SPRING 2025

MOLD TECHNOLOGIES DIVISION

FORM YOUR FUTURE

SPE Center for Polymer Education

SPE Center for Polymer Education offers a range of courses and workshops to enhance the expertise of plastics industry professionals. Our upcoming courses and workshops, available both in-person and online, cover diverse topics to meet the varied needs of our members. Explore our offerings to find programs that align with your career objectives.

Plastic Additives

Start Date: April 8, 2025

Instructor: Lennart Johansson

Level: Intermediate

Total Sessions: 4 -- Total Hours: 8 -- Online

Consider Recycling when Addressing Polymer Design and Optimization

Start Date: May 13, 2025

Instructor: Brian Love

Level: Intermediate

Total Sessions: 4 -- Total Hours: 6 -- Online

UV Effects on Plastic Materials

Start Date: May 14, 2025

Instructor: Jeffrey A. Jensen

Level: Intermediate

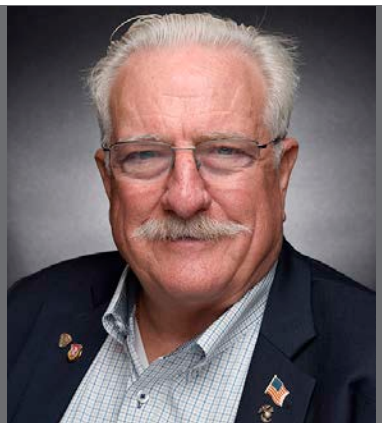
Total Sessions: 1 -- Total Hours: 1 -- Online

Check out the SPE Center for Polymer Education on the SPE WEBSITE

Click the LEARN FROM EXPERTS SECTION on the Home Page and see the number of educational topics available to SPE members. Podcasts, the Event Calendar, the SPE Library and Journals, the Materials Database, and Routsis Training.

INSPIRING PLASTICS PROFESSIONALS

Message From The Chair



Division Chair Message – PTXPO MARCH 2025

Welcome to the second “In Print” edition of the Mold Technologies Division Newsletter.

There is a lot to report today, but I promised John (our editor) and the other authors to keep it short.

As in PT-XPO’s past, our division is presenting four, yes four, international awards. These awards recognize excellence in craft in the areas of Mold Design, Mold Making, and Mold Repair/Maintenance. In addition, we are recognizing an Up-and-Coming Apprentice of the Year. In total, we are presenting $4000.00 to the recipients, who then (in the case of our Journey-Level Awards) pass the award through to the training center or scholastic program of their choice. Our Apprentice of the Year receives $500.00 in cash as well as $500 in “In-Kind” tools and supplies to help outfit their toolbox. As you might expect, there is a lot of excitement around being included in the now 40-year legacy of Mold Maker of the Year recipients.

These awards are made possible through the generous donations of Industry Leading Companies, the names of which you should find very familiar.

- Mold Maker of the Year – HASCO America Inc
- Mold Designer of the Year – Progressive Components Inc
- Mold Repair Technician of the Year – MoldTrax LLC
- Apprentice of the Year – PCS Company

Each of these companies supports our industry and believes in supporting the further training and development of Mold Designers, Mold Makers and Mold Repair/Maintenance Technicians - both on the job and in the classroom.

We, as a division and industry, say “Thank You” to the leadership of each company for their support throughout the years and wish them and their teams every continued success!

As I noted in my first paragraph, this is the Second “In Print” Edition of our newsletter. And it is a special one.

For a few years now, our friends at Plastics News Magazine have been recognizing members of the industry that are of the, shall I say, gentle gender. They have been hailed as “Women Breaking the Mold” and, as such, have covered women in leadership roles all throughout the Plastics’ Industry. Some of these women are previous or active members of our board of directors.

For this issue of the newsletter, we decided to make a slight variation on the theme and come forward with “Women Making the Mold.” These ladies have exhibited a love for our business as Mold Makers, and they hold significant and unique roles of leadership and influence in various departments within varying stages of their careers. All have different stories and perspectives of what makes Mold Making and Design exciting to them. And as a result, we have their interviews for you to read and enjoy!

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Editor's Commentary

– *Berg's Eye View*

The SPE Mold Technologies Division Team is very pleased to begin publishing a series of interviews with **Women Making the Mold**. As we all put efforts into recruiting the next wave of engineering, design, mold-making, mold-repairing, and project management talent, it's important to recognize the value of inspiration. What better way to inspire the consideration and interest of young women than stories of success and career fulfillment? We've got five such stories in this edition of the MTD Newsletter - and we have more on the way for our next edition this summer - and very likely for fall.

As you read each interview, you'll see the common thread - their journeys are their own and their success has been driven by their initiative and attitude, not by their gender. Another common theme is the importance of of guidance and mentorship - reminding each of us that our interactions with our new-to-the-industry colleagues can be very influential and even impacting. Never forget to pay forward the value of tribal knowledge and learned perspectives and insights taught to you early in your career development.

If you work with an outstanding woman making the mold, please consider submitting her name for our series.

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Did you attend or exhibit at MD&M West? Will you be at PTXPO? Did you attend ANTEC? There are many expos / trade shows and technical seminars in our industry, and that means plenty of opportunity to meet with existing customers, prospects, supply chain partners, potential suppliers, and spend time with your plastics-peers. Make it a point to get involved in a few of the remarkable events that support the growth of our industry.

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How are your shop's recruiting efforts going? Do you have an apprentice or two on your staff? Young talent is difficult to find - especially for a toolshop. We're generally not listed as an area's top employer, nor do we generate the local publicity required to be in consideration when moms and dads discuss career opportunities and smart educational choices for their sons and daughters. It's easy for industry outsiders to drive right past our facilities without knowing who we are or what we do - much less thinking we would be an ideal landing spot for their children's future. The only way to change that is to raise your brand's voice in your community. Host an openhouse career fair, get tight with your local high school's shop teachers and guidance councelors, volunteer to present our industry and your shop to the students, sponsor a community event... do SOMETHING that introduces your company to your neighbors.

Our place in business and industry is an outstanding destination for anyone with attitude and ambition.

John Berg - Dynamic Tool Corporation - MTD Newsletter Editor - john.berg@dyntool.com

Message From The Chair

(Continued from Page 2)

Now these articles are more than just “Hey, Look at Me!” pieces - they are intended to help young women see that there are great careers available to them in the Mold Manufacturing Industry. From Apprentice to CEO and every role in between is open to women across the marketplace.

