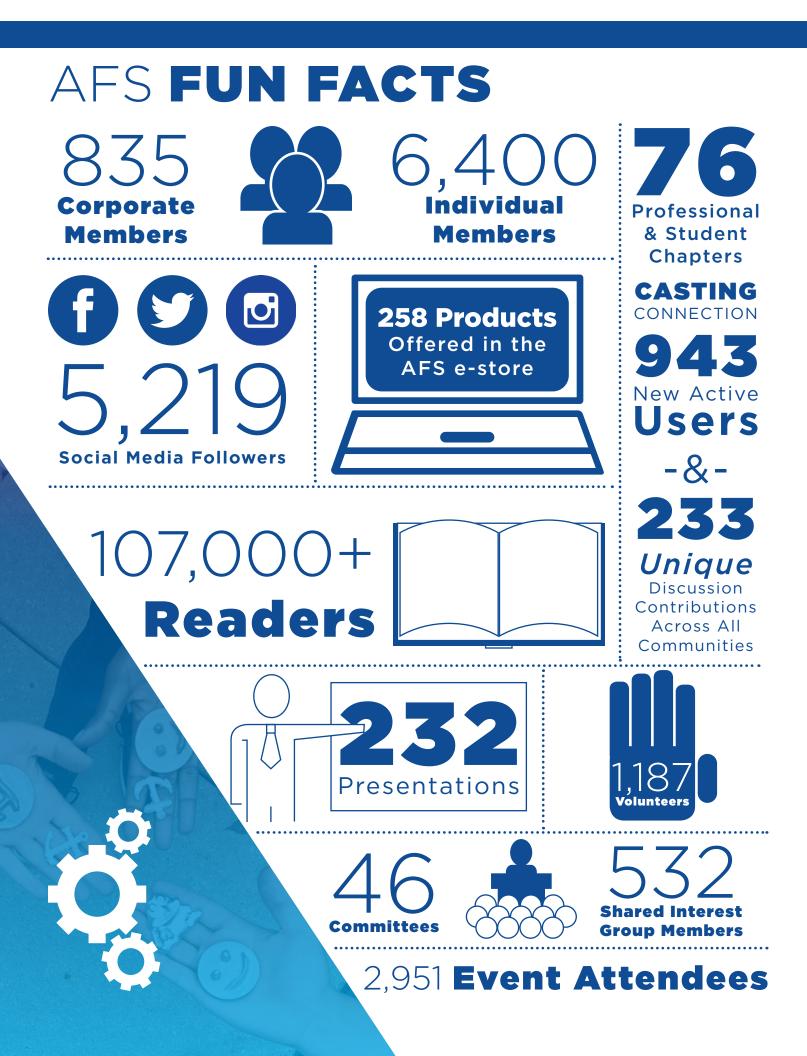
### 2016-17 **Revenue**

Membership	20%
Education	7%
Magazines	25%
Publications	<b>2%</b>
Conferences	7%
<b>Congress &amp; Expositions</b>	14%
<b>Program Services</b>	2%
Research	13%
Other	10%



#### 2016-17 EXPENSES

Membership/Chapter	<b>6%</b>
Education	<b>9%</b>
Magazines	17%
Publications	<b>4%</b>
Conferences	<b>6%</b>
<b>Congress &amp; Expositions</b>	7%
<b>Program Services</b>	19%
Research	10%
Administrative	22%



## **Vision Statement**

AFS will lead the North American metalcasting industry in advocacy, education and innovation.

### **Mission Statement**

The American Foundry Society exists to provide and promote knowledge and services that strengthen the metalcasting industry for the ultimate benefit of its customers and society.



## **Member Involvement**

Member involvement is the lifeblood of AFS, and it is on the rise. Attendance at the Human Resources Conference and the Government Affairs Fly-In increased by 60 percent and 50 percent, over last year. EHS conference attendance exceeded 2016 levels.

Our chapters through the years have played an important role at the regional level. AFS has launched a renewed commitment to our chapters. Our Board members are reaching out to every chapter president, seeking to find out what assistance they might need. Our staff launched a new monthly Chapter Bulletin, which debuted in September. Also, a Chapter Success Story is now featured in every quarterly issue of *Member Connections*. When the new website goes live, we will also offer chapters an optional AFS-branded website template to use for their chapter. This is all part of a commitment to reinforcing the value of chapter involvement.

