

50TH ANNIVERSARY
EDITION



MOLD TECHNOLOGIES DIVISION

SUMMER 2026 NEWSLETTER

JULY 2026



FORM YOUR FUTURE

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Women Making The Mold
Sarah Morgan

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Women Making The Mold
Lindsay Mann

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Newsletter Sponsorship Opportunity

SPRE MTD

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 mold making 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.

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CHAIR'S MESSAGE

by **SCOTT PETERS**



On assignment in PHUKET, THAILAND

We have reached the end of the operating year for the division and the end of the 1st half of 2026. To say we had a busy and successful last half of the 2025 – 2026 Fiscal Year would be a disservice to all the work that was put in by our board and membership.

Before diving into all the activities, I want to thank the board for each member's contribution to making this, my **5th year as division chair**, a GREAT YEAR!

The notes of encouragement, the calls to work through next steps, to challenging direction and course of the division. Each individual action shows your personal commitment to making the Mold Technologies Division that much better.

As we publish this edition of the newsletter, the division has wrapped up elections for new members of the board. These individuals will be serving 3-year terms as volunteer leaders.

Unfortunately for the division business, family commitments, and other extracurricular activities do from time to time pull us out of our involvement in

volunteer activities. Thus, we say so long, not goodbye, to the following who have participated in the leadership of the division-

- ◆ **Darryll Gratrix** - International/Inter-Society Liaison Committee(s) will be stepping away to focus on the formation of his new business endeavor – NextGen Skilled Trades
- ◆ **Harindranath “Harry” Sharma** – International Committee will be stepping away from the board to focus on his business in India.
- ◆ **Andrew “Andy” Hartmann** is stepping down to take a more local role with the Milwaukee Section. Andy is newly married, well within the last year, and between business requirements and family obligations feels his time with a local section will provide more “Home Time” and have a large impact in the region.
- ◆ **Greg Osborn** has stepped down from his role as Newsletter Sponsorship Chair to be a working partner in his wife’s “Cottage Industry.” Look for their Home Décor shop whenever you are in Roscoe, IL - I sure Greg would be glad to say hi!
- ◆ **John Berg** - Newsletter Editor Extraordinaire will be stepping back to focus on his next chapter of his life in retirement.
- ◆ **James Jergens** - is stepping down to focus on business changes and family.

THANK YOU ALL!

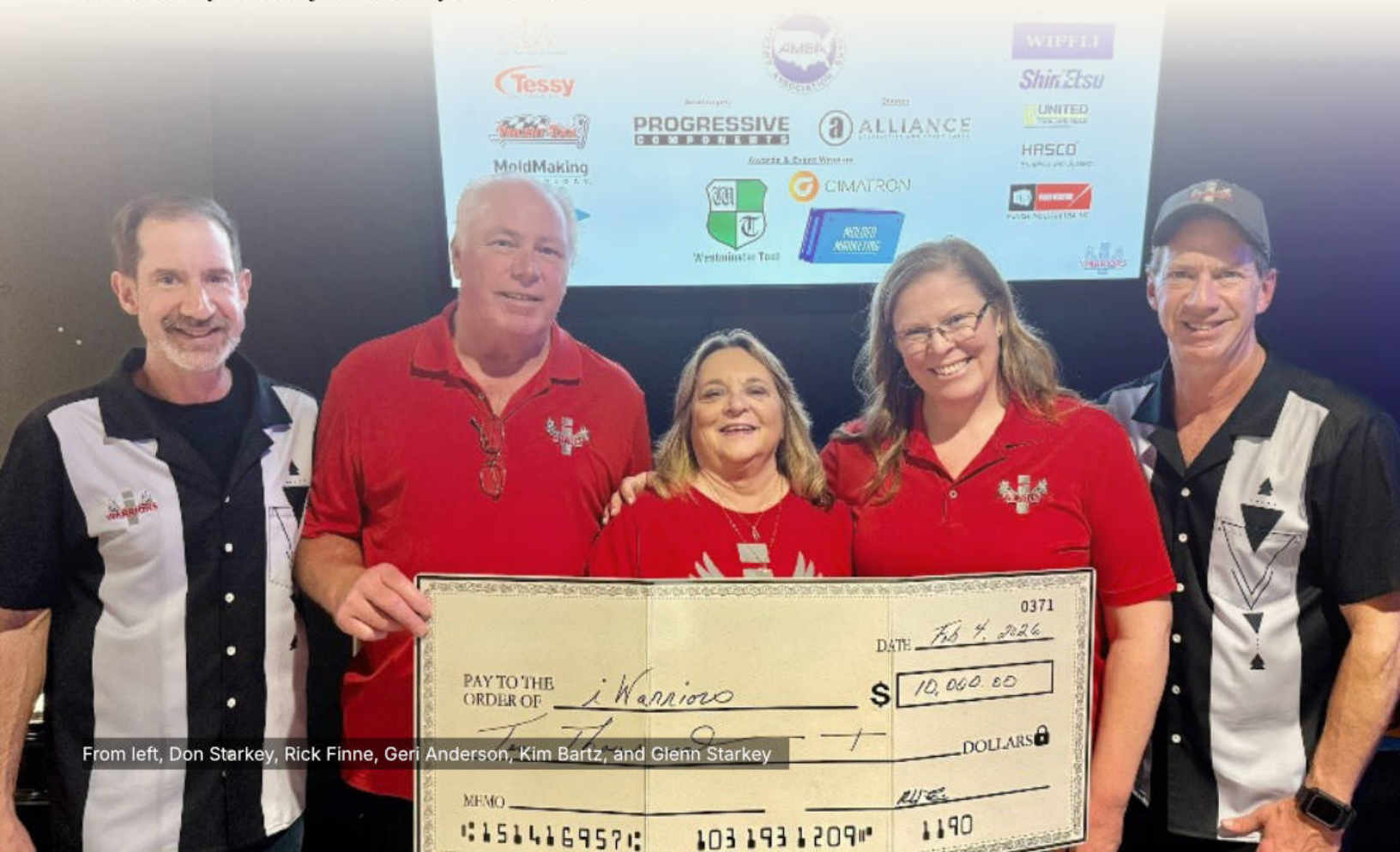
We wish you every continued success in your careers and family lives, and we look forward to reconnecting at some point in the future. Your legacies within the division will carry on for generations and we hope that the **friendships that you forged will last a lifetime!** Please remain in touch with each of us.

IF as you read this report you think, “Man this reads like an executive report to the shareholders of a corporation.” That’s because it is, and ***YOU are our shareholders!***

I believe that to properly look to the coming new year and set strategic goals for the division we need to take stock of what has worked in the past year. That said, here we go into the last half of 2025 – 2026 and our activities!

TRADE SHOWS

MD&M WEST- While we didn’t have an official presence at the show in February, members of the division leadership were on hand to meet and greet customers and colleagues from around the world of Medical Device and Manufacturing. Our own John Berg was on hand to greet a new member of our leadership Michael “Mick” Guistino and others. The I-Warriors held a “Bowling Fund Raising Night” and party sponsored by a member of our Mold Makers of the Year – Rick Finne of M-R Mold and Engineering. They raised \$10,000 for the I-Warriors Charity. Once again, we see that Mold Makers and Designers give back in ways that are tangible to the community! Great job to everyone involved.



From left, Don Starkey, Rick Finne, Geri Anderson, Kim Bartz, and Glenn Starkey

EDITOR'S NOTE

I should start with an admission: I had never edited a newsletter before I took this one on. I spent over a year in the mold technologies division as of this May 2026. I greatly enjoy being part of this community and learned from veterans in the field but planning, editing, designing, proof reading a newsletter is new to me! I am Gunakar (Gk) Golagana and welcome to this edition of Mold Technologies newsletter!

I've spent a good bit of my career in running injection molding operations, diagnosing why my molded parts were warping regardless of uniform wall thickness and running endless mold trials to find more ways to save cycle time. So my world from a plant manager to an editor for a newsletter meant a lot of learning and asking questions, making mistakes, exactly how I learned running operations and understanding value creation on the shop floor.

I met Scott Peters at PT-Expo and given my background in engineering, we instantly connected on the vision for Mold Technologies Division and if you know anything about Scott, he is very good at keeping you engaged in any conversation. Scott also has endless stories and wisdom to share with people of any age group.

"build it while you're doing it, ask the people who know more than you, and let the work get better with every newsletter"

Ultimately for me an editor means to create and improve the value of this newsletter one issue at a time and introduce you to all the people that make this newsletter a worthwhile read.

There are incredible people working in this industry that the world needs to know more of. We may have diverse views on AI and its impact but we have a real challenge to strengthen our manufacturing roots and Mold Technologies Division does exactly that but you will learn more about the "How" as your progress further in this and upcoming newsletters.

A little about where I come from, for anyone I haven't met yet, I currently serve as General Manager of BPC Toll Compounding & Blending in Meredosia, Illinois, where I hold full P&L responsibility for a \$5M+ facility shipping millions of compounded polymers every single year. If you are buying plastic resin, we should talk. Before that, I spent several years in engineering and general management roles at a MIC Molding where I helped grow the company, team and played a key role in establishing best practices for success.