I am a history buff of sorts, and I was reading about how the US and Allies won World War II. Did you know that while the men were out fighting the war, the women took to the factories and made certain that the machines of war were on the ready? Well, they did, and it can easily be said that were it not for “Rosie the Riveter” and others just like her we wouldn’t have stood a chance… Thanks Rosie and thank you to the ladies of “Women Making the Mold” for sharing your stories.

With all of that said, and my personal promise to be short, I will turn the podium over to our ladies and let them encourage and challenge you too!

Until next time,

Scott Peters
2022-2026 Chair - Mold Technologies Division,
The Society of Plastics Engineers

New HASCO Hole Filter H5055/…

The optimum solution for demanding filter applications

HASCO will present the innovative hole filter H5055/…, **a pioneering development for demanding melt filtration**. The innovative design, which is unrivalled on the market in this form, reduces shear and thus contributes to retaining the mechanical properties of the plastic. In addition, the **pressure loss is kept to a minimum**.

The filter has been specially designed for use in machine nozzles and sprue bushings. Through the sophisticated design made of corrosion-resistant stainless steel, with more than 1,000 angled holes, the melt flow is optimized to keep the shear and the flow rate in the holes to a minimum. This enables, in a market comparison, the lowest pressure loss with the same filtering performance.

The filter also stands out from the rest through its **long service life** and **ease of cleaning**. Sediment can be easily removed from outside, with dead spots being avoided by the conical geometry. As a result, the **maintenance intervals are reduced** and the **operating costs lowered**. This enables a considerable reduction in machine downtimes and ensures consistently high productivity in production.

In tests with highly abrasive materials, it was found that the innovative, low-shear design also produces remarkable results as regards wear on the filter.

With minimum pressure loss, high efficiency and long service life, the new hole filter H5055/… ***is the ideal solution for the demanding applications in plastics processing, even under difficult production conditions.***

Message From The Education Chair

Division Education Chair Message – PTXPO MARCH 2025

Well, 2025 has kicked off with many great opportunities for those that want to get into the Trades industry. There has been a push / initiative for many years, and I must admit that "We" as trade professionals, must keep pushing that trades-train moving forward. The trades industry and advanced technology are what will separate our manufacturing industry from those around the globe. I have been in the manufacturing / trades industry for over thirty years, and I have made a commitment to give back to the next generation of professionals because of the mentors that I have had, helping get me to where I am today.

There are an overwhelming number of resources out there for elementary, middle school, high school, college students, and those looking for a career change. This article will hopefully shed some light on those resources and encourage other industry professionals to spread the word.

Programs and organizations like STEM, First Robotics, BotsIQ, NTMA, Apprenticeship USA, Explore the Trades, NWIRC, Catalyst Connection, IMC, AMBA, Tooling U, AIM, SPE, Plastic News, and Mold Making Technology to name a few. Not to mention all the international programs and resources that are available in other countries. Manufacturing is and will always be the backbone of the economy and can provide an outstanding career for those that want to enter the trades.

Here are a few benefits: high demand for skilled workers, relatively quick training paths, good earning potential, hands-on work, potential for career advancement, flexibility in work schedules, and the ability to contribute directly to your community by building and repairing infrastructure. Relatively quick training: Trade schools typically provide shorter training programs compared to traditional college degrees, allowing for faster entry into the workforce. Potential for self-employment: Some trades allow for self-employment, giving you more autonomy and control over your work. The best recommendation is to do your research, ask questions, talk to those in the industry, and ask a professional to be your coach or mentor.

Skilled trades jobs are essential for a functioning society, ensuring our homes, businesses, and public spaces are safe, functional, and well-maintained. They also drive the production of goods and promote community development. These careers not only keep the wheels of our communities turning but also lay a roadmap for a better tomorrow. Moreover, these jobs are crucial in bridging socio-economic gaps. They often offer competitive pay, and they generally don't require a university degree, providing a practical pathway to economic security for those who may not have the resources for higher education.

Respectfully,

Joe Karpinski – SPE Mold Technology Division Education Chair

Women Making the Mold

Meet Donna Pursell, CEO at Prestige Mold

What drew you to Mold Making and Mold Design as a career choice?

Plain and simple, I fell in love with a mold maker. While attending college in Southern California, I was set up on a date with a guy that happened to be a very enthusiastic mold maker. I had never heard of plastic injection molds and really had never given much thought to the manufacturing world of plastics. That all changed once we married and started our own moldmaking business, Prestige Mold.

How was it for you, entering a traditionally "Male Dominated" industry in a technical role?

My story is different than most of the women that have entered the plastics industry. I have always been involved in the financial aspects of running the business. Things changed for me many years ago when my husband passed away. I had the responsibilities of a family, great employees that I wanted to keep employed, and a business that demanded my attention in all aspects. Keeping our legacy going has always been at the forefront of all my decisions. People have asked how I did it. One of the major factors was hiring and promoting great people that I trust and have the same values and ethics to fill the critical roles. I believe that my story has earned me much respect among the men that I work with and our customers who know that I will do what it takes to get the job done. I enjoy working with men and have found most all of them to be very respectful of my role.

How has your career choice been rewarding to you?

I am very proud of the businesses that I have built. When I hear Prestige Mold and Pres-Tek Plastics recognized as leaders in the industry, I definitely get an ego boost. I recognize and appreciate that I have a team of very skilled people that keep them both moving forward every day. It is so rewarding when I think about how many lives the businesses have affected both in terms of patients that have used the medical devices we manufacture, and the employees and their families that have benefited from a challenging but steady career choice.

What do you see as High points in your career?

High points in my career were receiving the American Mold Builders Award for Mold Maker of the Year and the SPE Mold Designer of the Year. It was such an honor to be recognized by my industry peers. For me, it helped substantiate that I was on the right track.

What do you see as the biggest challenge in your career?

The biggest challenges for me are work-life balance and time management. It has taken many years to learn how to re-prioritize my daily agenda based on the fluidity of the businesses while staying calm or at least portraying calmness on the outside.

What do you still want to do in your career?

Both of my children, Lyndsay Petersen and Andrew Koebel, run our molding operation. It has been very rewarding to see them take over and grow the business. I hope to continue setting things in place to ensure that our legacy continues.

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2025 SPE MTD Golf Tournament

Regrettably, this year's tournament was canceled due to unusually high temperatures and forest fires.

The venue experienced weeks long temperatures exceeding 110 degrees, rendering the fairways unplayable. Additionally, multiple forest fires significantly diminished the air quality to dangerous levels.

We would like to express our gratitude to everyone who showed interest in participating and those who offered support through sponsorships.

