Mold Technologies Division

Division of Society of Plastics Engineers WINTER 2023

Message from the Chair - *IN RECOGNITION*

Scott Peters

SPE Mold Technologies Division Chair
2022 / 2024

There are people who are selfless in the dedication they have to their business community and remain faithful and steadfast to the cause of propelling the knowledge base forward. Their focus is collaboration – always learning and always sharing experiences. They are the people that should be recognized for their many contributions – not only to acknowledge their work ethic and commitment, but to use their accomplishments to inspire each other.

Glenn Beall is just such a person. Since joining the Society of Plastics Engineers in 1960, he has been instrumental in the formation of several technical divisions including the Rotational Molding Division, Product Design and Development Division (PD3), and Mold Technologies Division (previously Mold Making and Mold Design). His foresight and quest for the dissemination of technical information in the form of Technical Papers and Educational Activities are the hallmark of his career. Glenn was named Fellow of the Society in 1985, Distinguished Member in 1990, and he was inducted into the Plastics Pioneers in 1983.

Attend any ANTEC (Annual Technical Conference) or RETEC (Regional Technical Conference) or most any other industry event and you can rest assured that Glenn will be there. And he is not there for recognition - oh no - he is there to share his knowledge and experiences with all who will listen.

A member in good standing of the Society of Plastics Engineers for 62 years, a member of the leadership of the Mold Making and Mold Design Division since its inception, Glenn has long been a driving force in the industry. It is estimated that Glenn has spoken at more than 350 technical seminars to an audience of over 30,000 industry professionals during his career.

In addition to his many technical accolades, Glenn has served as a mentor to many members of SPE Leadership, yours truly

Continued on Page 5

Sponsor's Index

Editor's Commentary

When we in the mold making industry describe our shop – or very likely any other shop – we very often do it with credentials of size and some form of product category.

John Berg
SPE Mold Technologies Division
2018 / 2023 Newsletter Editor

Size of the business – Many of us first describe a tool shop in terms of the size of the team, for example, "XYZ Mold is a 30-person shop." Another size reference is annual sales or revenue, "XYZ Mold does about $18 million in tools annually."

Size of the molds – as measured in IMM clamp – "XYZ builds molds for applications that range from 40 ton to 1000 ton." The size of parts produced by the mold are also descriptive of a shop. Perhaps they specialize in micro-molds, or high-cavity cap molds, or their tooling systems are used to mold full-size waste containers, automotive instrument panels, or shipping pallets and bins. Once we have an idea of how many people work there, what the annual revenues are, and which style(s) and applications of molds are created, we can already begin to imagine the physical nature of the shop.

What separates one mold builder from another? After we communicate a general account of the size of the shop and the size range and part design nature of the injection molds they build, how do we describe that shop's unique strength, attribute, and character? Certainly, it is the human factor involved – the culture of the shop. It is, ultimately, the personality of the team members, individually and collectively, that not only determine the day-to-day performance of the business, but its sustainability and growth.

Because culture cannot be implemented by the will or wish of the CEO alone, it must be grown. The shop owner or leader surely impacts culture by providing an atmosphere and environment conducive to mutual success. But a company culture of safety, performance, reliability, collaboration, and education

Continued on Page 3

comes from the team itself. The goal is to have a workplace of people focusing on customer satisfaction and proactively looking out for one another's best interests and career growth. A sound strategy to create such a workplace is to guide and support the youngest members of our team. Whether they are participants in a state-certified apprenticeship program, a work-study curriculum, or your own intern program, each individual will benefit from a well-rounded and appropriately structured mentoring system.

I asked a few of my fellow SPE MTD board members a few questions about educational and mentoring best practices at their shops. There are no secret strategies or short-cuts to creating an effective learning environment. There is however, a common theme of extended involvement – with several members of the shop team actively engaging with their apprentices and young learners, and with their local educational community. Very sincere thanks to Eric Hecker – Eifel Mold & Engineering, Stephen Hansen – CDM Tool & Mfg., Wes Stephens – Omega Tool, Inc., Jason Murphy – Next Chapter Manufacturing, and the shop I call home, Dynamic Tool Corporation, for providing insights and updates on their education and mentoring procedures. The answers from our group will be presented collectively. As it turns out, hands-on involvement and dedicated interaction are the key to talent development. Which is likely why all the above-named shop leaders are on the SPE Mold Technologies Division board.