To assist chapters in finding great metalcasting speakers, AFS launched an online Speakers Bureau in late 2016. AFS used to update its speaker list once every three years. Now, we update it in real time, so that chapters and student chapters always have access to great metalcasting industry speakers. AFS staff are also speaking at many industry events. ABOVE: AFS staff members help at a Girls in Engineering, Math and Science (GEMS) event.

BELOW: AFS members enjoying the Foundry Executive and Leadership Conference.



## **AFS Staff**

**Doug Kurkul** Chief Executive Officer

#### **Finance & Accounting**

Kris Drager Director of Finance & Accounting Valerie Stramaglia Accounting Manager Nicole Bagnara Accounting Associate

#### **AFS Institute**

Shelly Dutler Director of Education Jennifer Morton e-Learning Project Manager Bo Wallace Institute Course Coordinator Renee Berrigan Education Assistant

#### **Government Affairs**

**Stephanie Salmon** Vice President Government Affairs **Jeff Hannapel** The Policy Group

#### **Information Technology & Operations**

Mike Lakas Vice President of IT & Operations Rich Fett Information Systems Manager Katie Matticks IT Project Manager Barbara Jackowski Customer Service Manager Carmen Rodriguez Receptionist/Customer Service Deana Barrueta

Customer Support Coordinator Diane Waligurski Meeting Planner & Trade Show Manager

#### **Human Resources & Administrative Services**

**Cathy Potts** Director of HR & Administrative Services

#### **Business Development**

Ben Yates Vice President of Business Development Neal Bender Business Development Specialist Jim Beckwith Magazine Advertising Sales & Marketing Mark McGowan Magazine Advertising Sales & Marketing Joe Murphy Magazine Advertising Sales & Marketing Fabio Cavalieri Magazine Advertising Sales & Marketing

#### **Marketing & Communications**

**Richard Jefferson** Vice President of Marketing & Communications Laura Moreno Director of Special Publications & Related Services Sue Thomas Publications Senior Technical Editor **Tyler Buchenot** Senior Graphic Designer Shannon Wetzel Magazines Managing Editor **Mike Berrafato** Magazines Art Director **Brian Sandalow** Magazines Associate Editor Joe Costin Public Relations Specialist **Tony Perrone** Mailroom/Warehouse Coordinator

#### **Technical, Research & Library Services**

Steve Robison Senior Technical Director Frank Headington Interim Technical Director Juliette Garesché Senior Environmental Health & Safety Technical Director Pam Lassila Casting Congress Director Mary Crompton Industry Information Specialist Kimberly Perna Technical Assistant

## 2017-2018 **Officers & Board Members**



President

**Patricio Gil** CEO Blackhawk De Mexico

#### Directors Class 2014-2018



Edward S. Boyd, Sr. Vice President of Operations Goldens' Foundry & Machine Co.

#### Directors Class 2015-2019



Sandra M. Calabrese Chief Metallurgist General Motors Co.



Vice President

**Jean Bve** President Dotson Iron Castings



2nd Vice President

Peter C. Reich Director Laempe Reich



Immediate Past President

Jeff Cook Chief Sales and Marketing Officer Eagle Alloy Inc.



CEO

**Doug Kurkul** CEO American Foundry Society





Michael Lenahan Vice President-Sales Fairmount Santrol



Randolph Sandstrom Regional Director Technical Service ASK Chemicals

Jim Frost Director of Quality Systems & Compliance AMERICAN Cast Iron Pipe Co.



John L. Grahek Assistant Plant Manager Metalcasting Facility Clow Valve/McWane







**Greg Loving** Senior Vice President & General Manager **Rochester Metal** Products Corp.



Jason McGowan President D&L Foundry, Inc.



**Russell Rosmait** University Professor Pittsburg State University



Scott Strobl Executive Vice President Simpson Technologies Corp.

Directors Class 2017-2021



**Tom Christie** President ATEK Metal Technologies



Mike Leib CEO Weatherly Casting and Machine Company/ Hazelton Casting



Christopher T. Misiak Vice President of Manufacturing and Operations Victaulic Company



**Bradford Muller** Vice President of Marketing Charlotte Pipe and Foundry

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