I hold a B.S. in Mechanical Engineering and an M.S. in Industrial & Systems Engineering from Northern Illinois University, and a certified Moldex3D analyst in mold flow simulation. During my Master's I learned about Lean Manufacturing, Sigma and Value Stream Mapping which later helped me in running manufacturing plants successfully as a General Manager. I joined the Mold Technologies Division board because I believe the technical and human sides of this industry are similar stories told differently and noticing diminishing talent in this well reputed field of mold making. A toolmaker solving a part sticking in



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ANTEC 2026

This will be a brief mention of the activities. As the division chair, I can say “What a Success.” Professor Peng Gao, Western Washington University, has out done himself again. With 6-papers and sponsorship for the half-day session by our friends at ACCEDE Mold – Rochester NY. Special thanks to ACCEDE for their leadership and sponsorship of this event! Lookout for a full report from Peng elsewhere in this edition.

PT-EXPO 2026

March 17th kicked off the Largest Plastics Show of the Year. And what a show it was. There were Colleges and Universities represented, Trade Associations and Training Advocacy Groups, and of course Machine, Materials, Services, Tooling Suppliers as well. From the start on Tuesday the traffic was good and got better as the day turned into afternoon and then into Wednesday. On Wednesday, the division presented our four international awards. You can meet the recipients later in the newsletter.

The aisle in front of our booth was packed with observers as we introduced each recipient and presented them with their award. This year was special because we saw awardees from different generations, genders and continents.

The common theme when asked was “I was just doing my job.” That humility sets these recipients on a level that is second to none. Speaking of the awards program, let me say that the 2026 class of nominations was among the best we have seen. *The depth of experience and commitment to excellence in craft and to reaching the next generation of Tooling Practitioners was fantastic.* We look



forward to great things next year and in years to come. Wednesday evening the division and **Chicago Section hosted a Pizza Party at Crust Brewing Company** - adjacent to the show. And a party it was. With around 50 folks from Award Recipients to family members to industry professionals all gathered to celebrate everything that is the Mold Making and Plastics Industry!

Facebook : We had a Facebook page in the past and have let it flounder to non-existence. If you believe that using Facebook as a media outlet for division news and events is worthwhile, please let us know. For now, it is there and stagnant.

Original Content : We are always looking for original content from our members to push out to the Global Tooling Community. What a great way to make your name known in industry.

Mold Technologies Division, July 2026



RIT

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Institute of
Technology**

STUDENT LIAISON

For the past 3 years we have worked with a student at RIT (Rochester Institute of Technology) in developing a division liaison throughout academia. **Anthony Bubay** is completing his class work at RIT, and we hope to continue his legacy with another student.

Of course, the goals here are multi-faceted as follows-

- ▶ *Develop tooling/mold making synergies within the academic community around the world.*
- ▶ *Develop core relational networks intertwining folk in academia and industry to further bolster the value of retained membership in the SPE – Mold Technologies Division.*
- ▶ *Help develop leadership and networking skills in a cross functional volunteer board*

Having one member of the board working on a project like this is daunting at best. So, we are encouraging a cohort of students from across the landscape of colleges, technical schools, and universities to come together and build relationships outside of the individual student chapters. And as a division, we will support their activities as best we can!

SCHOLARSHIPS & GRANTS FROM MOLD TECHNOLOGIES DIVISION

As in years past, the division is seeking applicants for Academic Scholarships.

Scholarship Applicants can be enrolled into a **4-year university program**, converting a Journeyman Credential to an associate or bachelor's degree in Plastics – Plastics Engineering – Tool Engineering. They need not be based in the US nor do the applicants need to be undergraduates. Check with the **Education Committee** to see what we have to offer!

Grant Applicants, likewise, do not need to be in the US. They must however, have a verifiable program in place and provide an overview of the intended outcome of the grant. Enhancements to education labs, tooling, machines and the like are great compliments to the Mold Technologies Grant Programs. In some cases, we may try to facilitate hard donations from industry to help meet the enhancement plans.

Here is one more key point about Scholarships and Grants – **THEY ARE NOT LIMITED TO 4-YEAR UNIVERSITIES!** Community Colleges, Technical Schools and even Community Career Centers are encouraged to submit applications.



READERS FEEDBACK and closing

Reader feedback is a critical motivation for our Editors and Authors in preparing our AWARD-WINNING NEWSLETTER. I cannot say it enough, if something strikes a chord – set's your hair on fire – or just makes you go HUH. Let us know!

Over the past two issues I have had direct comments from readers about “A new phrase” or the concept of “Leisure Suit Larry working a trade show.” It is these little comments that make us aware, PEOPLE REALLY DO READ THE NEWSLETTER.

So, to all our contributors, THANK YOU FOR MAKING THE NEWSLETTER SPECIAL! And to all our readers – THANK YOU FOR THE COMMENTS AND ENCOURAGEMENT!

Looking at a report like this; from successes and struggles to planning and hopes – should give the entire division a **great sense of pride and purpose**. I know that it does for me!

All I can say is – THANK YOU to our board for your leadership in these and so many other behind the scenes activities – we couldn't accomplish this work without your intentional participation. And to our members – **THANK YOU** for entrusting the leadership of the division and by extension, the industry to us as your board!!!

We look forward to seeing you all again in the fall edition and at a conference



Scott L. Peters

Chair – 2022 – 2027

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DIVISION EDUCATION

CHAIR'S MESSAGE



Joe Karpinski

Yes, we are over half way through 2026 and there are still multiple conversations about the “skills gap”, “retention”, and “who will be the future leaders of the plastics Industry?” By the way, these conversations must be at the forefront for academia and the organizations that want to attract the best qualified talent. I have seen more attention being placed on these topics from the Federal government and all the way down to the local shops in my area. If you have spent any time in the plastics industry, you can clearly realize the importance of the products and services that make this big world of ours go around.

I recently read a post from one of our industry leaders Christina Fuges (MMT) because she talks to a plethora of organizations and people that want to solve these issues. The question that was presented was “what is the best way to prepare students for the realities of manufacturing.” I know I have had that conversation and/or discussion myself after being in this trade for over thirty years. Also, being an Adjunct Instructor provides me an avenue to get feedback directly from those wanting to enter the trade or those who are in the manufacturing industry in general. Here are some of the avenues that were identified; hands-on injection mold training, get them on the production floor, and present them with scenarios that require problem-solving and troubleshooting skills. The more we (industry professionals) can make that connection between a classroom, and the real world is an advantage for all parties involved.

Additionally, there are multiple resources that can connect the school to the industry with partnerships, mentoring programs, apprenticeships, donation of equipment, and tours of manufacturing organizations in the communities. I think you can see the presence and driving force of this article. Communication and connection.

I recently purchased a book titled “Pass the Torch” A Rallying Call to Rescue the Future of Trades written by Manja Horner (3rd generation tradesperson). I will admit this book speaks volumes of where we were in the industry and where we can go. Here are a few “snip-its” from the book. For example, “When did we stop recruiting people into the trades” Let that sink in. Next question, “When did the education focus shift?” Back in the ‘80s the trades industry “working with your hands” and “dirty jobs” lost its attraction. Hmmm, “dirty jobs” and “how do we make manufacturing sexy again?” Somehow, I have heard those words before.

In conclusion, a closing reference from the book. The next generation is overwhelmed and ambitious in many ways. Have you ever attended a First Robotics event or sponsored a local STEM program? You can see the eagerness and see the excitement of those students as they create and develop things. They want to learn, contribute, and see the fruits of their labor. They want to be led by individuals and organizations that believe in the future.

Do we hear that call and will we answer????

**Respectfully,
Joe Karpinski – SPE Mold Technology Division Education Chair**



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WOMEN MAKING THE MOLD

LINDSAY MANN

For the past several editions we have introduced you to different women in the industry who are making a real difference in the mold making world. In this edition we have 5 ladies that have different backgrounds and have shared their thoughts about this topic starting with Lindsay!

Lindsay is Director of Commercial Strategy and leads MTD's commercial strategy and new-business development, working with medical device and health tech OEMs from the first conversation through program qualification. Let's hear from Lindsay about her journey.

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

I didn't grow up thinking I'd end up in manufacturing, let alone micro medical molding.

What drew me in was the complexity of the work and the fact that no two challenges are ever the same. At MTD, we work on parts and programs that push the limits of what's possible in molding, tooling, and metrology. That problem-solving aspect and ability to help others is what hooked me. I've always been interested in how things work and how teams come together to build something meaningful. In this industry, you get to see an idea move from concept to production and know the work you're doing ultimately supports medical devices that impact people's lives. That's incredibly motivating.

Lindsay Mann

Director of Commercial Strategy
MTD Micro Molding

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

At times, it could be intimidating walking into rooms where you were often the only woman, especially early in my career. But I was fortunate to work alongside people who cared more about whether you were willing to learn, contribute, and work hard than anything else. I also learned pretty quickly that confidence comes from competence.

The more experience I gained and the more I understood the technical side of the business, the more comfortable I became speaking up and trusting my own perspective. Today, I think there are more opportunities for women in manufacturing than ever before, especially in technical and leadership roles. The industry needs different perspectives, strong communicators, and people who can connect engineering, operations, customers, and strategy.

How has your career choice been rewarding to you? What do you see as a "High Point" in your career?

The most rewarding part of my career has been the relationships and the opportunity to help grow a company and culture I genuinely believe in. One of the biggest highlights for me has been helping tell MTD's story externally while also helping strengthen the company internally. Over the years, I've had the opportunity to work across commercial strategy, branding, customer relationships, and industry visibility. Seeing MTD continue to grow its reputation as a leader in micro medical manufacturing — while staying true to the culture and values that built the company — has been incredibly meaningful.