In a typical year, how many apprentices do you have on your team?

Every member of our group stated they have at least one apprentice on staff, with a couple of the larger shops coming in with as many as seven young learners on the team – as either those serving their formal apprenticeship program or as part of their high school's co-op / work study program. We also find that geographic location has an impact on the number of available and qualified candidates – via proximity to technical colleges and high schools with progressive technical education departments.

Do mentors from all departments actively work with your apprentices?

This answer was also determined by shop size as shops with larger teams have more available human resources to devote to educating. Each business has a key mentor as the conduit of an apprentice program's management and progress review. There is also significant involvement from representatives from each of the mold manufacturing process categories (departments) at a mold builder – design, EDM, hard-cutting, graphite machining… Once the student has had the opportunity to spend time in every area, their mentor discusses their performance and assesses any proclivity the individual has for a specific discipline.

Continued on Page 4

Do you have your students spend time in non-technical areas of your business?

Every shop expressed the value of the wide perspective of the business for the apprentice / intern and for the company itself. An opportunity to work in the non-tooling areas of the business, such as shipping / receiving and customer service, for example, provide the best experience for career path development. This cross-training will also be beneficial when circumstance requires the donning of different hats by various employees to fill-in during times of vacations or leaves of absence. One shop owner brought up their positive experience in integrating their Quality Management System into their Enterprise Resource Planning, so all workflow and documentation is a digital thread from start to finish. I have found it easier for younger apprentices to work digitally compared to more traditional systems.

Are you actively involved in your educational community?

All shops strive for a connection to their community's educational sources, but the amount of time and level of commitment is based on their headcount bandwidth. Hosting student tours and participating in regional career fairs is pretty much standard operations for all. In some cases, the shop has established direct and ongoing interaction with the instructors and technical education department heads at their local high schools and technical colleges. Several shops noted they have hosted tours for grade school students, in an attempt to generate interest in manufacturing careers.

Are you doing anything different today than you were five or ten years ago?

Each company is focusing on increasing their effort in cultivating and growing talent. For most, that resulted in building and growing relationships with schools in their area to promote manufacturing and to meet likely candidates. It also involved designating a specific resource to take on the tasks associated to those activities. The scope of most mold builders' operations often precludes the ability to fund a dedicated resource solely to managing their talent development. However, every shop has found a few key employees whose dispositions and interpersonal skills are suited very well to supporting and guiding the careers of the next generation. After all, innovation comes from the team, not the equipment.

Eifel Mold & Engineering	https://www.eifel-inc.com/injection-mold-company/
CDM Tool & Mfg.	https://www.cdmtool.com/
Omega Tool, Inc.	http://omega-tool.com/
Next Chapter Manufacturing	https://nxcmfg.com/
Dynamic Tool Corporation	https://www.dyntool.com/

included. I recall meeting Glenn when I became a new member of the Mold Making and Mold Design Board of Directors in 1995. I was a nervous first year member of our board and really had no idea what I was signing up for. Glenn came along side me and gave me the encouragement to continue through the leadership roles offered. At my first Past Chairs Breakfast, Glenn was there again encouraging me as a new incoming Division Chair.

Glenn can always be counted on to provide guidance when needed, a steady hand when sought after and a word of encouragement to stay the course. I mentioned a little earlier in this discourse that Glenn will be found at most all Plastics Events. In years gone by, Glenn wasn't alone. His wife Patsy was right there alongside him. For more than 61 years, Patsy and Glenn were Mr. and Mrs. Plastics. In fact, Patsy was made an Honorary Member of the SPE in November of 2014. A high point for them both.

To be honest, our division quite possibly would not have come into existence were it not for Glenn and Patsy. It is with this in mind that we recognize Glenn for his recent transition to Member Emeritus of the Medical Plastics Division of the Society. Glenn was recognized with this honor in October of last year and our board sends every good wish as he transitions to a new phase in his career… We say, in great admiration, THANK YOU GLENN, for a career of service to our industry.

Continued on Page 7

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Glenn is self-effacing about his stature in industry, but we'll toot his horn! Here are some articles that talk more about the man we have all come to revere as Mr. Plastics.