We are planning next year's event, We are looking at several venues. These courses will be located near or in Los Angeles.

We are looking at 2 types of courses.

Private - Price range of $150 to $200 per player.
Course availability, typically Mondays.

Public - Price range $80 to $120.
Course availability any day of the week.

Please reply with your preference.

Kerry Kanbara - kerryk@piustech.com

HASCO

100 Years

Enabling with System.

Innovative Ejector Delay Unit Z1725/...
Increases Process Reliability

The demolding stage during the injection molding process can be optimized with an ejector delay unit. The **sprue and molded part are cleanly separated from one another** through a coordinated ejector movement.

The new ejector delay unit Z1725/... from HASCO offers a **simple solution for the efficient demolding and separation of sprues**. The unit enables two-stage ejector demolding, in which the delay is ensured by an individual pocket depth and the ejector assembly.

Through the new delay unit, not only can the process reliability be considerably improved, but also the quality of the end-products. Production downtimes are, thanks to the innovative design of the unit, a thing of the past. In addition, it offers maximum flexibility because they **can be used without any minimum stroke requirements**. With ejector sizes from 2 to 5.9 mm, this enables a variety of applications in different production processes.

The functioning of the ejector delay unit is based on the transfer of axial forces through friction between the plastic sleeve and the drill-hole wall. This friction force can be seamlessly adjusted by a conical, self-securing screw and adapted to the specific requirements. The plastic sleeve should sit approximately 3 mm deep in the location hole. The precise position of the ejector pin is achieved by a flattened circular pocket, during which the desired delay is integrated into the pocket depth of the ejector package.

Overall, the HASCO ejector delay unit offers an **efficient solution to meet challenging demands in the demolding of injection-molded parts**.

The simple retrofitting of existing molds facilitates its integration into existing production lines.

Plastics News
BEST PLACES TO WORK
2024

www.hasco.com

Women Making the Mold

Donna Pursell & Brenda Clark

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Given that you are celebrating more than 4 decades in business, how has the industry changed during your career? Prestige is in its 42nd year of business. In that time, we have seen the ups and downs of business cycles and the off-shoring and then re-shoring. The industry has changed in so many amazing ways, and we have tried to adapt quickly so that we can stay current with the times. When we started, the skilled, top moldmakers ran the job from start to finish. Now we are engineering driven with complete departmentalization throughout the shop. Both businesses are Project Management oriented. Years ago, when we finished a mold, it shipped to the customer and that was that. As our customer base changed so did the sophistication of our customers. They have demanded more from us which has pushed us to up our game. That is how Pres-Tek Plastics began. Who would have ever guessed that we would now have 44 presses and two locations, when we started mold sampling as a department within Prestige?

What do you see as opportunities for other women making the mold?

Our mold shop has not had much success with recruiting women interested in machining. The women that have been drawn to Prestige tend to be strong in engineering and show interest in mold design and our inspection department. However, our molding operation is a different story with over 50% women. We continue to see more and more female engineers coming out of college which really excites me.

What is your advice to any young person considering a career in Mold Making, Mold Design and Mold Repair?

I would give the same advice no matter what industry they are interested in. Keep an open mind and be willing to soak up all the information and ideas that you can from others within the industry. More than likely, they have already been exposed to, experienced, and problem solved, the very situation that you'll be introduced to. Being humble and letting others teach you earns respect.

Meet Brenda Clark, Engineering Manager / Inside Sales at HASCO AMERICA Inc.

What drew you to Mold Making and Mold Design as a Career Choice?

This career dropped into my lap my Senior year. In drafting/engineering class, there was an announcement from a local mold builder looking for a draftsperson. Really, they were looking for a young man, but they graciously accepted my application. That one interview started my plastics industry career.

A little more about my chances: Telling my parents about my new job, I found out my father was familiar with plastics, but he had never brought it up with me. My mother gave words of encouragement, telling my sisters and I that we could master any career we put our minds to. I have used this as a driving force throughout my career. She went on to tell me that her father worked in tool and die, first with an early automotive firm, Columbia Bicycles, then with Sikorski, Colt, United Technologies as a consultant, and then lastly with Nelson Tool. She told me he received his education from a tool and die school located in New York City. I was fortunate enough to have a similar conversation with my uncle just before his passing. He told me his brother had worked at Motorola as an engineer, and that his son worked in tool and die. One of his last jobs was correcting a mold build for plastics. One would say engineering is in my family. It's always interesting speaking with my family during holidays and visits.

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How was it entering a traditionally "Male Dominated" industry in a technical role?

At first it wasn't an issue, as I stated previously, the interview went well. My interest was noted, and I was hired. I am sure between both owners one was not too sure about hiring a young lady. The other kept an open mind and went on to train me in all things' plastics. From office work to mold design, polishing inserts, and using the machines for mold making. The company grew and I did as well! We got into processing, and I began running an Arburg 200 Allrounder (with relays - that is how old it was). When you're intelligent and show an interest, it surpasses the question of gender. As my role has progressed, I have seen a bit of hesitation from some within the industry. Even now, customers and their designers are shocked to find I'm the only one with answers to their questions. Shame, as I was the one usually there for the technical side or doing all the design work. As I stated earlier, once other professionals realize my level of knowledge, perceptions change very quickly and the meetings go as planned with a new non-gender aspect to them.

How has your career choice been rewarding to you?

There has always been a drive within me to help customers, companies, and other engineers succeed in every project where I am involved. It is extremely rewarding seeing the unique finished products in a wide range of industries, from the original mold design to the final build. Assisting with significant projects that make our lives more productive, safe, and comfortable.

What do you see as a "High Point" in your career?

The "High Point" of my career was receiving two prestigious honors in 2019, after 31 remarkable years in the industry. The first honor was being named the 2019 SPE Mold Designer of the Year by the Society of Plastics Engineers (SPE). The second was not only becoming a member of The Plastics Pioneers Association with the highest accolades, but I was introduced by Mr. Glenn Beall, a seasoned mold designer who is well recognized in our field! He listed my accomplishments, reminding me of a few I had forgotten along the way.

What do you see as the biggest challenge in your career?

The biggest challenge was wanting to start a family as well as have a career. So, in 1997 I decided to take time off work to raise my two sons. When I was ready to return to this rewarding field in 2004, I found out the last company I had worked for had unfortunately closed its doors. I was able to reenter the industry in mold design and build from the supplier side. Learning 7 years of new developments in advanced software and designs brought on it's own challenges.

What do you still want to do in your career?