Another high point has been stepping into a leadership role where I can help shape strategy while still staying connected to the people and technical side of the business.

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

One of the biggest challenges has been learning to trust my own voice and perspective, especially early on. In technical industries, it can sometimes feel like you need to prove yourself repeatedly before people fully listen, especially as a woman without an engineering degree.

Another challenge for manufacturing overall is helping younger generations understand how advanced, innovative, and impactful this industry really is. A lot of people still have outdated perceptions of manufacturing, when in reality companies like MTD are working with cutting-edge technology, automation, precision tooling, and highly specialized medical applications.

How has the industry changed during your career?

The level of technology and specialization has increased tremendously. In micro medical molding especially, tolerances continue to get tighter, devices continue to get smaller and more complex, and customer expectations around validation, quality, and speed have all accelerated.

I also think the industry has become much more collaborative. Customers are looking for true development partners that can contribute engineering expertise, manufacturability insight, automation strategy, and long-term scalability — not just someone to build a mold and run parts.

From a workforce perspective, I do think there's been positive movement toward bringing more women and younger professionals into manufacturing and technical leadership roles.

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

There are tremendous opportunities for women in this industry because manufacturing today requires a wide range of skills beyond traditional engineering paths. Communication, project leadership, problem-solving, customer engagement, technical strategy, operations, and innovation all play a huge role.

Women can bring valuable perspectives to team dynamics and leadership. The industry benefits when different experiences and viewpoints are represented.

Most importantly, manufacturing offers real opportunities to grow, lead, and make a tangible impact.

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

Stay curious and don't be afraid to start before you feel fully qualified.

Manufacturing is one of the few industries where you can continuously learn and see the direct impact of your work. The people who succeed are

usually the ones willing to ask questions, stay adaptable, and keep learning.

I'd also encourage young people to spend time inside modern manufacturing facilities before making assumptions about the industry. The level of technology, innovation, and technical expertise involved today surprises a lot of people.

And finally, build relationships. This industry is smaller than people realize, and the connections you make throughout your career matter.

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TECHNICAL PROGRAM

CHAIR'S MESSAGE



Mold Technology Session Highlights from ANTEC® 2026

The SPE Mold Technologies Division was proud to host a highly engaging and well-attended Mold Technologies session during ANTEC® 2026, held March 9–12, 2026, in Pittsburgh, Pennsylvania. The full morning Mold Technology session took place on March 12 and featured six technical presentations covering advanced cooling technologies, intelligent hot runner systems, reconfigurable tooling concepts, and simulation-driven process optimization for injection molding applications.

Despite being scheduled on the final morning of the conference, the session attracted strong attendance, with more than 30 participants from across industry and academia. The audience included tooling engineers, business owners, sales representatives, professors, researchers, and students in the plastics and mold manufacturing fields. Audience participation remained active throughout the session, with many presentations generating thoughtful technical discussions and extensive questions from attendees.

On behalf of the SPE Mold Technologies Division, I would like to sincerely thank all presenters, attendees, and volunteers who contributed to the success of this year's technical program. We would also like to extend special appreciation to ACCEDE Mold & Tool Co., Inc. for sponsoring the session and supporting continued innovation and technical exchange within the mold manufacturing and injection molding community.

We would also like to thank Ms. Camille Sackett, Vice President of Sales & Marketing at ACCEDE Mold & Tool Co. Inc., for attending the session and providing the opening remarks welcoming speakers and attendees to the Mold Technologies session.

The session featured a balanced mix of contributions from industry and academia, including two student presenters and three first-time ANTEC presenters. The strong diversity of backgrounds and experiences contributed to lively conversations throughout the morning and reflected the continued growth and evolution of the Mold Technologies Division.

One of the featured presentations, ***Development and Adoption of On-Demand Reconfigurable Mold and Cavity System for Injection Molding***, explored a modular mold architecture utilizing a universal mold base and a matrix of individually actuated pins capable of dynamically forming cavity and core surfaces. The work addressed longstanding challenges associated with tooling lead time and cost in prototype and low-volume production environments. By enabling rapid geometry changes without dedicated tooling, the concept demonstrated significant potential for agile manufacturing and mass customization applications.

In Optimizing Plastic Injection Molding with Advanced Cooling Strategies: an Experimental Study of SimForm and PulseCooling Approaches, the presenters

investigated how simulation-driven cooling design and dynamic temperature control can improve molding efficiency. The work combined Maya HTT's SimForm platform for generative cooling channel design with CITO's PulseCooling technology for real-time mold temperature regulation. Experimental validation demonstrated strong agreement between simulated and measured mold temperatures while highlighting opportunities for reducing cycle times and energy consumption.

Further advancing the discussion on cooling system optimization, **Computational Evaluation of Advanced Cooling Strategies for Slender Injection Mold Cores** examined the challenges associated with cooling slender core geometries through numerical simulation. The study compared conventional cooling methods with advanced strategies such as conformal cooling, thermal pins, and high-conductivity inserts. The results demonstrated how optimized cooling layouts can improve thermal uniformity, reduce hot spots, and minimize core deflection while balancing productivity and dimensional stability. One notable example discussed during the session was the use of conformal cooling channels fabricated through advanced metal additive manufacturing techniques, demonstrating how modern tooling technologies are increasingly integrated with thermal simulation and digital design workflows.

Hot runner and process monitoring technologies also received significant attention during the session. The presentation **Smart Hot Runner for Indirect Cavity Pressure Monitoring and Process Control** introduced an intelligent valve gate hot runner system capable of generating cavity-pressure-equivalent signals without requiring traditional cavity pressure sensors or mold modifications. The plug-and-play approach simplifies implementation while still enabling process monitoring and quality control. Additionally, the system provided insights into valve pin movement, offering opportunities for

predictive maintenance and balancing optimization in multi-cavity molds.

Complementing this work, **Advanced Hot Runner System Development for High-Quality Thin-Wall Parts** addressed the growing demand for molding aesthetically demanding thin-wall electronic housings using white flame-retardant polycarbonate materials. Using a specialized test mold with interchangeable inserts and multiple hot drop configurations, the study systematically evaluated gate designs and processing conditions to establish optimized molding strategies capable of maintaining both surface quality and structural performance.



The session also featured innovative research into polymer flow control within hot runner systems. **In Numerical Investigation of a Hybrid Hot Runner System to Improve Polymer Flow and Injection Molding Efficiency**, researchers presented enhancements to the “Rheodrop” concept originally developed at Lehigh University. By incorporating axial grooves into a rotating valve pin design, the system generated increased localized shear within the melt, reducing viscosity and improving cavity filling consistency. Numerical simulations demonstrated the potential of the design for improving process control and



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Keynote Speaker

Lynzie Nebel is an Upstream Hardware Engineer at Cytiva (headquartered in Marlborough, MA). She has spent nearly two decades working in the plastics industry at various custom injection molding facilities, making everything from micromedical devices to heavy-equipment radiator tanks. She has been an active member of the Society of Plastics Engineers since 2006, serving in numerous leadership roles. She is currently a member of the Board of Directors' Executive Committee and the incoming 2026 President. Lynzie also co-hosts the award-winning podcast, *PlastChicks*.

When Lynzie's not living for all things plastic, she can be found with her husband, Danny, and their four boys, Henry, Sam, Charlie, and Archie.

expanding molding capabilities for challenging polymer systems. Across all presentations, a common theme emerged: the future of mold technology increasingly depends on the integration of advanced simulation, intelligent sensing, adaptive process control, and innovative tooling strategies. From conformal cooling and smart hot runners to reconfigurable molds and simulation-driven optimization, the session demonstrated how digital engineering tools and advanced hardware are reshaping the injection molding industry.

The Mold Technologies Division sincerely appreciates the technical contributions made by all presenters and the enthusiastic participation from attendees throughout the session discussions. The high level of interaction and technical dialogue throughout the morning reflected the strength of the mold engineering community and the continued importance of ANTEC as a platform for sharing innovation and practical manufacturing solutions.

Finally, I would again like to thank ACCEDE Mold & Tool Co., Inc. for sponsoring the Mold Technology session at ANTEC® 2026 and supporting the advancement of mold engineering education and technical exchange.

We look forward to continuing these conversations and welcoming everyone back at ANTEC® 2027, which will be co-hosted with NPE 2027 on May 3–7, 2027, in Orlando, Florida. We hope to see you all there.

Peng Gao

Technical Program Chair

SPE Mold Technologies Division



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> Applicability To Both CNC-Machined And 3D-Printed Inserts

Knowing the critical locations means the mold designer can route channels, baffles, or even thermal pins appropriately. They can even go one step further by routing conformal cooling channels to determine whether the added cost yields even better performance.

> Reduced Design/Engineering Effort And Cost

Instead of guessing where to put water, mold design teams can quickly build upon the SimForm recommendations. Plus, with many senior designers retiring, this tool compensates for gaps in experience as new hires are onboarded.

> Accelerated Time To Market

Shifting cooling design earlier in the process means fewer iterations with suppliers and faster mold procurement. Furthermore, a better cooling design means shorter cycle times and a higher production throughput. Ultimately, the product hits the market sooner.

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Energy Efficient Injection Mold Cooling *-PulseCooling-*



By: Max Wieder

How Energy Efficient is your Molding Process?

