AFS MEMBER Connections News and information for afs members and chapters



Sand and additive expertise goes digital

They're two of the biggest foundry technical topics: sand casting and additive manufacturing. But rarely do metalcasters have the opportunity to learn about them hand-in-hand, or from a full slate of experts covering all aspects of these foundry operations.

The Sand Casting and Additive Manufacturing Conference, going live on-

line Aug. 31-Sept. 3, is changing that. Featuring more than 25 leaders foundry in sand and 3D printing, this four-day virtual event will COV-

SAND CASTING AND ADDITIVE MANUFACTURING CONFERENCE

Aug. 31-Sept. 3, 2020 Live online & on demand **To register, visit afsinc.** org/conferences

er everything from sand additives to 3D consumables to how metalcasters should prepare for the future of the industry.

When organizers first set out to deliver this conference, they expected to host an in-person event in Milwaukee. But as with so many things, the corona-

Please see Sand/Additive on Page 3





Solidification front begins to move across face of core at ~400s (6.7 mins), and advances past it by ~840s (mins)

Defect needs to occur before casting skin has formed over cores



The Sand Casting and Additive Manufacturing Conference features live and on-demand presentations on ways to improve foundry processes. Above are screengrabs from AFS OnLive, the online platform hosting the event.

AFS introduces benefit to help Corporate Members reduce energy costs

E nergy costs account for a big portion of foundry expenditures, but it can be hard to judge which option is best when shopping for gas and electricity in deregulated states. That's why AFS recently introduced a new Corporate Member benefit that makes it easier for companies to save money on this major expense.

In partnership with APPI Energy, AFS

Corporate Members now have access to energy consultants who provide recommendations on pricing, market time and length of contract using data analytics a proprietary database.

This database, which benchmarks historical and real-time prices in every

Please see Energy on Page 6





Ask a technical question, answer a question with Casting Connection

Follow us on Instagram at americanfoundrysociety



American Foundry

Society

Join the discussion at Foundry and Diecaster Network



Follow us on Twitter @AmerFoundrySoc

Supporting AFS members through the recession

From 1980 to 2019, the United States endured five recessions, lasting anywhere from 6 to 18 months. The 2020 recession is unlike the others in that the immediate cause was neither an oil shock nor any other economic occurrence, but rather was a health pandemic, leading to self-imposed restrictions on our economic activity.

Although it is too soon to know how long the current recession will endure, the team at the American Foundry Society knows that we have an opportunity – and indeed an obligation – to support you, our members, during challenging times. For that reason, with the full support of the AFS Board of Directors, AFS has undertaken the following steps to support our membership:

Reducing Health Benefits Costs. Providing benefits to your employees helps make your company an attractive place to work. AFS is now partnering with United Healthcare, Mercer and the NAM to bring you an affordable group-purchasing option, alongside other metalcasters. Contact us and we will put you in touch with an expert who can price our offerings alongside your current plan.

Trimming Energy Costs. There aren't many industries more energy-intensive than foundries. AFS is now partnering with APPI energy in deregulated markets to shop for the best natural gas and electricity rates. Contact Ben Yates at byates@afsinc.org, and he will put you in touch with APPI. You could start saving as early as your next contract renewal.

Delivering Your Message. It has never been more important for suppliers' messages to be heard by foundries; and in turn, for foundries' messages to be heard and understood by casting designers and buyers. AFS publishes two magazines that are the premier message-delivery vehicles in our industry. Now is the time to recommit to delivering your message through magazine and digital advertising through AFS. Moreover, this month we introduced digital ad retargeting, which further multiplies the reach of your advertising dollar. Give us a call so we can walk you through

the options!

Free Members-Only Webinars. One of the great benefits of **AFS** membership has gotten better. Since March 1, AFS has delivered 24 free Members-Only Webinars on topics technical, policy, and compliance in nature. They are all archived on AFSinc.org as well for your convenience. In our last fiscal year, AFS

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Sept. 3. The video content will remain available after the conference as well. Visit AFSinc.org/events to register. EHS Conference. Every year, upwards

of 160 metalcast-

ers and suppliers attend the AFS Environment, Health and Safety Conference. For the safety of our members, this conference is also going to be delivered virtually, Oct. 5-9, with archived video thereafter. At this critical time, you won't want your foundry to miss out on these vital presentations. Courses via Zoom. AFS Insti-

webinars were viewed more than 2,000 times.

Metalcasting Forecast. Knowing that all January economic forecasts were quickly rendered obsolete, AFS is now delivering two Forecasts per year. The newly updated Forecast was issued in July to all corporate members. It is also available for purchase to individual members.

