

Letter from the Chair



Dear fellow Medical Plastics Division members, BOD members, and other volunteers,

Heading into the final quarter of 2024, I wanted to share some general updates from the Chair's point of view:

1. The energy, dedication, and commitment that this division and its Board/Committee members continue to bring each day is incredible, truly motivating, and also humbling!
2. Over the past several months in the role of Chair, I've seen incredible personal growth – new BOD members and other volunteers stepping up and taking on new responsibilities and leadership positions.
3. I've also seen past leaders continue their journey, moving into different roles but continuing to advance our mission, and it's been nothing but inspiring!

Continued the next page...

Inside This Edition...

Message from the Chair	1
Councilor's Report	4
Message from the Newsletter Editor	5
Meet your SPE MPD BOD	6
Featured Board Members	13
The Future of Pain-Free Drug Delivery with Advanced Medical Plastics	17
Treasurer's Report	21
MPD Fall Events Photo Gallery	23
Awards Presented to MPD Members	31
Upcoming Events	39

GREETINGS FROM THE CHAIR

Continued from the previous page...

I'll divert off topic for a bit, but promise that I'll do my best to tie it all back together:

A few months ago, I was a late joiner to a very impressive "Happy Hour Webinar" talk by Betty Howard from Steris on Wednesday evening, May 1st. Honestly, this was a beneficial networking experience for me personally, and I'd like to thank Len, Pierre, Kyle, and any others involved in coordinating.

The following week, I was fortunate to attend the NPE in Orlando. I had a couple of happenstance meet-ups with folks from SPE HQ and the Executive Board. They were cordial experiences for the most part. However, I had several unplanned "Hey! How ya doin'! – Good to see you!" experiences with MPD members – the energy and interaction of these rendezvous were special! There were also some incredible moments captured and shared on LinkedIn of Chairs Past and their happenstance rendezvous – I encourage you to please like and share them. These really help the visibility of our Division.

Also, the week following NPE, I was fortunate to attend some incredible events hosted by the Central Indiana Section. I am so impressed with this Section and their energy that I decided to join as a member (even though I live in Wisconsin) when I renewed my membership last week. This also serves as a PSA – please keep your membership and dues current.

While all of this has been occurring, I've found very little time to attend calls regarding MiniTec Minneapolis and MiniTec '25 Anaheim. However, those that I have attended and the emails I've seen are reassuring that we've got the right team in place putting together a solid plan.

Continued the next page...

Are you interested in volunteering for the BOD?

Please email Ned LeMaster
Ned.E.Lemaster@delrin.com

GREETINGS FROM THE CHAIR

Continued from the previous page...

With that, and I'm incredibly sorry if I missed anyone, but some recognition and kudos to:

- Len, Pierre, Kyle Kulwicki, and others involved in the monthly networking web-meetings. Thanks also to Ajay for stepping up and joining the committee.
- Rob Klein for his continued commitment to the division and for passing the torch to Chris Lyons, who has done an incredible job stepping up as TPC. The work that they've led, along with Len Czuba, Ron Dugas, Joanne Moody, and others to prepare a MiniTec event at MD&M Minneapolis, is incredible!
- Louis – for his role as Past Chair, but more importantly, for his unofficial role he's assumed as liaison between Central Indiana Section and Medical Plastics Division. Thank you, sir – this cross-pollination is exactly what the Society needs! Thanks also to Kyle!
- Also thanks to Louis for his initiative to run for the SPE Board of Directors 2025! I have no doubt that you will continue to make a positive impact on our society! Thanks also to Len for putting the nomination together and submitting!
- Much appreciation and recognition are due to Ali for his initiation of the "What should Council Look Like" discussions with other sections and divisions.
- Congratulations again to Chris Konitzer for winning Most Valuable Division Member 2023-2024! Great work with the fundraising! Thanks to Kyle and Len for running the polls!
- Lastly, thanks to Ravi for his dedicated service as Membership Chair over the years! Good luck in your next chapter, my friend, and please stay in touch! Thanks to Kyle for agreeing to step in as the new Membership Chair!