I feel that I will continue to work in my career to the best of my ability for customers and fellow designers. I hope to extend my knowledge to other engineers and students looking to enter the industry.

How has the industry changed during your career?

Wow, that is a loaded question as more than 40 years have passed. Let me recap it quickly:

- Starting with designing on the drafting board with a mechanical pencil, electric eraser, compass, templates, and trig!
- The Apple computer not yet having CAD, and that only senior designers were allowed on CAD.
- Computer Aided Design – CAD with CADKEY or wire frame 3D.
- CAD with CADKEY Surfaces 3D.
- CAD switching to solid modeling: Solid Works 2001, and classes at local technical college to get back up to speed with computer design.
- For machining, it went from Bridgeport milling machines and surface grinders using mold build team leaders to Computer Aided Machining - CAM and programming off 3D CAD to lights-out machining!

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The Mold Technologies Division of the Society of Plastics Engineers is looking for a Few Good Men and Women!

If you have ever wondered, “Is leadership in the Mold Technologies Division for me???”

If you have ever thought, “I have something to contribute to the guidance of our association and industry.”

If you find great fulfillment in collaboration, seeing new things come into practice in our industry, and progressing best practices in mold making, then this is your opportunity to shine.

Each year we seek leaders, some polished and experienced, but more the Diamonds in the Rough that have so much potential and are standing back waiting for an invitation to participate — *This is your INVITATION*.

Please contact—Scott Peters, Nominations Chair at scott.peters@moldedmarketing.com for more information. We are looking for directors to take on rolls in Technical Programming, News-letter Preparation, Division Senior Leadership/Secretary and so on… So please reach out and help us all lead our industry into 2030 and beyond — Leadership Terms are for 3 years and come complete with a mentor to help learn the ropes...

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What do you see as opportunities for other women making the mold?
I won't address this question specifically for women, as everyone is equal in brain power and ability. While some are a little more knowledgeable and are stronger in experience, gender should never be part of the question, as it limits thinking. You ask this question to women, and I believe the sky is the limit! If you are willing to understand project requirements, have knowledge in CAD and/or CAM, strengths in engineering, and an understanding or willingness to learn plastics mold building and/or processing. I do have to note, it takes patience when you work on a mold design, or mold build. The field is open, and more companies are searching for the right person for the position, not the right gender.

What is your advice to any young person considering a career in Mold Making, Mold Design and Mold Repair?
Young people need to start early on in STEM driven education. If this isn't available in your area but you have a good mathematical or mechanical ability, then find technical colleges and/or companies with good internships for mold design, mold making, and mold repair. Do not be afraid to get your hands in and on the work as it is extremely rewarding. It helps to have firsthand experience to strengthen your engineering background. Online, you can network within LinkedIn and other Plastics organizations like the Society of Plastics Engineers, The Plastics Industry, PPA and AMBA to name a just few. These sources may have mentorships to pair you with a seasoned engineer who is available to assist you with your career questions. Many of the same have grants or scholarships as well.

Meet Christina Fuges, Editorial Director at MoldMaking Technology

What drew you to Moldmaking and Mold Design as a Career Choice?
Honestly? I didn't choose moldmaking - it chose me! I graduated from Wilkes University wanting to be in radio or TV behind the scenes, specifically directing. But life had other plans. After a short stint at a local TV station, I realized I didn't want to chase jobs across the country, away from my family.

I landed in trade publishing, first with a show company focused on quilting and antiques, then in the critical cleaning industry. When Joe Prischak and Gary Orfe approached me about starting MoldMaking Technology in 1997, it was pure serendipity. I knew nothing about molds. I literally filled a notebook with questions during our first meetings. But the industry's passion, its tight-knit community, and the opportunity to help tell their stories? That captured me completely.

How was it entering a traditionally "Male Dominated" industry in a technical role?
Surprisingly welcoming. The moldmaking community didn't just accept me - they embraced me. From my first American Mold Builders Association convention to early sales calls, I was welcomed as a partner, not an outsider. These were family-oriented professionals who saw beyond gender and appreciated someone genuinely interested in understanding their craft.

Sure, it was a technical world predominantly of men, but they were eager to teach. They opened their shops, shared their stories, and explained complex processes. I wasn't just an observer; I became part of their professional family.

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How has your career choice been rewarding to you?
Beyond measure. This isn't just a job - it's a calling. I've observed generations of moldmakers, met their families, and tracked their businesses' evolutions. I've seen children take over family shops, witnessed technological transformations, and, as Mike Zacharias put it years ago, “MMT has helped legitimize an entire industry.”

The most rewarding part? Connecting people. When someone tells me an article we published helped solve a problem or guided their business strategy - that's pure magic.

What do you see as a "High Point" in your career?
There are so many, but launching the Leadtime Leader Awards in 2003 stands out. This initiative became more than recognition—it became a catalyst for growth. Shops like Westminster Tool, Cavalier Tool and Dynamic Tool Corporation didn’t just win; they leveraged their wins to showcase their strengths, improve their processes and gain new business. The excitement and passion these shops demonstrated have been incredibly motivating.

Another highlight was our MoldMaking Matters video project. Collaborating with AMBA, PLASTICS and SPE MTD, we created a recruitment tool with Nypro Mold to address the skilled workforce shortage. This project included a video and teacher’s manual, produced with Creative Technology, to inspire a new generation to explore moldmaking careers.

There have been many high points in my career, but a few stand out. My first sales call with Glenn Starkey at Progressive Components also remains a favorite memory, as it led to an immediate friendship and lasting support for MoldMaking Technology. Producing our first directory issue was another milestone, revealing the breadth of suppliers serving the moldmaking industry. Seeing our magazine in shop lobbies, engineering departments and toolrooms has always reinforced its value to our audience.
Our “Top 10 Reasons to Be a Moldmaker” T-shirts became an annual tradition that showcases the industry’s humor and camaraderie. Early MoldMaking Expo parties were also unforgettable, bringing professionals together in vibrant settings like casino nights. Hearing how our publications have directly helped readers solve challenges is continually rewarding. Finally, supporting iWarriors, an organization providing iPads to wounded veterans, remains one of my most meaningful endeavors.

What do you see as the biggest challenge in your career?
Adapting to rapid technological changes while maintaining the human connection. The world of moldmaking has transformed dramatically, from design processes to manufacturing technologies. Keeping our content relevant, engaging and accessible across print, digital, social media, podcasts and events requires constant reinvention.