As the drive to conserve energy and reduce our carbon footprint intensifies, it's worth asking, how energy-efficient is your molding process? While many molders make efforts to cut energy consumption, a key opportunity is often overlooked. Process cooling. Surprisingly simple, yet highly impactful, optimizing your cooling process can deliver drastic results. Reports of up to 96% more energy efficient when compared to conventional methods.

Save Energy with *PulseCooling*

Sustainability has become a central focus in modern manufacturing. Driven by regulatory expectations and industry practices, manufacturers are under increasing pressure to minimize waste, conserve resources, and optimize energy usage. Specifically for process cooling in injection molding, it is essential to critically evaluate the energy that is being produced and use it to our full advantage while removing the excess energy as efficiently as possible.

This is the principle behind PulseCooling. At its core, PulseCooling is designed to achieve energy balance by selectively removing only the excess heat generated during the molding process. By leveraging the energy already present in the system, the technology maximizes efficiency, reduces waste, and minimizes the additional energy required for cooling.

Plasticizing the material in the barrel is an absolute necessary expenditure of energy in the molding cycle. The specific amount of energy retained in the material is calculable based on the enthalpy value of the material and the processing temperature. This can be a very large amount of energy and we should use it to our advantage.

In many cases, the energy in the melt is sufficient to maintain mold temperature for processing. With each injection shot the energy is replenished, thereby acting as a constant energy source for maintaining the desired mold surface temperature. Using this to our full advantage, all we must do is remove any excess energy from the process to cool the part to ejection temperature. Once the excess heat is removed, the mold is then maintained at the processing temperature consistently across the molding surface and we achieve an "energy balance" that makes the process extremely efficient.

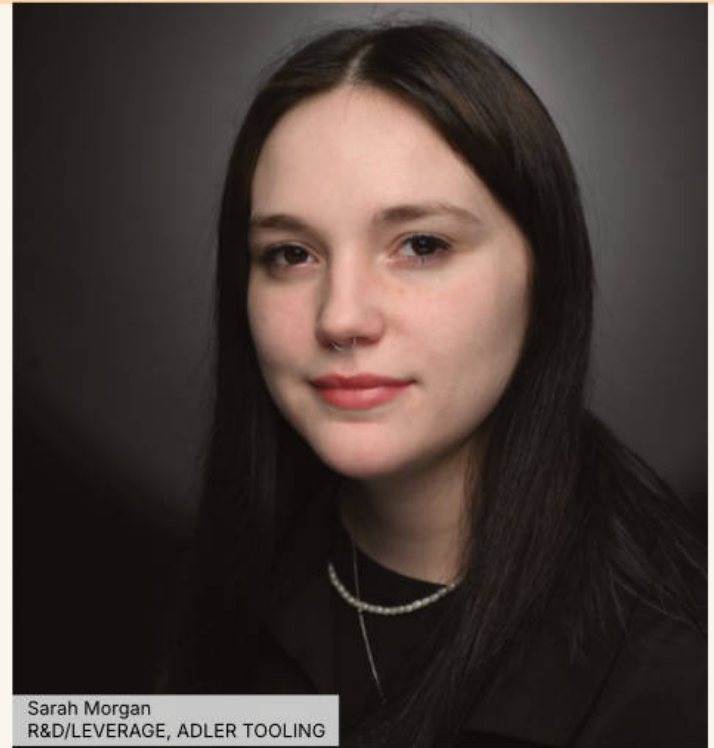
Most molders rely on Temperature Control Units (TCU's) for "mold cooling," but these systems are inherently inefficient. A typical TCU uses a pump and electric heaters to heat the water, which is then circulated to indirectly control mold temperature. In other words, we are heating the water that's intended to cool the mold. Adding to the inefficiency, TCU's often use 1–5 HP pumps to drive water through the mold. These are energy-draining machines that consume significant power. When multiple cooling zones are required, multiple circulators are needed, compounding the energy demand. This conventional approach to "cooling" is anything but efficient.

Basic thermodynamics has taught that cooling efficiency and heat transfer are greatly increased by larger temperature differentials and turbulent flow. PulseCooling is fundamentally different from traditional constant-flow cooling. Rather than maintaining a steady-state coolant flow, PulseCooling uses an on-off, pulsed flow strategy that is dynamically controlled based on real-time thermal readings at the mold surface.

WOMEN MAKING THE MOLD

SARAH MORGAN

Sarah Morgan is the Mold Making Apprentice of the Year for 2026. Let us congratulate on her achievement. Sarah works at R&D/Leverage, Adler Tool Co. and shares her story about how she navigated through hurdles and challenges which traditionally were known to be hard. Sarah's story is an inspiration and proves what can be done with hard work and determination. Let us hear from Sarah now!



Sarah Morgan
R&D/LEVERAGE, ADLER TOOLING

What drew you to the plastics industry as a Career Choice?

Most of the jobs I had previously been employed were landscaping, light fixture manufacturing, QuikTrip, and grinding down bad parts at an injection molding shop. In late 2022, I was a senior in high school, I was offered, along with any other students in the 3 high schools in the district, to go on a field trip. They called it manufacturing day and students were invited to learn about a few local businesses and a trade school. I went on the tour and subsequently emailed the company that I work at now R&D Leverage.

Also just before working at R&D Leverage, I got offered a job by a family friend (Rick Perkins, Owner of Midwest Plastics). The slight experience of already working in a molding shop, as well as, the fact that I have had mostly odd jobs, is why I had the confidence to reach out.

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

It didn't seem to be too big of an adjustment. Growing up, I had as many male friends as I did female. Since I was never super girly and would always be described as the 50/50 split of girly and boyish. Also, the places I worked at before were mostly male or there were very few people working around/with me.

To me it's never been about gender and is more about the attitude and character of the person. There's plenty of people that I work with or meet and it's not their gender I worry about but how

they treat others, their work, and their attitude about life.

How has your career choice been rewarding to you? What do you see as a "High Point" in your career?

I'm very proud of the work I accomplish. Sometimes there will be a lot of things to do with what seems like not enough time to get it all done but when my fellow ISBM toolmaker and I meet the deadlines, it's very rewarding.

I've had quite a few high points over the past 3 years. First, is all of the operations or decisions that I first have to make by myself and so far, I've made no bad calls and only had a few scrap parts out of hundreds that I've milled and surface ground. Second, my community continually invites and asks for my involvement in local meetings or advertising apprenticeships for high schoolers. It always makes me feel like I'm doing something useful to all generations to come and possibly helping people see that women can work anywhere they see fit. Last but not least, I recently was awarded apprentice of the year by SPE Mold Technologies which was very incredible to have achieved when in my mind I've just been trying to do my job the best I can.

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

One of my biggest challenges is the workload, I very much enjoy staying busy and being needed, but some projects can definitely take a toll when there are issues and tight due dates. I currently work with a 70+ year old toolmaker that will need to retire at some point, so my workload will double sometime in the next few years. Being a toolmaker is a challenge in itself; I've had to have great memory because there is a lot to oversee, long hours, a lot of responsibility.

Biases is most likely the other biggest challenge. I haven't had many issues with the people that I work with. I think it's partly due to the way I present myself and my character. Also, a lot of machinists and toolmakers seem to have mutual respect for being in the industry. It's not an easy career path to choose while in high school or straight out of school. More negative things are said by people that don't work with me than is ever said about me by co-workers... or at least as far as I know.

How has the industry changed during your career?

I've been seeing more people that are in their 20s or younger that are taking on a career in this industry. I've also seen plenty of people from different backgrounds coming in to intern or job shadow. This includes some females as well; I've had the privilege to help train or talk to some of them for a short amount of time.

The other change that has happened over time has been steady increase in automation on CNC machinery. For example, mills with multiple tombstones and vises filled with work pieces or automatic bar feeds with parts catchers on lathes.

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

I feel that all opportunities are out there, if you open enough doors and put yourself out there whenever possible. I've been slowly realizing that there are tons of people in this industry that will do anything for those that deserve it. So, if you continue to have/show respect while growing in your career, anyone in this industry will help you out. You can only get help or be where you want to be in your career by asking and taking initiative. No one will teach you something that they think you already know.

What is your advice to any young person considering a career in plastics?

One of my main pieces of advice is to leave assumptions at the door. The people I thought looked the meanest, turned out to be my closest co-workers. The machine operations that seemed intimidating, in reality can be easy to get a hang of. The more you know, the easier day to day tasks are. I think that every young person that has been interested in plastics, gets pretty intimidated by everything that goes into the molding process but if you can make it through the first 2 years, it gets easier.

And for someone that is just starting out, there are all sorts of opportunities depending on your area of interest and expertise. If you enjoy using your hands almost as much as your brain, then a shop floor/manufacturing or molding/sampling job would be a good fit. If you enjoy design, being tedious, working with numbers and aren't into physical labor, then working anywhere in engineering or programming would be a great fit.