In summary, I sincerely believe in the mission and goal that this division continues to serve, and I am so proud to be a part of it. At the end of the day—like I tell my co-workers—it's more than just a plastic pellet. Medical plastics do save and improve lives, and I think that's something we should all be proud of.

Best wishes for a safe and successful last quarter of 2024!

Ned LeMaster
Chair of the Board of Directors
SPE Medical Plastics Division

Are you interested in volunteering for the BOD?

Please email Ned LeMaster
Ned.E.Lemaster@delrin.com

COUNCILOR'S REPORT



Dear fellow members of the Medical Plastics Division,

As we approach the last quarter of the year, I would like to take this opportunity to share some of the highlights:

- Another very successful MiniTec held this February in Anaheim, CA. Preparation for 2025 MiniTec has begun in full swing.
- Great attendance and representation by the Medical Plastics Division at ANTEC in St. Louis, MO (March 4-7, 2024). Our very own Glenn Beall was recognized for his contributions toward the Plastics Industry.
- A Chapter Leaders' Meeting was organized at ANTEC 2024 on March 4, 2024.
 - Presided over by the SPE President, Conor Carlin.
 - Summary of goals/mission statements, Financials, SPE Structure
 - A workshop was organized to discuss 3 questions:
 - How can SPE best benefit from Council and Councilors in their roles as advisors to the Society?
 - What should SPE do (or do more of)?
 - How are our members changing, and what might they want in the future?
 - Conor's closing comments
 - Schedule a virtual meeting with councilors
 - Captured the following:
 - Transparency and communication
 - More frequent meetings
- SPE meeting of Councilors was organized on May 3, 2024
 - It was decided that a group of former and new councilors to meet to discuss future roles and responsibilities of councilors
- A group of old and new councilors met on June 27, 2024 to start one of many discussions on defining roles and responsibilities of Councilors. More discussions to follow.

As the councilor for Medical Plastics Division, I welcome any suggestion or feedback from the MPD Board as well as the MPD membership-at-large.

With best wishes,

Ali Ashter, Councilor, MPD

NEWSLETTER EDITOR

GREETINGS FROM THE NEWSLETTER EDITOR



Dear Esteemed Members of the Medical Plastics Division,

Welcome to the latest edition of our newsletter! As a Plastics Engineer, I'm thrilled to share stories from our industry that showcase how plastics and other polymers make our lives better.

Let's face it, no one enjoys those long, sharp needles—especially when it comes to our children. The pre-appointment pain is real! Fortunately, the medical device industry is innovating rapidly, with micro-needle and wearable technologies paving the way for less daunting drug delivery solutions. In this issue, we delve into an exciting development from Vaxxas in Australia, where they are pushing the boundaries of vaccine delivery with micro-molded needles.

Our field is brimming with life-saving innovations and improvements thanks to Medical Plastics and other polymers. If you have a breakthrough story or an insightful experience to share, please reach out to me at vkudchadkar@isomicro.com.

Additionally, we spotlight key contributors Pierre Moulinié, Bhavin Shah, and Rob Klein—three individuals whose dedication and expertise have significantly advanced the Medical Plastics Division. Their stories are a testament to the impact of our collective efforts.

The recent MiniTec 2024 at MD&M West and ANTEC® 2024 were resounding successes, showcasing our field's progress and innovation. Check out the event photos and stay tuned to our upcoming events page for opportunities to engage with our vibrant community.

Warm regards,

Vijay Kudchadkar
MPD Newsletter Editor
Director of Plastics & Sales Engineering
Isometric – A Nissha Medical Technologies Company
vkudchadkar@isomicro.com

Newsletter Suggestions?