What do you still want to do in your career?
Continue building community. The moldmaking industry isn't just about machines and molds - it's about people. I want to keep amplifying voices, especially emerging talents. Our 30 Under 30 Honors Program is a great example of highlighting young professionals who are reshaping the industry.

How has the industry changed during your career?
Wow, where do I start? When we launched MoldMaking Technology in 1997, moldmaking was often seen as a behind-the-scenes craft. Today, it’s recognized as a high-tech profession driving manufacturing innovation.

Looking back, the topics we covered—like network infrastructure, mold materials, hot runners and EDM—were foundational. Now, these have evolved into more advanced areas like IoT, data management and automation.

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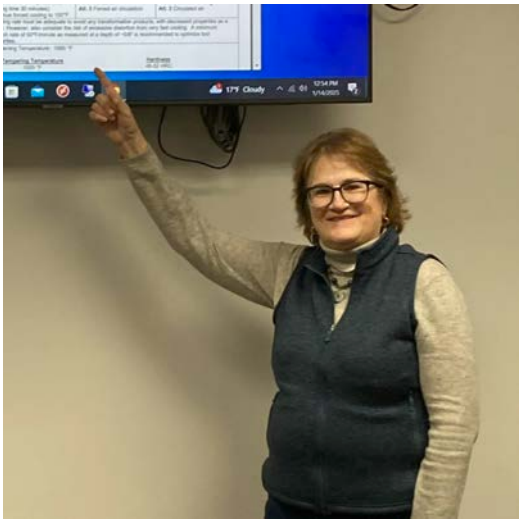
Data, in particular, has been a game-changer, impacting everything from mold design and job scheduling, to machining and maintenance. Moldmaking has shifted from craft to science, with a stronger focus on collaboration, supply chain integration, and even reshoring.

Technological progress, like 3D printing for conformal cooling and five-axis machining, continues to redefine what's possible, while cultural shifts, including cleaner shops, expanded benefits and more diverse workforces, highlight the industry's growth. Today, moldmaking is not just about building molds—it's about manufacturing excellence on a global stage.

What do you see as opportunities for other women making the mold?
Endless! This industry values skill, creativity and problem-solving - not gender. Women bring unique perspectives to engineering, design and business strategy. Whether it's in shop management, technology development, or industry leadership, there's room for passionate professionals.

What is your advice to any young person considering a career in Mold Making, Mold Design and Mold Repair?
Be curious. Be humble. Be willing to learn. This isn't just a job - it's a craft that combines art, science and innovation. Talk to professionals, visit shops, understand the incredible impact moldmakers have on manufacturing. Oh, and grab one of our "Top 10 Reasons to Be a Moldmaker" t-shirts - they're hilarious and might just inspire you!

Meet Patricia Miller, Director Technical Services at Uddeholm North America.



What drew you to Mold Making and Mold Design as a career choice?
Two of my degrees are in Metallurgical and Materials Engineering. In these programs, I was able to develop a strong technical basis for both the metals and plastics industries. It has been an excellent way for me to continue to learn both the art metals used in mold making, while developing a deeper understanding of the plastics molded in them.

How was it for you, entering a traditionally "Male Dominated" industry in a technical role?
I never looked at it in that way. I was always interested in engineering, since I did well in the STEM areas, and thought of it as a good career choice from a practical and financial perspective. Growing up with strong male engineering role models, I did not see this career as "them versus us". My challenge was with the technical aspects of the job, and to learn and understand how best to respond to those challenges. And, since I started in a very technically intense area of technical support for aerospace applications, I had already gone through my growing pains before launching into materials for molding applications.

How has your career choice been rewarding to you?
I enjoy working with the members of SPE's Mold Technologies Division as I have done in the past. Tooling is a constantly changing landscape that is impossible to know without input from the experts in their fields. What better way to know this than by meeting and working with those dedicated experts?

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THERMOPLASTIC ELASTOMER CONFERENCE

"Compound Interest: TPEs in a Circular Economy"

The **Akron Section of the Society of Plastics Engineers**, along with the **TPE Technical Interest Group of the SPE**, will again be hosting a conference this spring that highlights a unique blend of polymers, Thermoplastic Elastomers (TPEs). It will be held April 8 to 10, 2025 at the Hilton Garden Inn in Akron, Ohio.

Full information can be viewed at http://www.4spe.org/tpe25.

There will be a separate tutorial held on April 8 taught by industry experts. The morning session will be TPE fundamentals while the afternoon session will feature sustainability.

Technical sessions will focus on sessions exploring sustainability, recycling, bio content, composting, part consolidation, efficient design, minimizing machine energy, material formulation and regulatory trends. The topics and speakers can be viewed at the above link using the "Program" tab.

This conference will push the envelope of development as we feature two keynote addresses. Professor Spontak will discuss **"Water-Activated Elastomers to Mitigate Growing Global Environmental, Healthcare and Energy Challenges"**. Kathryn Wright, Kraton R&D VP, will be the second keynote speaker. Her topic will be **"A Sustainable Future Enabled by Six Decades of Innovation"**.

There will be an exhibit area where companies will display their products related to TPEs. In addition there will be two receptions where networking can be done.

Sponsors will be recognized during the conference. If your company would like to be a sponsor and/or exhibitor, please use the above link and click on the "For Sponsors" tab.

Room reservations at the Hilton Garden Inn for a special reduced rate can be made using the link above and clicking on the "Hotel Information" tab.

Your participation will support the TPE Technical Interest Group and the Akron Section in their efforts to provide student scholarships and opportunities to participate in plastics industry events.

spe AKRON

PROMOTING SCIENTIFIC AND ENGINEERING KNOWLEDGE RELATED TO PLASTICS

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What do you see as a "High Point" in your career?
Leading the division as the Chair was really one of my high points. Since then, I have received awards from my employer for my contributions to the steel industry and mold making in general.

What do you see as the biggest challenge in your career?
Time management. There is an ever-expanding list of things that are of interest and managing my time to fit them in is a challenge. For example, reprioritizing my activities. I would like to do more in terms of social media, but technical demands from the industry and lack of resources to handle those requirements push off other as important activities.

What do you still want to do in your career?
I have focused on the technical aspects of my career. I would like to use both my technical and business background to share what I know of the industry with decision makers to help rebuild our industrial base here in North America.

How has the industry changed during your career?
The positive use of plastics in critical industries such as medical, bio-composites, recycling, and childcare areas has been astonishing. And we are now learning how to complement these uses in sustainable ways. On the flip side, we have gone from a high level of technical advancements here in North America to offshoring the fundamentals. We need to return to a more balanced approach to research and profitability.