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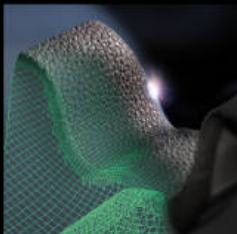
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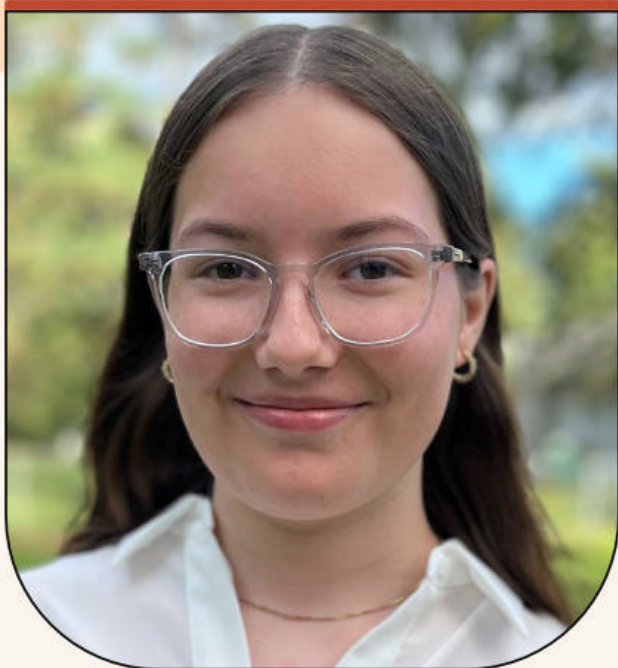
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WOMEN MAKING THE MOLD

CLAIRE MARBLE



Meet Clair Marble!

Claire is a student at University of Wisconsin-Stout and a CAD Detailer at Vincent Tool in Chippewa Falls, WI. She received one of the Hasenclever Family – HASCO GmbH – Mold Technologies Division Scholarship in 2026. Claire's story for such a new member of the plastics industry is quite compelling – read on to meet this leader of the next generation in Plastics and Mold Making."

What drew you to the plastics industry as a Career Choice?

When I was a sophomore in high school, I was offered a position at a company that manufactures injection molds. At this point, I had no knowledge of injection molding or even anything to do with plastics. Since I was spending everyday learning about injection molds and their components, I thought it would be interesting to also know how the molds work after they are made. I knew that if I chose my major to be Plastics Engineering, I would have the best chance of working in a career related to injection molding so I could fully understand the whole process. This has proven to be true, as I have gained a lot of hands-on experience in injection molding since I first learned about it in high school. The more I learn about the plastics industry, the more excited I am to be a part of it.

How was it entering a traditionally "male-dominated" industry in a technical role?

I have noticed that the less women there are, the closer they become. In all my classes, there are usually only about three girls compared to almost twenty guys. Since there are so few girls, we usually all end up sitting together, which can create some great friendships. In my plastics classes specifically, I know almost every girl in the program. Plastics Engineering is already a very small major compared to the other engineering majors, so there aren't that many girls in total. Women are becoming much more common in the engineering industry, so I feel like I am treated equally to everyone else. However, you still are going to be the minority at every job you have, and you are also very likely to hear many sexist comments and jokes. Although this should not be the case, you can't let it get to you, otherwise it will become very difficult to continue in this industry.

How has your career choice been rewarding to you? What do you see as a "High Point" in your career?

Throughout my time at college, I have had so many opportunities solely because of my majors and skillset. I have been awarded many scholarships, had articles written about me, and I was even invited to be on a podcast. I also have had the opportunity to tour many advanced manufacturing companies and hold positions in engineering related jobs. My most recent accomplishment is my position at my current internship for a medical manufacturing company. I would also call this the "high point" in my career as of right now. This is because I have gotten so much hands-on experience that I believe will be very beneficial for future jobs. Learning in a classroom is very different compared to learning at a full-time job. Although it is very challenging learning so much in such a short amount of time, I am having a lot of fun taking in all this new information.

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

Since I am just starting the path to my career, I think it will feel like a big step to transfer the knowledge I have learned from school into a real-world environment. I have already noticed this with my current internship. It doesn't matter how much you are taught in school because it will still be a challenge to learn the skills needed for a real job. I believe this also is true for when you transition to a new job at any point in your career. There will always be new skills to develop and new systems to learn, but I think it will get easier as you gain more knowledge over time. Each company you work at will have its own quirks, but the main knowledge and vocabulary will stay the same, as long as you continue to work in the same field.

How has the industry changed during your career?

Although I have not been studying plastics for very long, I have already learned a lot about what other people are doing to improve plastics and the techniques used to manufacture them. For example, I have learned a lot about people who are trying to figure out how to recycle thermosets. I am confident that we will have a solution to this problem in the near future. On the manufacturing side of things, I know that the automation involved with injection molding is always advancing. Machines are getting bigger, faster, and are gaining more capabilities overall. The competition is fierce within the industry, and many companies need to hide their automation from customers so they can continue being the best at what they do. Since I am just getting started in the industry, I am constantly amazed at how advanced the manufacturing industry is. It's hard to imagine how quickly you can make products until you see this kind of automation for yourself.

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

Since there are less women in the industry, it can be easier for them to stand out. People want to recognize your achievements and see what you are doing differently. I think opportunities like this are great for showing younger girls what is possible. They are free to do what they want to do

and be who they want to be. I have found that even without trying, I have been repeatedly recognized for the work that I do. I am not coming up with crazy ideas or trying to stand out from everyone around me, but I continue to be given so many great opportunities simply because I am a woman in a field where there aren't many other women. It's the perfect time to start in an industry like this since so many people are trying to break out of the box and explore the options that are available to them.

What is your advice to any young person considering a career in plastics?

Choosing to study plastics or deciding to have a career in plastics can be scary. Many people will not understand or support your decision due to the stigma around plastics. I have experienced this firsthand. However, it is important to stay confident with your choice. The more you learn, you will start to realize that the people who fear plastics are the ones who simply don't understand them. The only way to make plastics better is to study them, and I am happy I made the decision to learn as much as I can about this topic. Don't be afraid to pursue your passion. I find that some of the scariest decisions I make often result in the most rewarding outcomes.

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WOMEN MAKING THE MOLD

LYNZIE NEBEL

Meet Lynzie Nebel!

If you know something about mold making, you may have heard about Lynzie!

Lynzie serves as the Executive Committee Chair of the Society of Plastics Engineers and is an alumnus of Penn-State Behrend.

We are very proud to introduce Lynzie in this edition. Let's learn from Lynzie now!

What drew you to the plastics industry as a Career Choice?

I didn't originally see myself in this industry, or even as an engineer. I thought I'd end up in music. In high school, I took a manufacturing class, and we had a tabletop injection molding press, and I was fascinated. At the time, I didn't think it was a viable career path.

However, after an injury made it hard to play my instrument with any regularity, I had to rethink what my plans were. Once I realized plastics was very much a real industry, I decided to check out Penn State Behrend, and that pretty much sold me.

How was it entering a traditionally "male-dominated" industry in a technical role?

For someone who hadn't really been in mostly male spaces before college, it was pretty intimidating at first. I second-guessed myself a lot and had a hard time speaking up, even if I had something to contribute. It took some time and a few good allies to find my footing. Even now, if I'm not intentional, I can feel myself slipping back into that same uncertainty. The difference is I have a lot more experience to lean on when that happens. I've also become more aware of when I'm adjusting how I communicate to fit the room, and how important it is not to let that turn into holding back.

How has your career choice been rewarding to you? What do you see as a "High Point" in your career?

I've gotten a lot out of this industry over my career. I've built a stronger voice than I had in 2004 as a new college freshman, I've had the chance to work on projects that I can tangibly see

in the real world, and I've been able to be involved in conversations that shape our industry. There are probably a billion little high points along the way, but two of the biggest ones come from PlastChicks and SPE.

When our podcast started a scholarship three years ago, we weren't entirely sure how we were going to sustain it. We just knew we wanted to find a way to support students who show they want to be part of this industry in the same way Mercedes and I do. Being surprised on an episode with news that the scholarship has been endowed was overwhelming. It's the only episode I've cried on so far. I'm beyond touched and incredibly grateful. My other highlight has been serving as the 83rd President, now known as the Executive Committee Chair, of SPE. I've been part of the Executive Committee for several years, and it's given me the opportunity to help move the society's direction while working alongside a group of people who are just as committed to the industry. It's very rewarding, and I'm grateful that the members of the society entrusted me with a year at the helm.

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

My biggest challenge has been consistently trusting my own voice in environments where I've had to learn how to belong. Often, that shows up as me code-



switching, adjusting how I communicate depending on the room. It's not always a negative thing, but it can become easy to lose your natural voice if you're paying more attention to the way you think you should be perceived versus the way you actually want to be perceived. Staying aware of that balance has been an on going part of my growth.

How has the industry changed during your career?

I think the biggest change has been the industry surfacing more in the public's awareness. There's a noticeable shift in how people think about plastics and how they perceive the work we do. When I first started, it felt like a bit of a secret, but now, with sustainability at the center of almost every conversation, plastics is much more visible. At the same time, that visibility often comes with big gaps in understanding. The conversation tends to focus on what people see negatively, rather than the broader, important role plastics play across so many aspects of everyday life and problem-solving.

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

For women entering the industry, there's space to contribute in ways that aren't always tied to a traditional path. Bringing that perspective consistently can influence how teams function and how decisions get made, even in subtle but meaningful ways. Those differences can become strengths in environments that benefit from a range of viewpoints.

What is your advice to any young person considering a career in plastics?

You don't have to see yourself as the classic straight-A student who loves math and science. Curiosity matters more than fitting a specific profile. That curiosity can come from a lot of different interests and lead you into a really interesting and fulfilling path in the plastics industry.

If you're someone who wants to build things, solve problems, or be part of the future of sustainability, there is a place for that. It's an industry that can meet you where your interests are and not the other way around. For a lot of people, the path reveals itself the more you see what this industry has to offer.