[Glenn Beall - A One-Man Education Crusade | Plastics News]

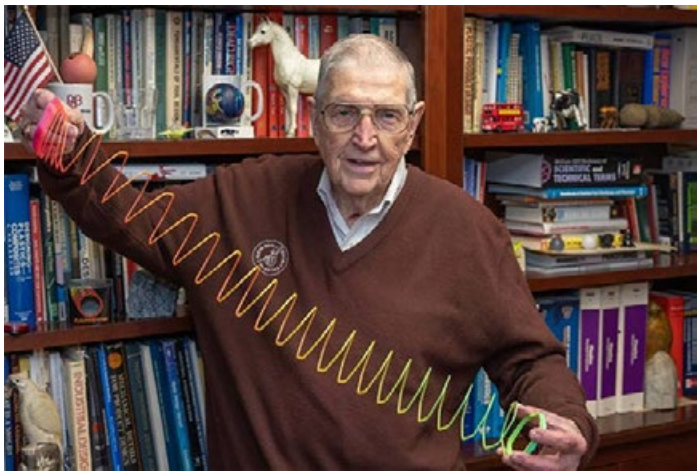
[Glenn L. Beall - Plastics Hall of Fame | PlasticsHoF.org]

[Glenn Beall - SPE Chicago]

[Gross Mismanagement Part V: Education | PlasticsToday.com]

[It's Wine o'clock for Recycling; Honoring Glenn and Patsy Beall; K | Plastics News]

[Chicago SPE Educational Foundation]
[Endow Penn College Plastics Scholarship | PCToday]



Until next time, I remain in your service as division chair.
Scott

MOLD TECHNOLOGIES DIVISION

2022/2023 BOARD OF DIRECTORS

OUR MISSION: *To be the leading industry resource for technical information and to advance plastic mold engineering technologies, while fostering industry growth, education and leadership.*

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Power Point® Hot Edge Gate Nozzles from Melt Design Inc. Create Clean Gate Vestiges, Tips Never Wear Out

Hot runner systems run extremely long periods of time without failure or maintenance

St. Charles, IL – Melt Design Inc. (MDi), a leading innovator in the manufacture of hot runner systems and components for the injection molding industry, designed its Power Point® Hot Edge Gate Nozzles to deliver multiple advantages for injection molders, chief of which is excellent gate vestige. Another benefit? The nozzle tip will never wear out.

Power Point Edge Gate Nozzles are ideal for molding fast-cycling, high-volume production parts such as thin-wall packaging applications and medical goods like pipettes, syringes, and personal hygiene products.

Typically, parts are gated in the center, but when a sidewall gate is needed, Melt Design's edge gate nozzles are a good option. "Take a flip-top cap, for example. Using our edge gate nozzle, the resin is injected away from all the moving mold components and shut offs required to produce the hinges," Panos Trakas, president of Melt Design, says. "The material flows through the nozzle, makes a 90-degree turn to enter the cavity, and as the part ejects the gate is seared cleanly off. You can barely see it." Trakas notes that because the edge gate tips sit in the opening and do not touch the steel at all, the tips will never wear out. Cold runner side gates are eliminated because these nozzles gate directly to the part.

Additionally, as with all of Melt Design's Power Point nozzles, the edge gate nozzles are internally heated for more optimal heat profiles. The thermocouple, located at the nozzle tip, is replaceable and a dual seal system and solid body construction prevents leakage, so the MDi nozzles and complete systems run for millions of cycles without failure or need for maintenance.

Power Point Hot Edge Gate nozzles are available as a single body nozzle in small and medium sizes with 1 through 4 gates and as a three-piece replaceable tip assembly for higher temperature processing materials.

For more information, visit www.meltdesign.com or call 1-800-MDI-ONLY.

Melt Design, Inc. specializes in the design and manufacture of failure resistant, internally heated Hot Runner systems and components servicing molders and mold makers since 1984.

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MST is pleased to announce the arrival of our newly-added Laser texturing and engraving 5 axis machine. This added technology offers MST Inc. the ability to provide our customers with 3 dimensional type patterns that are virtually unlimited. We are excited to bring MST Inc. into this amazing technology and look forward to working with you on your future projects.

For quotes or questions, please contact Joe Gendron, President - MST Inc.
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Office: 330-678-8590 - Fax: 330-678-8594 - Cell: 330-352-5082
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HASCO cooling range extended with the USA system

Through continuous and market-oriented new and further developments, HASCO is able to offer one of the largest ranges of cooling systems in the field of moldmaking. The portfolio, consisting of numerous standard components, a high-temperature range, the Push-Lok system, the stainless steel and clean-break ranges, as well as an innovative multi-coupling system, has now been enlarged even further.