What do you see as opportunities for other women making the mold?
I was very excited to meet with and listen to the women who are a part of this industry at this year's 2024 Women Breaking the Mold Networking Forum (although I had some angst with the title of "breaking" the mold which is what I try to prevent). Any aspect of mold making and plastic processing is a possibility for current and future opportunities, and women are making good strides. But I think that more education in the early years of schooling about what is available in these industries will help. I also think particularly during the middle-school years, young girls need to be encouraged to do well in the math and sciences so these job choices are also open to them.

What is your advice to any young person considering a career in Mold Making, Mold Design and Mold Repair?
Take every opportunity to learn all aspects of these fields while you can, to broaden your knowledge base so that you make wise career choices. The internet, YouTube, chat and AI, as well as classroom activities are there more than ever to ask questions and learn. Hands-on experiences and interaction with people in the industry will also give you a good foundation. Visit our many technical museums to learn how we can take the plastics industries to new heights.

Meet Taylor Bartelt, Apprentice / CNC Machinist at CDM Tool and Manufacturing

What drew you to Mold Making and Mold Design as a career choice?
As an apprentice that is more than halfway through my apprenticeship, I have learned a lot in the shop, out of the shop, at trade shows, and at school. I was just a sophomore in high school when I discovered the trade of all things metal. I am incredibly grateful that my school, Hartford Union High School, has numerous technology education courses. I discovered machining, welding, polishing, cutting, laser cutting / engraving, and various fabrication methods while in high school. The first class I took in the technology education hallway was a "wood products" class, which taught me how to make a real wooden clipboard. From there on, I made more wood collectibles which introduced me to welding and machine shop classes. I was drawn to the metal shop because of the CNC mills and lathes.

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Women Making the Mold

Taylor Bartelt

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These machines' abilities blew my mind, without me even touching the part. The precise nature of the machines and the industry overall was what drew me to mold making and mold design. I later learned that it was a very possible career choice for me.

How was it entering a traditionally "Male Dominated" industry in a "Technical Role?"

I gravitate towards being hands-on and detailed, so it didn't bother me that this career direction is traditionally "male dominated". At CDM, they welcomed me as a teen with the drive this industry needs. They immediately noticed my eagerness to learn and the attitude I put towards my work. Everyone I have met in the metals and plastics industry has been nothing but delightful and excited for me to continue my career. I believe that as long as you have the desire to work towards a goal, you will always accomplish it, especially with the right people around to help.

How has your career choice been rewarding to you?

My career choice rewards me with knowledge and helpful connections with others in the industry. While attending trade shows like PT-XPO 2023 and IMTS 2023, it was exciting to meet professionals in the industry. I was spotting people in the industry that were from different companies that have long-lasting relationships.

What do you see as a "High Point" in your career?

The connections between others within the industry is definitely the "high point" in my career.

What do you see as the biggest challenge in your career?

I'd say that the biggest challenge in my career is the work in the shop; brainstorming ways to create unique parts. Customers are always looking for companies that will take on projects other companies would turn away. There are so many ways to machine, program, and design a part, figuring out the most efficient process is the biggest challenge.

What do you still want to do in your career?

In the industry, I still want to connect with the mold and learn the unique ways in how they move. I intend to become a mold designer in the future because I believe it will allow me to be a part of the process of connecting customers to the molds they want to build.

How has the industry changed during your career?

Throughout my career the industry has evolved; creating new ideas for molds and ways to make them. I have seen modular clamping systems become more popular within the industry to clamp parts of different shapes and sizes. The FCS System is a favorite and most popular clamping system for unique parts in CDM's machine shop. I have also seen changes in the plastics industry, specifically in the additive manufacturing area. The aerospace industry seems to have started using huge 3D printers to make lightweight structural components, prototyping, drones, and unmanned robotics. These kinds of new ideas will make the industry boom!

What do you see as opportunities for other "Women Making the Mold?"

There are tons of opportunities in the mold making trade and being a woman is no exception to any of them. These include any detailed job that has a complex nature. This could free up just about any job in an industry setting. For example, we need individuals to manufacture and design consumer products, as well as make them more efficient. The art of making a mold has the potential to bring in sales opportunities, which records how efficient a part or piece can be for a consumer.

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Women Making the Mold

Taylor Bartelt

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What is your advice for any young person considering a career in Mold Making, Mold Design or Mold Repair?

The advice I have for a young person considering a mold making, mold design, or mold repair career is to jump in headfirst and learn everything you can because there is a lot to learn! Not only about molds, but so many people to meet as well. Everyone in the industry has a story to tell about their time in the industry and a wealth of knowledge to share with you. Even little tips on how to better clean a piece or part can change your whole attitude on the project. More than likely, there is a more efficient way to do your work that anyone in the field can teach you. As a young mold maker, designer, or repairman, there is so much to get involved with in the industry, and you should never stop trying to get involved in absolutely everything. There is always something new to learn!

Our sincere appreciation to our initial Women Making the Mold participants - your stories and insights inspire confidence and optimism that our industry, and manufacturing in general, will continue to evolve and progress!

We encourage our readers to submit our next rounds of female leaders / engineers / mentors / educators... we've got a handful lined up for our next issue, and we want more. Please send your nominations, along with their contact information to: John Berg - john.berg@dyntool.com and Scott Peters - scott.peters@moldedmarketing.com