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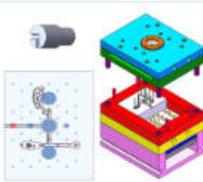
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INJECTION MOLD ENGINEERING CLASS PROJECT – CROC JIBBIT



DESIGN CONSTRAINTS

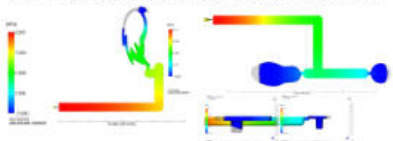
- Two plate cold runner mold
- Insert Size: 5"x7"
- Ejector pin location, size, quantity
- Min. feature size: 1/32"
- No Undercuts
- Required Edge Gate
- 3 Axis Machining
- Horizontal Injection Molding



MOLD FLOW SIMULATION

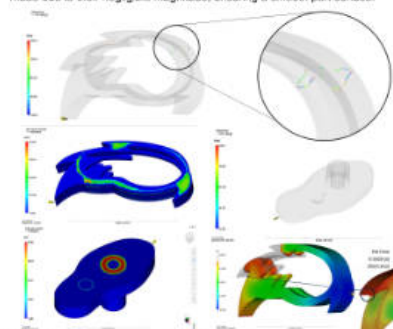
Fill Pattern & Flow Balancing

To prevent short shots and ensure full cavity filling, we used mold flow simulation to optimize the runner system. Balancing the runners ensured simultaneous filling, preventing imbalances and defects between cavities.



Weld Lines, Air Traps, and Sink Mark Considerations

Flow simulation software was utilized to analyze weld line formation, air trap locations, and potential sink marks. A predicted weld line in a non-critical area was determined to have no impact on part integrity. Air traps were identified, and venting strategies were implemented to prevent defects. Additionally, sink marks were evaluated, and minimal adjustments were made due to their negligible magnitude, ensuring a smooth part surface.



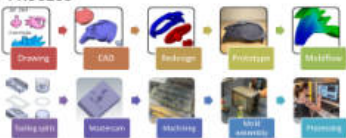
2025 Society of Plastics Engineers Annual Technical Conference

Daniela D'Alleva, Abigail J. Mastromonaco, Alex Rhodes, Sarah Ross, Ryan Tangney
University of Massachusetts Lowell
Plastics Engineering Department

ABSTRACT

The perception of plastics has grown increasingly negative, leading to declining enrollment in Plastics Engineering programs despite industry demand for skilled professionals. At UMass Lowell, the oldest Plastics Engineering program in the country, we aimed to address this by developing an injection-molded outreach tool to connect with potential students and highlight the creative projects engineers can tackle. Our charm demonstrates advanced molding techniques such as overmolding, runner balancing, and press-fit assembly while serving as an engaging promotional item.

PROCESS



SUSTAINABILITY

We ground runners to reuse material and minimize waste. With full mold customization, we'd optimize ejection to reduce runner size, cut waste, and produce multiple parts at once.



ACKNOWLEDGEMENTS

This project was conducted under the curriculum of PLAS.3730 Mold Engineering as the culminating experience in the UML Plastics Engineering bachelor's degree program. Thank you to Professor Masato, Nick Bowen, Mike Shore, & Pat Casey for helping us make this project come to life. Thank you to Eastern New England SPE for supporting our ANTEC attendance.

REFERENCES

- Kazmer, David O. (2022). *Injection Mold Design Engineering* (3rd Edition). Hanser Publishers.
- Malloy, Robert A. (2010). *Plastic Part Design for Injection Molding - An Introduction* (2nd Edition). Hanser Publishers.

SPE Poster Number: #####

TECHNICAL CONSIDERATIONS & DESIGN CHALLENGES

Material Compatibility & Shrinkage Effects

Polypropylene (PP) was chosen for its lower melting temperature, allowing overmolding without distorting the ABS. As a semi-crystalline material, PP shrinks more than amorphous ABS, contracting tightly onto the insert to strengthen interlock and improve durability.



Press Fit & Dimensional Stability

A separate press-fit feature was added, functioning independently of the interlock. ABS's low shrinkage and high stability ensured a consistent fit without excessive force. Using Plastic Part Design for Injection Molding, we applied interference fit equations for optimal dimensions.

$$i = \left[\frac{(D_{max} - D_{min})}{H} \right] \left[\left(\frac{D_{max} + D_{min}}{2} \right) + \left(\frac{D_{max} - D_{min}}{2} \right) \right]$$

Ejection

- Minimal ejection forces due to projected area, depth, draft, and material
- Sprue puller used for proper ejection
- Pin required drafting and tip ejection, needing a minimum 1/8" diameter
- Second shot reused first-shot ejection locations to reduce visual defects



EQUIPMENT & MATERIAL

- First Shot: Sabic CYCOLAC
- Second Shot: TotalEnergies Polypropylene
- Molding Machine: Milacron-FANUC Roboshot α-S130B
- CNC Milling Machine: Haas VF-4SS



FINAL PRODUCT

Our final product was shared with friends, family, and at events to showcase our creativity as plastics engineers. Rowdy The "Jibbit" Hawk was debuted at NPE 2024, and shared at UMass Lowell open houses, engineering tours, and hockey games, reaching alumni, students, employers, and four countries!



Meet Abigail and team at the University of Massachusetts Lowell, Plastics Engineering Department who presented their mold design project work at ANTEC 2025. It is very interesting to see a product evolve from a concept sketch to an manufactured product. It becomes even more interesting to see the process and behind the scenes. This project clearly shows what does it take design and develop a mold right from design to simulation, fabrication, and testing.

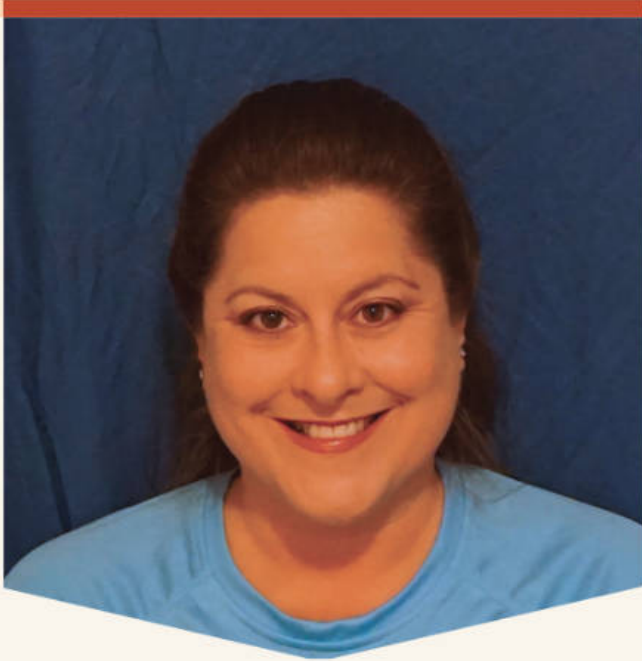
PROJECT TEAM : Daniela D'Alleva, Abigail J., Mastromonaco, Alex Rhodes, Sarah Ross, Ryan Tagney.

"The assignment was called the "Art-to-Part" project. In this project, we were challenged to design and manufacture a mold insert for a part of our own creation, with the main constraint

being that it fit within a 5 × 7 × 2" mold insert for a cold runner mold. The project included CAD modeling, iterative design with 3D-printed prototypes, flow simulation, creating tooling splits, Mastercam programming for CNC machining, and ultimately machining the mold inserts. We then assembled the mold and developed an injection molding process. All of this had to be completed within a single semester. **For our project, we designed a shoe charm inspired by our school mascot, Rowdy (similar to Jibbitz used with Crocs clogs).** Our goal was to showcase the creativity involved in plastics engineering to both current and prospective students, especially to encourage enrollment in the program. We wanted to highlight that plastics engineering is not just about high-volume production of single-use plastics, but also about creativity, innovation, and thinking outside the box.

WOMEN MAKING THE MOLD

LISA CLEMENS



Meet Lisa Clemens!

Lisa has a wealth of knowledge and expertise in mold making. She currently works at Turning Point Tool in the EDM department. It can't get more technical than running an EDM machine like a champ and Lisa is an expert at that. Welcome Lisa and let's hear from her!

What drew you to mold making / molding / plastics manufacturing as a Career Choice – how did you get to where you are?

The trades run in my family, which is how I learned that it was a career choice. I liked getting paid to learn as an apprentice, as opposed to paying for a college degree. I completed my apprenticeship as a Toolmaker in the machine build department at Micro Instrument Corp. Then, I started specializing in Wire EDM and Sinker EDM. That eventually led me to the Molding Industry. Now I'm at Turning Point Tool which is a great place to work.

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

It has gone fairly smoothly. I have always excelled at math and had mechanical aptitude. I was fortunate to work with a lot of talented Journeymen that were very professional and helpful. I have always been grateful and

appreciative to be learning from them.

How has your career choice been rewarding to you? What do you see as a "High Point" in your career?

It's very rewarding to me to make physical details. I love seeing the finished product. It has also been financially rewarding. I didn't want to take out student loans, so the apprenticeship program fit into my plans better. Getting my Journeyman papers and the raises that came after has allowed me to make a good living.

The high point in my career is now. I found a great employer (Turning Point Tool (Apollo)) and I like coming to work.