Sand Casting/Additive Manufacturing Conference. You count on AFS to bring you the best experts addressing the most timely technical topics related to metalcasting. Though we cannot get together in person, AFS is providing this conference virtually, Aug. 31 through tute courses are being delivered via Zoom to exceptional responses. The list of upcoming virtual courses is on our website. We encourage you to ensure that worker training does not become a casualty to the current economic climate.

We are proud of the dedicated work that foundries are doing to keep workers healthy, and at the same time produce the highly engineered castings that are critical to our economic rebound and national defense. AFS is committed to be at your side through the duration of the current recession and beyond. Thank you for your continued involvement and membership in AFS.



40+ experts to share insights at EHS conference

For more than three decades, the AFS Environmental, Health, and Safety

Conference has attracted foundry EHS pros for discussions, presentations and panels on the latest advancements in the indus-

32ND EHS CONFERENCE

Oct. 5-9, 2020 Live online & on demand To register, visit afsinc. org/conferences

try. Over that time, foundries have grown greener and safer than ever, but continuous improvement demands metalcasters stay on top of the latest technology and pioneering practices.

At the 32nd EHS Conference, going live online Oct. 5-9, more than 40 industry experts will give their insights into what every foundry needs to do to stay on the forefront of EHS advances. Featuring innovative research presentations, vendors highlighting the latest products, and foundry members-only sessions providing answers to pressing EHS questions, this event is essential for anyone who handles EHS responsibilities in a metalcasting plant. Topics to be covered include:

- Air emissions
- Silica compliance
- PFAS concerns

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- Incident investigations
- Regulatory updates
- Coronavirus issues
- EHS "hot topics"
- Stormwater rules
- First aid for burns
- And more

This event will be hosted on AFS OnLive, the new web platform for AFS conferences that features livestreamed presentations and bonus on-demand content. Registrants will have on-demand access to all recorded conference sessions for 12 months following the live event. To register, visit **AFSinc. org/conferences**.

Stay on top of stormwater regs at compliance seminar

Are you an EHS pro looking for targeted information on stormwater regulations and related issues? Join AFS for the **2020 Stormwater Compliance Vir**tual Seminar, live online Nov. 4-5.

Stormwater regulations are complex, ever-evolving, and essential for EHS pros to understand. Building on the fundamentals of the Clean Water Act, the AFS Stormwater Compliance Virtual Seminar will provide the latest regulatory and technical information on rapidly changing stormwater rules. This seminar is especially timely given the many recent changes to state General Stormwater Permits and the newly proposed 2020 EPA Multi-Sector General Permit (MSGP).

To register, visit **AFSinc.org/confer**ences.

AFS Advocacy

AFS supports legislation to double R&D tax credit

Abill that would boost innovation and expand tax credits for small businesses has the support of AFS.

H.R. 7766, introduced in the U.S. House by Rep. Jackie Walorski (R-Ind.), would assist metalcasters by doubling research

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Sand/Additive continued from Page 1

virus pandemic presented a challenge: how to facilitate knowledge-sharing and present important information in a remote setting?

The answer came in the form of a new opportunity for online conferencing and networking: AFS OnLive. A purpose-built platform for AFS conferences, OnLive combines live broadcasts of presentations, moderated question-and-answer sessions, and on-demand content that and development tax credits and allowing more businesses to access these incentives. The metalcasting industry is a major driver of innovation in manufacturing, investing heavily in research and development. About 90 percent of all durable goods contain metal castings.

"The highly engineered components manufactured by U.S. metalcasters form the backbone of our industrial economy," said AFS CEO Doug Kurkul. "This commonsense legislation would encourage further

can be accessed at any time.

In many ways, the materials presented at the Sand Casting and Additive Manufacturing Conference will mirror what attendees would expect at a traditional event -- experts presenting their insights into new technologies, process improvements, and similar topics, and answering questions. But OnLive conferences have a major value-add for registrants: the ability to watch, and rewatch, the entire conference for up to 12 months after it goes live. scientific and technical breakthroughs, and it would boost U.S. metalcasters' ability to innovate and support jobs. As manufacturers work to lead our country's economic recovery during these unprec-



Rep. Jackie Walorski

edented times, we encourage the House to pass H.R. 7766."

That includes keynotes, live presentations, panels, and bonus on-demand materials. In the case of the Sand Casting and Additive Manufacturing Conference, this means a total of about 14 hours of content will be streamable for a full year. Registrants just need their login information to access the full conference on demand.

Registration is \$600 for AFS members and includes live access and on-demand streaming. To register, visit **www.afsinc. org/conferences**.

AFS to host digital Manufacturing Day

Follow along at #MFGDay and #MFGatAFS

t's a longtime tradition for manufacturers around the country: Manufacturing Day. But this year's events are bound to look a bit different.

Held the first Friday in October, Manufacturing Day is typically a day when manufacturers open their doors to schools, community groups, families, legislators, and local media, to share a bit about what they make, who they employ, and why manufacturing is important.