Progressive Introduces Runner Components

New Gate Inserts and Runner Turn Offs

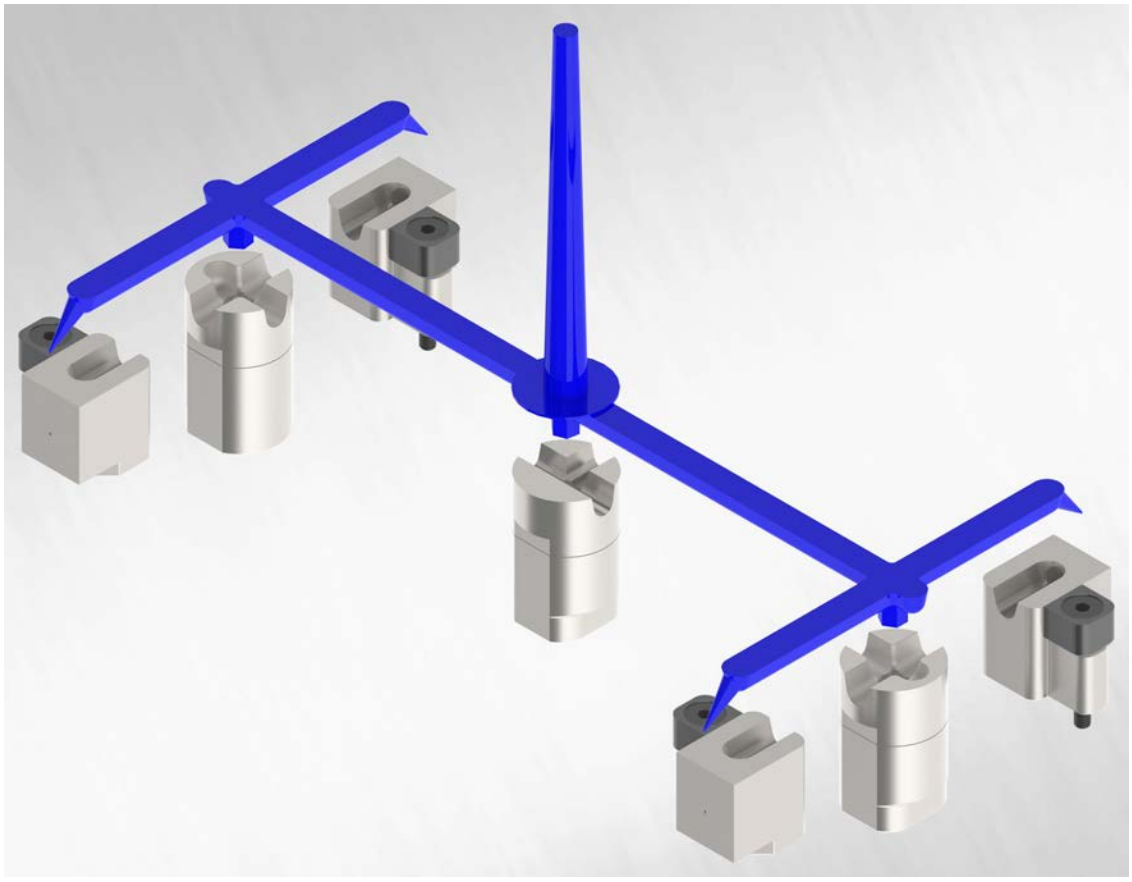
Progressive Components (Wauconda, IL) has added new runner components with the introduction of a Gate Insert and Runner Turn Off as standardized items for controlling a mold's runner system.

Progressive's new Gate Insert offers a compact, off-the-shelf solution to address the issue of abrasive materials opening gates. Gate Inserts are serviceable from the parting line, can be replaced, and provide an option to adjust gate size without re-EDM'ing the gate diameter.

Progressive's Runner Turn Off (RTO) provides a reliable method to block or redirect material flow within the runner, which is especially common with family mold tooling. The RTO offers precise, click-in-place positioning at 45° increments and is conveniently held during the machining of the pre-hardened 420 SS assembly, which is then located into position with a press fit flat. RTOs are available in styles both with and without a center ejector pin.

Gate Inserts and Runner Turn Offs may be used together or independently, as required by the mold's design.

For more information on Gate Inserts, Runner Turn Offs, or Progressive's extensive line of standard and exclusive mold components, visit www.procomps.com, email tech@procomps.com, or call 1-800-269-6653.



Progressive Components | 1-800-269-6653 | procomps.com

PROGRESSIVE COMPONENTS

HASCO

Product Announcement:

New HASCO N Range -
With over 3,000 variants in different dimensions and steel grades

With the introduction of the new standard bar range (N-bars), HASCO offers its customers more than 3,000 variants in a wide variety of dimensions and steel grades.

This extension to the existing range is designed specifically to meet the needs of tool- and moldmaking, and is an optimum supplement to the extensive HASCO plate portfolio of undrilled P and drilled K plates.
The N-bars can be used universally as the starting material for guide bars, inserts, slide bars, pressure pads etc. The precision of the bars, which are made of high-quality, low-stressed annealed materials, guarantees outstanding dimensional stability and process reliability.

The N-bar range is clearly aligned to the demands of modern moldmaking, and, with lengths of 500 mm and 1,000 mm, offers variable adaptability to individual customer needs. HASCO's well-filled stocks ensure ready availability and very short delivery times in HASCO's customary high quality.

2023/2024 BOARD OF DIRECTORS

Mold Technologies Division

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.**

— Call for Papers —

A Symposium on

Smart, Innovative, and Low-cost Tooling Systems for Advanced Materials Manufacturing

Sponsored by the ASME Manufacturing Engineering Division's
Advanced Materials Manufacturing Technical Committee
2025 ASME International Manufacturing Science & Engineering Conference (MSEC)
June 23rd – June 27th, 2025
Greenville, South Carolina, USA
Hosted by Clemson University

Technical Focus

The use of additive manufacturing (AM) and other rapid prototyping has not significantly penetrated in sectors like automotive manufacturing due to their high production rate requirements. A paradigm shift from direct production of the final parts to manufacturing tooling systems, like molds and dies, can unlock potential economic benefits. Utilizing AM and new hybrid techniques for creating tools in transformative tool-based processes can lead to reduced tooling costs, shorter lead times, and optimized weight, strength, and thermal management. The journey from concept to mass production for lightweight components, such as advanced high-strength sheet metals, fiber-reinforced composites, or hybrid parts, involves rigorous prototyping. These prototypes need to be manufactured with materials and processes similar to the final products, leading to the substantial cost of prototyping tools. The rise of digital manufacturing has fostered innovations in tool fabrication, active sensing, and data analytics. Tools have evolved with Industry 4.0, becoming pivotal linchpins in product transformation, providing real-time data and efficiency. This symposium invites papers that address theoretical, implementation, and applied aspects of the following topics:

- Low-cost tooling leveraging advancements in AM (metal and plastics) and hybrid technologies
- AI-enabled tooling design, manufacturing, characterization, and quality assurance
- Development and application of new tooling materials
- Integrating sensors, vision-based systems, or self-adjusting actuators in tooling
- Data-driven real-time process optimization and quality monitoring using data from tooling systems
- Developing soft sensors for tooling applications
- Customization of products through innovative tooling systems
- Coating, surface finishing, and functionalization for tooling enhancement
- Application of control and robotics in tooling systems
- Recyclability, reusability, and life-cycle analysis of tooling

Paper Submission (Dates are subject to change.)