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

The biggest challenge is happening right now. There are a lot of people getting ready to retire (and a lot that already have). A lot of knowledge will go with them.

How has the industry changed during your career?

I think that the industry is a bit more welcoming. In my early years, there were very high expectations. I haven't heard of any mandatory 55+ hour weeks lately. Employees are also treated better now, especially apprentices. There is a shortage of skilled labor, as well. That has driven up wages.

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

There are so many opportunities. It really depends what path you want to follow.

What is your advice to any young person considering a career in the plastics industry?

Pay attention to the people spending their time to train you. If you want to learn, and are willing to do the work, you will be well compensated.



Injection Molding Innovation Summit

**Network with the Right People.
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WHY ATTEND?

The Injection Molding Innovation Summit is designed for professionals who want practical ideas they can take back to their facilities and apply quickly. The Summit brings together a focused audience of molders, material suppliers, technology providers, and OEMs who are advancing injection molding through innovation, problem-solving, and best practices.

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- High-value networking with the right peers.
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Conference Topics

How AI Can be Used in Injection Molding
Equipment and Tooling
Materials
Sustainability

National Security
Workforce Training
Economic Outlook/Market Trends

So, You Are Thinking of Doing a Trade Show,

part-2, continued from the spring 2026 edition

I know, I know that means a great deal of time writing and printing or emailing individual messages. Well, that might be the case were it not for the wonder of **MAIL-MERGE**. Mail-Merge that miracle of the 1990's and WordStar Word Processing – come on, you remember those twin-disked wonders with a 9" green screen. Mine sounded like a meat grinder starting up... And the kids loved to watch the fan-fold paper fly out of the box and through the dot-matrix printer... Ah yes, those were the days.

Thank goodness for the team at Microsoft™ and the productivity of merged programs Excel™ and Word™. Some reading this may be well versed in the 'Mail-Merge' programs, so this isn't for you! But, for those of us who have read this far and are wondering if there is more coming than just a bunch of "Should Do's" for Trade Show Marketing, you are in luck.

You are in luck, **BECAUSE** now is when I share the real "How to of Mail-Merge." Whether you are going to print or to email, the following information will be useful in your FOLLOW-UP CAMPAIGN! And once you see how easy it is, I am certain that you and your team will be using the feature over and over again and will become more and more creative in the "Auto Fill" functionality! So, tighten your seat belt, and keep your hands and feet inside the car at all times – here we go!

Step 1 – Using the business cards and notes

In this step we will create a small database in Excel. The format will be important as it will be used in the mail-merge to populate areas of our correspondence. Here is a sample screenshot that will be useful in setting up your table.

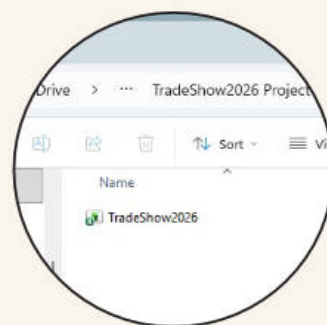
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	First	Family	Prefix	Suffix	Title	Company	Address	City	State/Province	Country	Postal Code	Telephone	Fax	Email	Date of contact	Key Topic 1	Key Topic 2	Key Topic 3
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Note that the first row is populated with "Headers." If we leave that row blank, the program won't know what to do with the data and we will have a nice start to a CRM program – but now a Mail-Merge. In this table there are several key columns that I wish to draw your attention to – Column "O" is the date that you met at the show "Date of Contact." And Columns P through R are the "Hot Button References" that were discussed in your booth visit. These will be pulled into your correspondence to drive home the point that you were keen on the discussion and next actions.

Remember, your table can be as dynamic or as bland as you want – the key is to ensure that your communication reinforces your meeting at the show. To not do this is to tell the customer that he wasted his /her time by even stopping in your booth – and that is not what you want because of "Doing a Trade Show," is it!

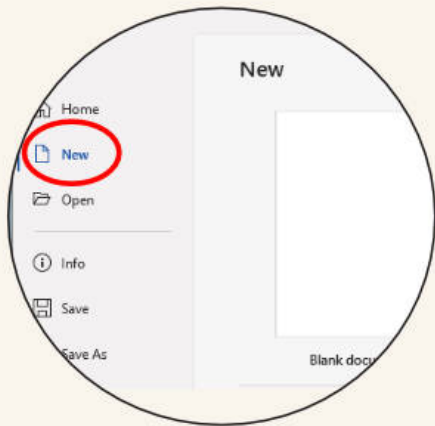
Once you have completed your table and saved it somewhere easily found with a catchy name "TradeShowGuests2026" for example, I like to keep all related files in one folder for ease of identification and location.

It is time to launch into Word – I have only

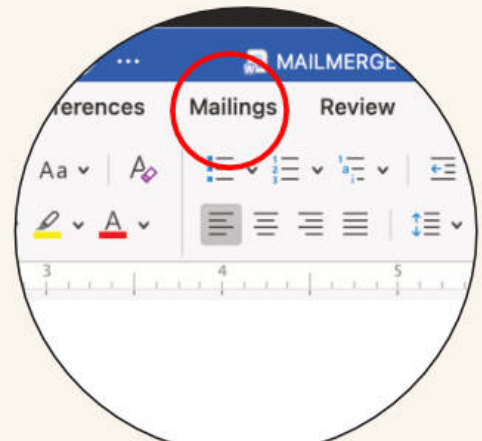


worked with the Word program and hope that the functionality is there in other applications. If you would like, we can set a Teams call and I can try to figure out how it is in other programs right

Step 2 – Launch Word and Initialize Mail-Merge



Once you have launched Word™, you will need to select a “Blank Document.” Then



Here is where you choose the type of correspondence you want to use. Is it a printed letter, or an email. If a letter, do you want an envelope or a label and so on... For the purposes of this exercise we will use an Email Message. So click on the Email icon... and the screen remains clear, but the headers have changed...

Remember that database we created – well, now we will introduce it to the Word program by selecting the “Select Recipients” tab. There we have 3 choices – Type a New List – Use an Existing List – or Choose from Outlook Contacts.

Since we have a list, we will “Use and Existing List!

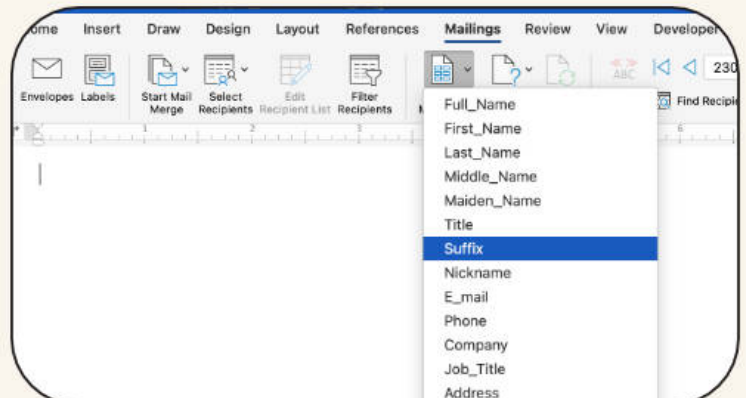
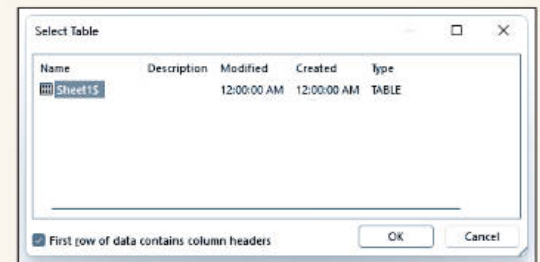
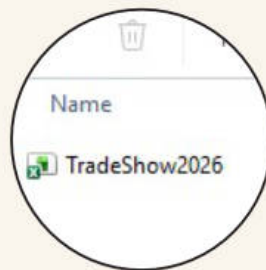
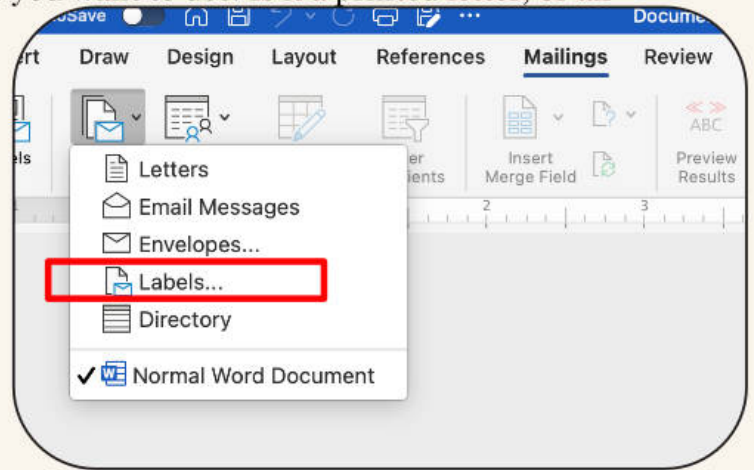
If you get this screen, don’t worry. You can choose your data file simply by going into your directory and finding the “TradeShow2026Project” folder

Programs and data introduced to one another and we are ready to begin our letter... Or so we think...

When using the “Mail Merge” feature, we have to think about how the information will appear. That is why we need to be careful about the input into the database – remember the GIGO philosophy “Garbage In = Garbage Out?” It is even more critical when you expect the machine to do the determination on what is good based on your input... So be careful.