New – Cooling range, USA system

With the new USA system, HASCO offers an extended service with a global standard. The exceptional variety of combination possibilities of nipples, couplings, sleeves, and hoses allows future-oriented solutions for all challenges in cooling technology.

Highest quality standards enable worldwide compatibility

As a company certified to DIN ISO 9001, HASCO attaches major importance to top raw material quality and constant quality controls. Very tight manufacturing tolerances allow global compatibility, while the unambiguous product labelling guarantees 100% traceability and maximum safety standards in mold cooling.

High-quality products must always be accompanied by top-class service. This begins at HASCO with competent customized consulting and simple and user-friendly use of the HASCO Portal www.hasco.com, with direct access to product information. With 50 years of cooling technology experience, HASCO is the leading specialist partner in this field of cooling.

HASCO Standard Mold Units with Digital Innovation

In modern mold making, it is important to identify individual components quickly and easily in injection molding tools, and to have rapid access to comprehensive details about the components so as to save both time and costs.

As a full-service provider for modern mold making, HASCO is always keen to deliver market-oriented innovations. With the introduction of a Mould Tag on technically demanding products, HASCO offers its customers an intelligent digital solution that represents significant added value for selected mold units.

Digital and forgery-proof product identification

The new HASCO Mould Tag A5910/… is provided with an RFID Tag (Radio Frequency Identification) and enables the easy and reliable digitalization of original HASCO standard mold units in injection molding tools. Whereas bar codes or QR codes can be easily copied, the Mould Tag offers unambiguous identification with forgery-proof certification of origin.

Correct installation through direct access to all product information

The HASCO Mould Tag allows direct access to all relevant product information such as order reference, product category, product type, material number or maximum mold size to ensure correct installation of the mold units. In addition to a safety datasheet, the user has all the relevant spare parts available at a glance. CAD data and product animations round off the information package.

The first step was to digitalize the range of two-stage ejectors Z169/... - Z1698/... and to equip them for RFID identification. The Mould Tags are installed ex works and are linked on delivery directly with the customer’s order.

The HASCO Mould Tag can be read with any modern smartphone via the new HASCO App.

Always one step ahead

HASCO is the first supplier of standard mold units on the market to come up with this intelligent solution – once again defining the standard with increasing digitalization in the world of mold making.

Meeting Minutes
SPE Mold Technologies Division - January 10, 2023

	Present	Absent	Excused		Present	Absent	Excused
Tony Demakis		X		Jason Murphy	X		
John Berg	x			Richard Evans	X		
Scott Peters	X			Cyndi Kustush		X	
Eric Hecker	X			Brenda Clark	X		
Greg Osborn			X	Davide Masato			X
Barbara Arnold-Feret	X			Wes Stephens	X		
Stephen Hansen	X			Hannah Coombs		X	
Rich Martin	X			Kerry Kanbara	X		
Raymond Gibler		X					

Call to order: 3:00 PM Central

Division Chair – Scott Peters

We have been offered a 10' X 10' booth at PTXPO, which we have accepted

Chair-Elect Report – Richard Evans–Scott Peters spoke for Richard

Mold maker, mold designer, and mold repair – request for nominees has been put out on LinkedIn
Richard is working to pull together a ballot for next term
Richard has been busy with Mold Making Technology talking up our division

Division Secretary Report – Wes Stephens

Nothing new to report

Division Councilor Report – Barbara Arnold-Feret

Barbara must attend in person at ANTEC. Virtual attendance is not an option

Membership Chair – Eric Hecker

The total number of members for MTD is 261 in January. Lost (2) memberships since last month
Eric questioned if we can understand why they left – John suggested focusing on the new members – try to learn what attracted the new members to join

Sponsorship Chair Report – Stephen Hansen

Looking for sponsors for the newsletter
Scott suggested a couple of vendors to Stephen
The yearly fee is for every newsletter that is published during that year

TPC Report –Davide Masato – Scott spoke on Davide's behalf

Scott said that there were (4) abstracts that were submitted.
Only (1) abstract was selected to go to ANTEC