Please email:

Vijay Kudchadkar vkudchadkar@isomicro.com



Meet your SPE MPD Board of Directors

MEET YOUR SPE MPD BOARD OF DIRECTORS

Officers



Ned LeMaster, DuPont Delrin

- Chair of the Board
- Term End: 2026
- Ned.E.Lemaster@delrin.com



Louis Somlai, Eli Lilly

- Past Chair of the Board, Communications Committee
- Term End: 2026
- somlai_louis@lilly.com



Pierre Moulinié, Covestro

- Secretary
- Term End: 2025
- pierre.moulinie@covestro.com



Ali Ashter, B. Braun

- Councilor, Treasurer
- Term End: Councilor - 2027, Treasurer - 2025
- ashter2000@gmail.com

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Margie Hanna, Czuba Enterprises

- Finance Committee
- Term End: 2025
- m_hanna@yahoo.com



Vijay Kudchadkar, Isometric Micro Molding

- Communications & Membership Committee
- Newsletter Editor
- Term End: 2027
- vkudchadkar@isomicro.com



Kyle Kulwicki, Kimball Electronics

- Membership Committee, Awards Committee
- Term End: 2025
- kyle.kulwicki@kimballelectronics.com



Kumin (Charles) Yang, Boston Scientific

- ANTEC 2023 TPC – Lead
- Term End: 2027
- Kumin.Yang@bsci.com



Rob Klein, AtriCure

- TPC - Committee Chair
- Term End: 2027
- rklein@atricure.com

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Donna Bibber, Isometric Micro Molding

- Membership Committee
- Term End: 2025
- dbibber@isomicro.com



Tom Meehan, Eastman

- Communications & TPC - MiniTec Committee
- Term End: 2025
- tmeehan@eastman.com



Jeff Ellis, EWI

- TPC – MiniTec Committee
- Term End: 2025
- JEllis@ewi.org



Prof. Carol Barry, UMass Lowell

- Carol_barry@uml.edu
- Term End: 2027



Trisha Costeux, DuPont Electronics & Industrial

- Term End: 2025



Md Kamrul Hasan, Pacific Northwest National Laboratory

- Term End: 2025

Are you interested in volunteering for the BOD?

Please email Ned LeMaster
Ned.E.Lemaster@delrin.com

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Joanne Moody, Zeta Scientific

- University Outreach Chair
- Term End: 2026
- joanne@zetascientific.com



Chris Konitzer, Avient

- Fundraising Chair
- Term End: 2026
- christopher.konitzer@avient.com



Ajay Padsalgikar, Biolinq

- Technical Program Committee
- Term End: 2026
- Padsalgikar@gmail.com



Gregorio Veléz-García, Zeus Corporation

- Membership Committee
- Term End: 2026
- Garcia@zeusinc.com



Christopher Lyons, Exponent

- TPC Committee
- Term End: 2027
- clyons@exponent.com



Bhavin Shah, Takeda

- Finance Committee
- Term End: 2024
- bhavin.shah@takeda.com

Are you interested in volunteering for the BOD?

Please email Ned LeMaster
Ned.E.Lemaster@delrin.com

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Emeritus Members



Glenn Beall, Glenn Beall Plastics

- Emeritus Member
- Historian
- glennbeallplas@msn.com



Len Czuba, Czuba Enterprises

- Emeritus Member
- Awards & Social Committee Chair
- LCzuba@CzubaEnterprises.com

Special Advisors to the Board



Vipul Davé PhD, Johnson & Johnson

- VDave1@its.jnj.com



Maureen Reitman PhD, Exponent

- mreitman@exponent.com



Norm Fowler, Keys Six Sigma

- normsuekw@comcast.net

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- Material contaminant ID
- QA/QC testing
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- Method development
- Failure analysis





Featured Board Members

MEET YOUR SPE MPD BOARD OF DIRECTORS



Pierre Moulinié

Head, Global Technical Marketing –
Healthcare
Covestro LLC - Engineering Plastics

Hobbies: Motorcycling, Scuba Diving



Bio: With over 25 years technical experience with Polycarbonate resins, Pierre leads Global Technical Marketing for healthcare at Covestro's Engineering Plastics Business. Recently recognized as an Honored Service Member by SPE, Pierre is the current Secretary of the Medical Plastics Division. Ever since his first presentation at ANTEC in 1999, Pierre has been a regular contributor to SPE events. Pierre earned a Ph.D. in Chemistry from Carleton University in Ottawa (Canada).