Submission of abstract for review (mandatory) ..... November 4, 2024
Submission of full manuscripts for review ..... November 12, 2024
Submission of revised papers for review ..... March 3, 2025
Notification of acceptance for revised papers ..... March 17, 2025
Submission of Copyright Form ..... March 28, 2025
Submission of final paper ..... March 31, 2025

- ***Submissions will only beaccepted via the conference website: https://event.asme.org/MSEC/***.
- No papers are to be submitted to the organizers.
- **Only industry presenters are allowed to present without a paper**.
- The presenting author must register by **April 10, 2025,** or the paper will be withdrawn from the conference proceedings.
- **High-quality MSEC 2025 papers will be channeled to an ASME journal for fast-tracked review and publication.** Accepted papers can be submitted for review to any ASME journal, such as the prestigious *ASME Journal of ManufacturingScience and Engineering* or the *ASME Journal of Micro and Nano Manufacturing*.

Additional Symposium Activities

To highlight advancements in this technical area, symposium organizers will:

- Work to attract a high-profile international keynote speaker
- Organize a special issue in the ASME Journal of Manufacturing Science and Engineering

Organizers

Dr. Saeed Farahani, Clemson University, Greenville, SC, USA, sfaraha@clemson.edu
Dr. Thomas Feldhausen, Oak Ridge National Laboratory, Oak Ridge, TN, USA, feldhausenta@ornl.gov
Dr. Kazi Md Masum Billah, University of Houston-Clear Lake, TX, USA, billah@uhcl.edu
Dr. Hamed Dardaei Joghan, Technical University Dortmund, Dortmund, Germany, Hamed.Dardaei@iul.tu-dortmund.de
Mr. Curtis Krick, Kistler Instrument Corp., Novi, MI, USA, curtis.krick@kistler.com

* The conference is collocated with NAMRI/SME's 53rd North American Manufacturing Research Conference (NAMRC53), which will have a separate call-for-papers. Please note that submission of the same paper to more than one conference is not permitted.

MINUTES
Board of Directors Mold Making and Mold Design Division SPE

	Present	Absent	Excused		Present	Absent	Excused
Shoreh Parandoosh	X			Jim Piehl - guest	X		
John Berg			X	Ron Natale	X		
Scott Peters	X			Andy Hartmann		X	
Peng Gao		X		Brenda Clark	Ex-Officio		
Greg Osborn		X		Davide Masato			X
Barbara Arnold-Feret	X			Wes Stephens	X		
Stephen Hansen		X		Joe Karpinski			X
Rich Martin			X	Kerry Kanbara		X	
Craig Crossley	X			Hari Sharma		X	
Susan Huang			X	Anthony Bubay		X	

February 19, 2025

3:04 Central Daylight Time – Meeting start – Lacking quorum - the meeting was held as a Committee as a Whole

Division Chair – Scott Peters

- We are looking for division chair-elect
- Nominations for Mold Maker, Mold Designer, Mold Repair and Apprentice of the Year will be at PTXPO.
- Scott will review current members to see who is up for re-election. Will need to submit bios for the ballet if they are interested in remaining on the board
- Scott will be attending ANTEC meeting, Cleveland section presentation on nano optics, and will be at the booth for PTXPO

Chair-Elect Report – vacant position

- Nothing new to report

Division Secretary Report – Wes Stephens

- Nothing new to report

TPC Report –Davide Masato – Shoreh Parandoosh

- We have a half day session dedicated to Mold Technology Division on Wednesday at ANTEC
- Scott said that we need to have call for papers by the end of the month for ANTEC 2026

Division Councilor Report – Barbara Arnold-Feret

- There is an independent meeting at ANTEC on Council. Scott will go on Barbara's behalf

Membership Chair – Peng Gao - absent

- Nothing to report

Sponsorship Chair Report – Greg Osborne / Stephen Hansen

- Letters were sent out in July; we have received about half of the payments

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RETEC Report – Barbara Arnold-Feret

- Nothing new to report

Newsletter Editor Report – John Berg

- Newsletter is in process – will be in print at PTXPO
- Shoreh needs to have call for papers in newsletter for ANTEC 2026

Education Chair Report – Joe Karpinski – absent

- Nothing to report

Web and Public Interest – OPEN

- No Report Presented

Treasurer's Report – Rich Martin – Ron Natale

- Bank of America - $40,414 is in Checking; $120,915 is in CD; $161,329 Total
- We made contribution to our speakers for SPE ANTEC student author travel fund, gift for Christina Fuges – honorary mold maker
- Rich and Ron looking into signature card for Bank of America - – President, Treasurer, Councilor, and Secretary
- Ron presented a mid-year financial review. He asked us to look at the budget in quarters rather than months.
- We are earning about $420/month in interest with our CD
- We are having plaques made for our winners to MMOY, MDOY, MROY and AOY winners

Councilor, and Secretary

- Rich was kind enough to of the duties of the treasurer

International Committee – Davide Masato/Hari Sharma

- Nothing to report

Intersociety Liaison Chair – Craig Crossley/Andrew Hartmann - absent

- Craig spoke with a mold base supplier in Hong Kong
- Andy is working with Wisconsin TMA and will be reaching out to the NTMA for further cooperation

Track the Apprentice – Susan Huang -

- Nothing to report

Social/Golf Outing – Kerry Kanbara - absent

- Nothing to report

Student Activities – Anthony Bubay - absent

- Nothing to report

OLD BUSINESS: No Old Business was covered / NEW BUSINESS: No New Business was covered at this meeting

The Meeting adjourned at 3:46 PM Central Daylight Time

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:

Greg Osborne - Sponsorship Chair - mldmkr@yahoo.com

Stephen Hansen - Associate Sponsor Chair - stephen.hansen@cdmtool.com

Publication Release Dates

Winter Issue
January 2022

Spring Issue
March 2022

Summer Issue
July 2022

Fall Issue
October 2023

SPONSORSHIP INFO 2025-2026

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

- Half 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

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

Send us your suggestions / nominations for

Women Making the Mold

Whether she is any or all of designer, engineer, toolmaker, programmer, project manager, or shop owner we want to meet her and provide a platform for explaining her journey and telling her career story.

Please contact Scott Peters - scott.peters@moldedmarketing.com and John Berg - john.berg@dyntool.com with your candidate's name, contact information, and a few points on her career and the impact she has on our industry.

Our very sincere thanks to the outstanding roster of talent that allowed us to share their career path stories and industry insights.





MOLD TECHNOLOGIES

OUR MISSION

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

OUR TECHNICAL FOCUS

The Mold Technologies Division exists to foster growth in the moldmaking and design profession by encouraging the training of moldmakers at the apprentice level, supporting the continuing development of established moldmakers, and by gathering and exchanging information on materials and mold performance.