Dozens of AFS Corporate Members make a tradition of participating in this nationwide event, giving tours of their plants, answering questions from curious kids, and sharing the positive message of American metalcasting with the next generation. AFS HQ in Schaumburg, Illinois, takes part, too, with Chicago-area schools sending students for Foundry-in-a-Box demonstrations, presentations from local AFS Corporate Members, and more.

The coronavirus pandemic and the resulting restrictions on gatherings are forcing manufacturers to think about this event differently this year, and many companies are announcing virtual events in lieu of in-person tours. AFS is also transitioning to a web-based approach to Manufacturing Day.

Instead of a one-day celebration of



Matthew Cummins, artist in residence at the Museum of Science and Industry, speaks to students during Manufacturing Day at AFS last year. This year's event will be virtual.



metalcasting, AFS will dedicate a week, Sept. 28-Oct. 2, to sharing a message about the positive ways metalcasting shapes our world.

Please see MFG Day on Page 6

MEMBER BENEFITS

Small Corporate Members could get big-time health benefits

Small AFS Corporate Members can now offer the same health care as large companies thanks to a new member benefit: NAM Health Care.

This partnership with the National Association of Manufacturers (NAM), Mercer and UnitedHealthcare allows AFS Corporate Members with fewer than 100 employees to provide workers and their families with a convenient, Fortune 500-style benefits buying and enrollment experience.

"We're pleased to launch this program for our small Corporate Members because it will help many of them find competitive, reliable policies that fit their needs," said Ben Yates, AFS Vice President of Business Development. "In addition to potential savings on premiums, the employer will have some great online resources for managing the program, and participants will be able to log in and personalize their coverage."

For more information and to get a quote for your business, visit the AFS NAM Health Care page at **afs.namhealthcare.com**. Companies are encouraged to review the eligibility requirements, which are state-dependent. All companies can receive detailed quotes, but only active AFS Corporate Members may participate in the program.

Questions about NAM Health Care or AFS Corporate Membership? Please contact Ben Yates at (847) 803-5278 or **byates@** afsinc.org.

2020-2021 **AFS Officers & Board Members**



President Michael L. Lenahan CEO. KB Foundry Services



Vice President **Jim Frost** Director Quality Systems & Compliance. AMERICAN Cast Iron Pipe Company



2nd Vice President Adam San Solo Director of Sales & Engineering, U S Foundry & Manufacturing Company



Immediate Past President Peter C. Reich Co-Owner, LAEMPE REICH



CEO **Doug Kurkul** CEO, American Foundry Society

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Virtual training is catching on for metalcasters

The coronavirus pandemic shut down gatherings and cut corporate travel plans short, but it didn't change one simple fact: some things, like training, are essential for businesses to operate successfully.

AFS Institute instructors knew this was true for the foundry industry, and so they got to work transforming their most popular classroom courses into something totally new -- "live online" courses that would cover all the same material as their in-person classes, but be held remotely, via the video conferencing platform Zoom.

The response from metalcasters to this new offering has been huge. In just a few months, enrollment in the Institute's new slate of live online courses has tripled.

"I am ecstatic that we were able to pivot so quickly to meet our members' training >> The AFS Institute also offers
e-Learning modules, so you can learn at your own pace and on your own schedule. To see a full list of e-Learning modules, visit AFSinc.org/e-learning.

needs through this virtual format," said Jen Christian, AFS Director of Training Solutions. "Student participation and instructor interaction has been great!"

Virtual training has allowed participants from all over North America to take part in classes ranging from Gating & Riser Design 101 to Casting Defect Analysis. Classes are held over several days, and students can log in from home, from the office -- anywhere with a device and an internet connection.

After they register, students get hard-copy materials mailed to them, and they get



A photo of the July 14-16 Gating & Riser Design 101: Live Online class.

a Certificate of Completion. The format allows students to interact and ask questions, just as they would in person. Courses are offered at a lower cost than in-person classes, and group discounts are available.

To see a full list of upcoming AFS Institute courses, visit **AFSinc.org**. Questions? Email Jen Christian at **jchristian@afsinc.org**.

FUTURE LEADERS OF METALCASTING

Future Leaders to hold development series

Future Leaders in Metalcasting (FLM) Chair Tom Bye (Dotson Iron Castings) announced that FLM will present two live webinars to provide young professionals with key skills to help them



Tom Bye

succeed as they move into higher leadership roles. The webinars will also facili-

MFG Day continued from Page 4

Using videos, graphics, and other materials on **AFSinc.org**, as well as on our social media channels, AFS will share information about metalcasting careers, how castings are made, and where castings are

Energy continued from Page 1

deregulated market, allows for direct comparisons of energy prices.