How SPE Medical Plastics Division has helped you in your career:

SPE Divisions and Local Sections have been outstanding venues to both learn and teach Polymer Science and Engineering. Actively volunteering and contributing to the Medical Plastics Division has provided the richest possible experience and has served as a great place to develop as a leader and mentor and meet new friends that share our common vision.

Are you interested in volunteering for the BOD?

Please email Ned LeMaster
Ned.E.Lemaster@delrin.com

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Bhavin Shah

Device Development Lead,
Sr. Manager.
Plasma Derived Therapy
Takeda Pharmaceuticals



Hobbies: Cricket, Food, Movies, Travel

Bio: Bhavin Shah serves as a senior technical leader in the Plasma Derived Therapy (PDT) division at Takeda Pharmaceuticals. He has a strong passion for medical devices and resorbable biomaterials. With over 15 years of experience in research and development, manufacturing, and product launch, Bhavin specializes in bioresorbable materials, implantable medical devices, and drug delivery systems. His expertise encompasses injection molding, extrusion, fiber extrusion, and material characterization. Over the past decade, he has successfully led the development and commercialization of innovative products across various organizations. Bhavin earned his Bachelor of Engineering in Polymer Engineering from Pune University, India, and both his M.Sc. and Ph.D. in Plastics Engineering from the University of Massachusetts. He is also an active member of the Society of Plastics Engineers, serving on the Finance Committee of the SPE Medical Plastics Division as part of the Board of Directors.

How SPE Medical Plastics Division has helped you in your career:

Over the last ten years, my engagement with the SPE Medical Plastics division has been fundamental to my career development. I started as a student member, and the experience helped me grow as a professional by offering access to technical resources, leadership opportunities, mentorship, and a wide professional network. The Medical Plastics Division has enabled me to give back to the industry while learning valuable life lessons from role models within the division.

Are you interested in volunteering for the BOD?

Please email Ned LeMaster
Ned.E.Lemaster@delrin.com

MEET YOUR SPE MPD BOARD OF DIRECTORS



Rob Klein

Executive Director of Engineering
Delivery Devices Connected Solutions
AtriCure, Inc.

AtriCure

Hobbies: Parent of 3 Small Children, Disc Golf, Biking, Science, Food & Cooking

Bio: Rob Klein, Ph.D. is the lead materials scientist/engineer at AtriCure, Inc. and manages the AtriCure Materials Group. Rob holds a B.S. (Chemical Engineering) from University of California, Santa Barbara, and a M.S. and Ph.D. (Materials Science and Engineering) from Penn State University. Rob has over 15 years of industry experience and prior to AtriCure, Rob worked at Stress Engineering Services, Luna Innovations, and Sandia National Laboratories. He is an SPE Medical Plastics Division board member and has been attending SPE conferences since 2014. He has published over 20 first-author papers and holds several patents.

How SPE Medical Plastics Division has helped you in your career:

I first attended an ANTEC conference in 2014, and attended several division tracks, including the Medical Plastics Division sessions. At that first conference in 2014, I was very impressed by the mixture of industry-focused engineering and science. There was nothing like it in any of the other conferences I had attended, which were either academic-focused, or business expos focused on selling equipment or products. In addition to being impressed by the MPD technical track, I met Pierre Moulinie and Louis Somlai at that conference in 2014, and they were very kind to invite me to come back to future year MPD events. I did, eventually joining the MPD board in 2021.

Over that time, MPD played a major role in my career by educating me on critical industry issues and providing me with the best possible network of industry-centric polymer/plastic engineers and scientists. That network played a huge role in my success as a medtech consultant at Stress Engineering; and continues to support my work at AtriCure. Whenever I have a medical polymers question, I can rely on past technical information from ANTEC or MPD MiniTec events, or I can reach out to the MPD network to get the latest information. My involvement with MPD has also helped my professional development in terms of gaining confidence that I can stand on the same stage as world-class medical polymer experts. It's been a privilege to learn from the SPE MPD network, and also now spend some of my time to give back to young scientists/engineers that are early in their careers and can benefit from this great group of people.