Continued on Page 14

Davide was concerned about low acceptance - noted it may be a deterrence for future ANTEC submissions

RETEC Report – Barbara Arnold-Feret
Barbara sent out a project status to the board
Chicago section is signed on, and other chapters will be invited
We are cleared for PTEXPO – they need our MTD logo as well as the agenda
Barbara will put a request for speakers and requested a co-chair to help her
Kerry has offered to help with West Coast and mailing help

Newsletter Editor Report – John Berg
Scott has requested a newsletter to be in print for PTXPO which is in March
John said thank you to the group for the answers for the apprenticeship writeup
Terry Schwenk made contact asking if we wanted boxes of archived information

Education Chair Report – Jason Murphy – Kerry Kanbara
Nothing to report

Web and Public Interest – Hannah Coombs
Nothing to report

Treasurer's Report – Rich Martin
$173,143 Bank of America
BMO; have 0 balance
Waiting for direction as to where to send check mold maker of the year from Hasco
Brenda is working with MR Mold about sending the check / Kerry K. will speak with his contact
Kathy Schact from SPE sent an email to support student activities at ANTEC to recognize our chapter
We voted and it was declined to send – Scott said that he would contact Kathy

International Committee – Davide Masato
Nothing to report

Intersociety Liaison Chair – Richard Evans
Nothing to report

Track the Apprentice – Hannah Coombs
Nothing to report

New Business –
We decided that Scott needed to write an article for Glenn Beall (emeritus)
We will ask Glenn to come to PTXPO to receive the award
Rich made the motion to close, and John seconded

2022 Mold Maker of the Year

Congratulations to Rick Finnie, Founder of MR Mold - Brea, California, being officially named the Mold Maker of the Year for 2022 by the SPE Mold Technologies Division. Rick and MR Mold have long been recognized as one the innovating leaders in the liquid silicone tooling and molding fields.

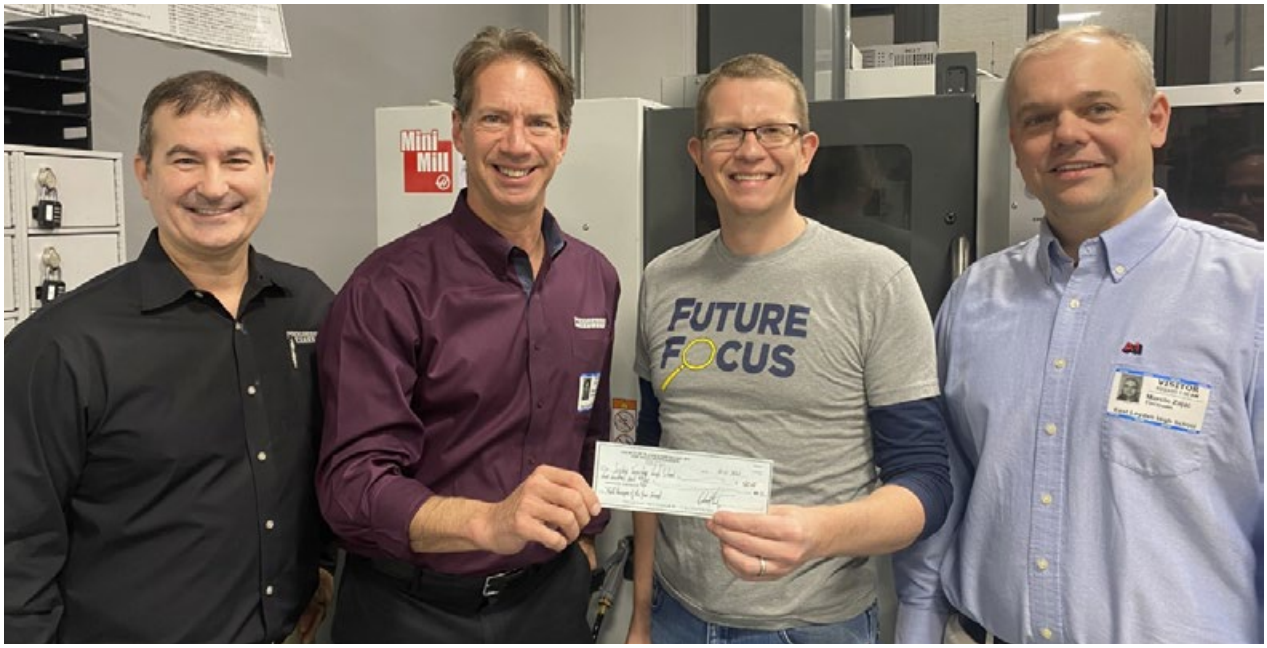
From left to right: Vishu Shah, CalPoly instructor, Rick Finnie, Mold Maker of the Year Award recipient, William Stevick, HASCO West Coast Sales representative, and Kerry Kanbara, SPE Mold Technologies Division Board Member.