Now, we are ready to start our letter! Again, we can be as formal or informal as we see fit... We can add an address block – All of the headers in our database, become pulldown options in our “Insert Merge Field” command. Go ahead!

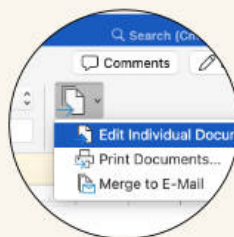
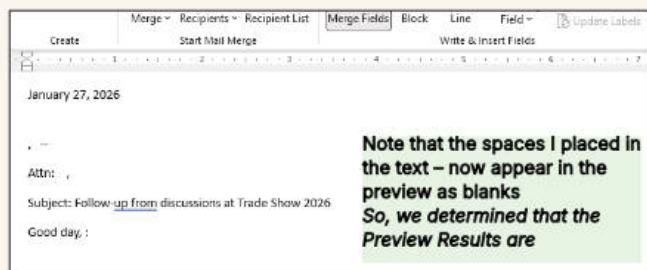
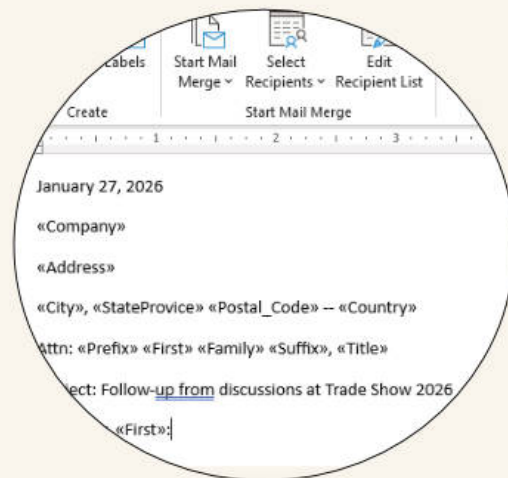
As you enter each Merge Field, you will need to add spaces or punctuation to fill in the blanks. Your screen should look like this.



Note – the Merge Fields are identified by << information>>. To erase these fields, you must remove the entire <<Information>> field or you will have a mess...

As you can see there is a lot that can be done with the Mail Merge in your correspondence. You are only limited to the creativity that you bring to the table...

Once you are satisfied with your letter, it is time to see how it looks with the populated fields. To accomplish this task, we will move to “Preview Results – this is a fast way to see if there are any glaring errors and a powerful proofing tool. Since my table doesn’t have any input beyond the headers, here is what I receive when previewing my letter...



So, we determined that the Preview Results are acceptable, the next step is to “Finish & Merge.”

Just because we have reached this point, doesn’t mean that we can’t make final adjustments... There are three options in the “Finish & Merge” tab that allow us to:

1 – Edit Individual Documents

2 – Print Documents

3 – Send Email Messages

For my money, another review of the documents can save some embarrassing Gaps and Gafas – Clicking Edit allows that final look. But if you feel real good – “Send” is a fine option too.

Once the email is complete and sent, it is time to begin planning the 2nd follow-up contact. Whether you asked for a meeting, or indicated a telephone call, the email is the tip of the iceberg in doing true Trade Show Follow-up... But the rewards in terms of new potential business are great!

If you have questions or would like to step through the “Mail Merge” process in a one on one, please reach out to me. My email is Scott.Peters@MoldedMarketing.com. And if you would like copies of the files that I created in this process, you can download them at the following link: <https://we.tl/t-jJKqZHHrmu>

About the author: Scott Peters has served the Mold Technologies Division for over 30 years. His roles have included Division Chair – Chair Elect – Awards Chair – Technical Program Chair – ReTec Chair – Newsletter Editor – Newsletter Sponsorship Chair and others. For his service to the SPE and the Division, Scott holds the title Honored Service Member of the Society of Plastics Engineers. Today he is completing his 4th term as Division Chair, where he leads a dynamic team of industry professionals in furthering the Art and Craft of Mold Making, Mold Design, and Mold Repair Maintenance. In his spare time, Scott operates Molded Marketing LLC and is the founder/president of the company. He can be reached by email at Scott.Peters@MoldedMarketing.Com or by telephone at +1.330.201.3751

MTD 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.

Publication Dates

Spring Issue
May

Summer Issue
July

Fall Issue
September

Winter Issue
December

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)

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- 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

For sponsorship billing questions please contact Ron Natale at his email, Rnatale@pltemail.com

For sponsorship opportunities at Mold Technologies, please contact Harshal Bhogesra at his email, Hbhogesra@rammolding.com

BOARD MEETING MINUTES

SPE- Mold Technologies Division

June 10, 2026

4:00 PM Eastern Standard Time – Meeting start

Attendance:

Present– Keith Angelescu, John Berg, Scott Peters, Peng Gao, Harshal Bhogesra, Barbara Arnold-Feret, Gunakar Golagana, Jim Piehl, Christopher Mac Donald, Ron Natale Jr, Michael Guistino, Brenda Clark, Davide Masato, Joe Karpinski.

Excused – Rich Martin, Anthony Bubay

Absent - None

Roll Call – Rich Martin

Division Chair Report – Scott Peters

- Working on the endowment process to setup scholarships. Western Washington University is finished with the check in the mail. Penn College of Technology and Western Carolina University are almost completed and Pittsburgh State (Pittsburgh, Kansas) is in negotiations.
- The goal with these endowments is to have them completed and in place by July 1st (end of our fiscal year).
- Thank you to the Executive Board and Joe for making this happen!
- We now have a Chair-Elect for the Division, Davide Masato. Joe will be taking over the Secretary's position for next year.

Chair-Elect Report – Davide Masato

New to the position.

Division Secretary Report – Rich Martin

Nothing to report.

Treasurer's Report – Ron Natale Jr

- Written report received and is on file.
- Discussing the budget for next year, keeping and adding sponsors is our blood-line.
- The new budget shows approximately \$17,000.00 of income with sponsorships representing half of that number.
- The other half is income from dues and interest from our CD.
- Expenses are pretty much the same as last year.
- Exception will be scholarships/grants will be cut in half based on anticipation of the scholarships that are being awarded through our endowments.
- Scholarships and grants can be returned to normal levels if the income stream increases (more sponsors) to allow that.
- Motion introduced by Scott to accept the amended budget, seconded by ?, motion carries.

Thank you to Ron for his hard work preparing/presenting the 26/27 budget.

Division Councilor Report – Barbara Arnold-Feret

- Tentatively scheduled for the 9/17 in Chicago. During IMTS. During an active time in local activities. No locale finalized yet. Trying to keep it around Rosedale or nearby the IMTS. Caution on the conflicts on schedules.

Newsletter Report – John Berg/Gunakar

- Transition going well.
- Planned publication in July – need articles before the end of May to ensure layout works.

Membership Chair – Jim Piehl

- Written report received and is on file.
- 219 active division members as of 06/09/2026.
- Difference of +9 since last update (05/11/2026).
- 3 new members.
- 3 Premium.
- 15 renewing members.
- 27 expired since 01/01/2026, 12 will expire 06/29/2026.

Sponsorship Chair Report – Open?

TPC Report – Peng Gao

- Will email Pat Berry and Yvonne Lopez to request clarification on the planned presentation counts and the changed technical paper procedures.

ANTEC Report – Peng Gao

- ANTEC 2027 will cohost with NPE 2027, that Plastics is calling for non-technical speakers for NPE 2027 and he is preparing topic recommendations to encourage technical submissions.

RETEC Report – Barbara Arnold-Feret and Peng Gao

- Trying to keep it around Rosedale or nearby the IMTS. Caution on the conflicts on schedules. 4 submissions + 1 commitment. Would like to have 6 or 8 total.
- Adding plating and polishing to injection mold surface finishing expands your options – Rich Wozniak, Bales USA
- Efficiently validating your tool's cooling strategy – Erik Folz, Madison Group
- 1,000x Faster: How Large Engineering Models Are Reshaping Gate and Runner Design – Mia Anfinson, Simcon
- Conformal Cooling in Injection Molding: Simulation-Driven Case Studies – Harshal Bhogesra, Moldex3D
- Glenn Keith / American Molding Institute/MoldTrax to present on Mold Maintenance – Scott, can you please follow up?

ISSUES

- Tentatively scheduled for 9-17-2026 in Chicago with the Chicago Section of SPE. During IMTS. - - -During an active time in local activities. No locale finalized as-of-yet. Based on the timing and current speaker listing, Barbara made a motion to withdraw from the event – the motion carried and Scott will send a letter to the Chicago Section informing them of our decision.
- Based on the withdrawal from the Chicago event, Davide will confer with the Cleveland Section and the Injection Molding Division to see if we can provide additional "Panel Discussion" participants for the Injection Molding Summit in October – Responses expected on Monday May 18.

Education Report – Joe Karpinsky

- Received 2 grant applications and 6 scholarship applications based on extending the application deadline to 5-20-2026. Joe to have list of scholarship recipients to Ron by end of June.

Student Liaison – Anthony Bubay

- No report given.

Old Business: None.

New Business: None.

Motion to end the meeting, motion passed. The meeting officially adjourned at 5:00 PM Eastern Daylight Time.

Respectfully Submitted,

Richard Martin
MTD Division Secretary



Richard Martin
MTD Division Secretary



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2025-2026

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Newsletter Assistant
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All members are serving a 3-year term except those noted with an asterisk "*" Those individuals are appointed to a one-year term by unanimous board approval.