The Future of Pain-Free Drug Delivery with Advanced Medical Plastics

Needle-free Vaccination Technology with LCP MAPS



Mike Junger

Director
Industry and Government Relations
Vaxxas
mjunger@vaxxas.com



The first glass hypodermic syringe with a needle was invented in Scotland in 1853 . It consisted of a glass plunger in a clear glass tube with a hollow needle to penetrate the skin. It has had minor changes over the past 170 years and is a product today often associated with pain and discomfort: approximately 33%¹ of targeted subjects for vaccination actively avoid vaccinations due to the use of needles. As vaccinations are a critical part of modern disease management, there is a need to make vaccinations more acceptable to the populations targeted by health officials. Vaccines delivered by microarray patches to the skin of subjects offers that opportunity.



The device is a sealed aluminium foil shell containing a vaccine coated Liquid Crystalline Polymer MAP.

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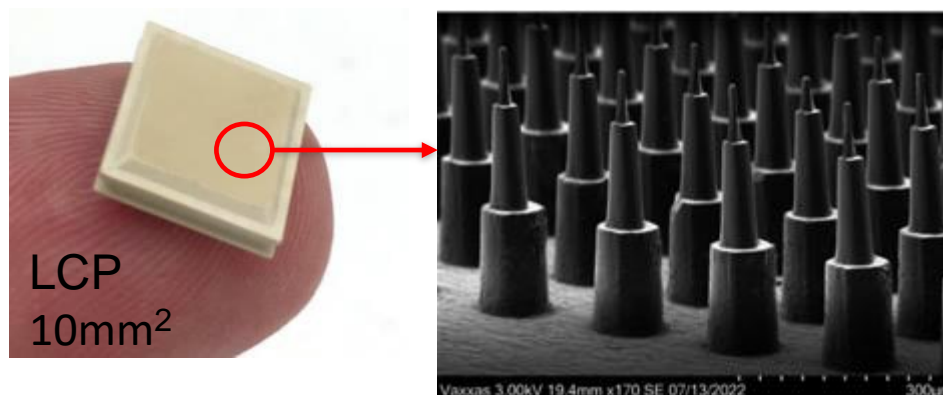
Needle-free Vaccination Technology with LCP MAPS

In addition, vaccines administered just below the surface of the skin (intradermally) have been shown in certain cases to be more effective than administering them intramuscularly as with traditional syringes. This is because intradermal administration takes advantage of an abundance of immune cells just below the surface of the skin.

The idea of using small, projections on a patch that can penetrate the skin and deliver a vaccine, or microneedle patch, was first patented in the 1970's.² Now called Micro Array Patches (MAPs), one of the missing links to the commercial use of MAPs has been the development of cost-effective manufacturing technology.

Vaxxas³ has pursued the promise of MAP technology, including the development of low-cost manufacturing capabilities, since the company's founding in 2011, and has advanced the development of a solid, dry coated, high-density microarray patch (HD-MAP) with several thousand projections on a patch that measures approximately 10mm square. Vaxxas' HD-MAP is applied to the skin using a low-cost device that also includes sterile packaging. Vaxxas' HD-MAP applicator was first evaluated in human clinical trials in 2015. Other companies have performed clinical trials with vaccine MAPs at around the same time, for example Micron Biomedical.⁴

Vaxxas' first trial was conducted using HD-MAPs made from a silicon wafer using deep reactive ion etching (DRIE). The 10mm square patches had 250µm long projections with a density of 10,000–20,000 projections/cm². They were extremely brittle and cost around US\$70 each to manufacture.³ The results from the human trials met clinical targets with patient preference for the patch over the needle. In addition, the patch showed similar performance at significantly lower doses compared to the same vaccine delivered with traditional needle-and-syringe technology.