Rick is often found giving seminars about the craft of Liquid Silicon mold making and processing. MR Mold is a fully modern and equipped mold shop, with a talented staff of mold makers and technicians, ready to meet the day-to-day challenges of Silicone mold making and processing. MR Mold is also a strong advocate and sponsor of apprenticeships and technical intern programs.

The $500.00 cash award was donated to the Mold Technology Division of SPE by HASCO America, Mold Components (www.hasco.com). Rick has donated the cash prize to sponsor a student to the upcoming CalPoly Pomona course PLASTICS 101 – THEORY AND PRACTICE, to be held FEB 18, 2023 & FEB 25 13, 2023. You can learn more about it right here: www.cpp.edu/cpge/professional-development/engineering-manufacturing/index.shtml

2022 Mold Designer of the Year

Congratulations to Marcin Zajac of A1 Tool Corporation for being named the SPE Mold Designer of the Year! Sponsored by Progressive Components, the award brings a $1000 grant ($500 from the SPE Mold Technologies Division and an additional $500 generously donated by the Progessive Components team) for the winner's trade-related training program of choice. Progressive's Patrick Fleming and Glenn Starkey presented the check to East Leyden High School's Michael Matticks and Marcin, who will purchase perishable cutting tools used in the classroom.



Congrats, Marcin, and thank you, Mike, for the good you are doing for our industry and for your community - you are changing lives and opening the door to long term opportunities!

Newsletter Sponsorship

The SPE Mold Technologies Division Newsletter is now issued four times a year, with readership composed of individuals involved in all aspects of the mold making industry. These issues are made possible through the support of sponsors shown in this Newsletter. SPE Mold Technologies Division thanks these sponsors for their generosity and encouragement in the publishing of our Newsletter.

For information on sponsorship of future issues, please contact:
Scott Peters - Chair Elect/Awards Chair/Sponsorship Chair
Scott.peters@moldedmarketing.com

Publication Release Dates

Spring Issue
April 2022

Summer Issue
July 2022

Fall Issue
October 2022

Winter Issue
January 2023

SPONSORSHIP INFO 2022-2023

Platinum ($2500/year) — Ad Specs: 9.75" H x 7.25" W

- Full page color ad in quarterly newsletter for one year circulated to members and distributed at SPE MTD events
- First right of refusal to a tabletop at Technical Tours to educate participants on new technologies/strategies
- Opportunity to submit a technical article for publication in newsletter
- Company logo on signage in MTD booth at AmeriMold
- Company logo on signage at ANTEC
- Company logo displayed at SPE events

Gold ($1250/year) — Ad Specs: 4.75" H x 7.25" W

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- Opportunity to submit a technical article for publication in newsletter
- Company logo on signage in MTD booth at AmeriMold
- Company logo on signage at ANTEC
- Company logo displayed at SPE events

Silver ($625/year) — Ad Specs: 4.75" H x 3.5" W

- Quarter page color ad in quarterly newsletter for one year circulated to members and distributed at SPE MTD events
- First right of refusal to a tabletop at Technical Tours to educate participants on new technologies/strategies
- Opportunity to submit a technical article for publication in newsletter
- Company logo displayed at SPE events

Bronze ($250/year) — Ad Specs: 2" H x 3.5" W

- Business card size ad in quarterly newsletter for one year circulated to members and distributed at SPE MTD events
- Company logo displayed at SPE events

Preferred File Format: Electronic (PDF, TIFF, BMP or PNG)


spe
ANTEC® 2023
Denver, CO · March 27-30, 2023
ANTEC® 2023 will showcase the latest advances in industrial, national laboratory, and academic work. Learn about new findings and innovations in polymer research, products, and technologies. There will be multiple opportunities to spend time with colleagues at SPE-hosted meetings, receptions, networking luncheons, and SPE Chapter networking events.
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