"The AFS Energy Program will use the power of group purchasing to provide many Corporate Members with favorable rates on electricity and natural gas," said AFS CEO Doug Kurkul. "We're happy to partner with APPI Energy to offer this tate educational networking among FLM members.

Featuring workplace psychologist Dr. Celina Peerman, the two-part series will give emerging leaders in management and technical roles the tools they need to build crucial workplace skills.

The series launches with "No More Hours in Your Day," live online from 2-4 p.m. CT Aug. 25. The session will focus on managing priorities, delegation, meeting strategies and communication.

"Managing Ups and Downs" follows from 2-4 p.m. CT Oct. 29. It Focuses on eliminating roadblocks to success, resolving workplace problems, and improving

used, as well as important facts and figures about the foundry industry and the people who make it work.

These messages and materials will be shared with our own followers as well as the broader #MFGDay audience, made

money-saving benefit to our members."

After choosing a supplier, APPI's customer service team interacts with utilities and suppliers on behalf of manufacturers to ensure smooth transactions. Additionally, APPI Energy can consult and provide guidance on energy management strategies, energy efficiency projects, Demand Response programs, emotional intelligence.

Both sessions include virtual networking, and all registrants will receive a Future Leaders of Metalcasting gift.

VIRTUAL DEVELOPMENT SERIES

2-4 p.m. CT Aug. 25 & Oct. 29, 2020 Live online & on demand **To register, visit afsinc.** org/conferences

The series is \$119.99 per session for AFS members, with discounts when you sign up for both. To register, visit **AFSinc.org/**conferences.

up of students, teachers, and other Manufacturing Day participants. AFS members are encouraged to share the message, too! Just look for us on Facebook, Twitter and Instagram, or visit AFSinc.org for links and materials.

alternative energy solutions and real-time energy management systems.

To learn more about the AFS Energy Program and APPI Energy, including states where this program is available, visit **afsinc.org/afs-energy-program**.

For questions about AFS Corporate Membership, please contact Ben Yates at (847) 803-5278 or **byates@afsinc.org**.

AFS WELCOMES NEW CORPORATE MEMBERS

As of July 31, 2020



Air and Energy Systems Inc. Matthews, North Carolina



American Pattern CNC Works Cedar Falls, Iowa



APPI Energy Salisbury, Maryland



Davis Alloys Manufacturing LLC Sharpsville, Pennsylvania



Effort Foundry Inc. Bath, Pennsylvania



Ermak Foundry & Machining Chaska, Minnesota

GridBeyond LLC Houston, Texas









PENN-MAR CASTINGS, INC.

Penn-Mar Castings Inc.

Hanover, Pennsylvania

Hawver Aluminum Foundry Tampa, Florida



ISO 9001:2008

Penticton Foundry Ltd. Penticton, British Columbia



Terves Inc. Euclid, Ohio



Marcellus Metalcasters Inc. Marcellus, Michigan



Romac Industries Inc. Bothell, Washington

TRIES, INC

Tengco Inc. Jonesburg, Missouri



Thomas Machine & Foundry Marysville, Washington





Total Alloy Foundry Inc. Memphis, Texas

Transvalor Americas Corp. Chicago, Illinois

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AFS EVENTS

No More Hours in Your Day | Live Online Aug. 25

Sand Casting and Additive Manufacturing Conference | Live Online | Aug. 31-Sept. 3

32nd EHS Conference | Live Online | Oct. 5-9

Managing Ups and Downs | Live Online Oct. 29

Stormwater Compliance Virtual Seminar Live Online | Nov. 4-5 Women in Leadership | Live Online | Nov. 10

INSTITUTE COURSES

Casting Defect Analysis: Live Online | Aug. 25-27

Gating & Riser Design 201: Live Online | Sept. 15-17

Green Sand Molding 201: Live Online | Sept. 22-24

Introduction to Metalcasting: Live Online | Sept. 29-Oct. 1

Improving the Effectiveness of Visual Inspection: Live Online | Oct. 6-8

2020-2021 AFS OFFICERS

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Jim Frost, Vice President Director Quality Systems & Compliance

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Member Connections is a newsletter for all current **AFS members**. Send all inquiries to Katelyn Stanek at *kstanek@afsinc.org* or *847-824-0181 ext. 286*.

2020 AFS TRANSACTIONS Vol. 128 | Coming November 2020

AFS Transactions is the premier technical publication of the international metalcasting industry. The 2020 publication includes 26 industry-based technical papers from scientific and academic researchers, suppliers, metalcasters and other industry sources that were scheduled to be presented at the 2020 AFS Metalcasting Congress.

Papers published in the *AFS Transactions* have been approved after rigorous peer review by academic and industry experts. These papers present the best in the categories represented below:

- Aluminum
- Molding
- Cast Iron
 Engineering
- Steel
- Quality
- Environmental, Health, and Safety

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