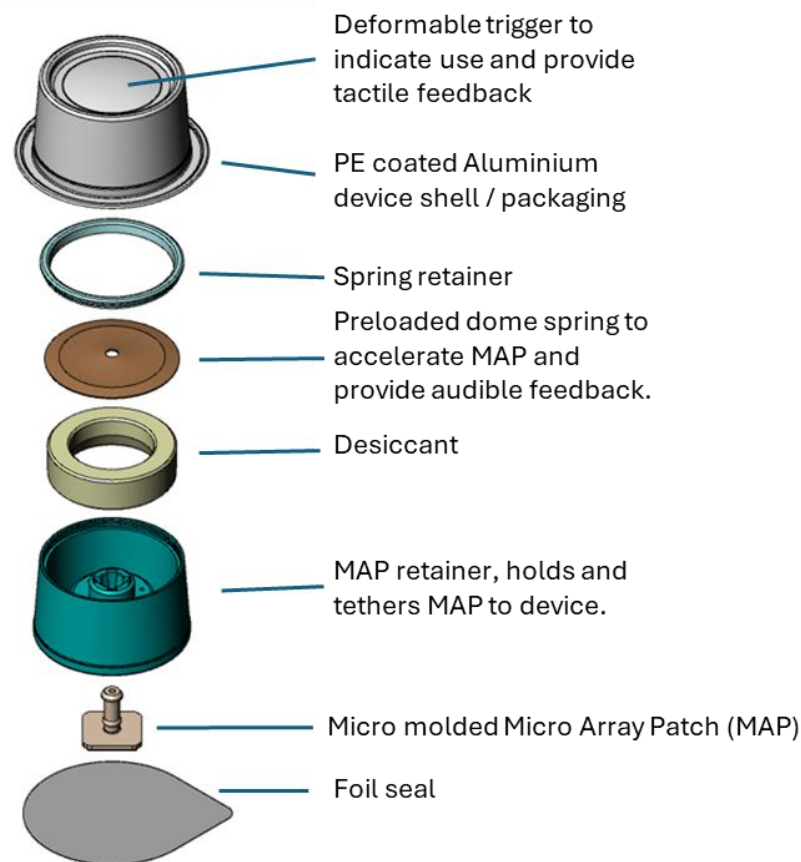
Liquid Crystalline Polymer - Micro Array Patch (LCP-MAP)

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Needle-free Vaccination Technology with LCP MAPS

Since then, Vaxxas, with the help of third-party suppliers, has developed a lower-cost version in the form of a micro molded polymer HD-MAP. The polymer specifications of Vaxxas' HD-MAPS can be challenging, as each projection must be strong enough to withstand skin penetration and consistently replicate the small features of the designed microneedles (e.g., tip dimensions as small as 5µm). Vaxxas has now shown that medical grade liquid crystal polymer (LCP) can meet those requirements. Using this approach, the flow lines created within each projection provide incredible axial strength with very high resistance to bending loads.

While the development of the tooling and molding process to produce perfect replications of the HD-MAP required several years, the results provide a path to advance HD-MAPS to commercial reality. Advancing MAP technology offers great promise in terms of improving global vaccination rates for both routine vaccinations such as influenza as well as pandemic-driven vaccinations, Higher vaccination rates will save lives and reduce the threats of disease globally.



Exploded view of Device Assembly

Ref 1: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9678288/>

Ref 2: <https://www.sciencedirect.com/science/article/pii/S0168365923003516>

Ref 3: <https://www.vaxxas.com/>

Ref 4: <https://www.micronbiomedical.com/technology/>



Treasurer's Report

TREASURER'S REPORT

TREASURER'S REPORT – Ali Ashter



Medical Plastics Division

Treasurers Report

Balance as of Sep 15, 2024	Checking Accounts	\$ 36,038.47
	Certificate of Deposit Account	\$ 31,744.17

INCOME

Income Type	Amount
	\$ -

TOTAL INCOME

\$ -

EXPENSE

Expense Type	Amount
	\$ -

TOTAL EXPENSE

\$ -

FUNDS AVAILABLE AS OF OCT 1, 2024 - \$ 67,782.64

END OF THE REPORT

Do you have questions about the Treasurer Report?

Please email Ali Ashter
ashter2000@gmail.com



MPD Events Photo Gallery

MiniTec 2024 – Anaheim, CA



SPE MPD MiniTec 2024 Sponsors

Rob Klein's presenting Material Selection for Medical Applications



SPE MPD MiniTec 2024 Attendees

MiniTec 2024 – Anaheim, CA



SPE MPD Board Members



SPE MPD Board Members with SPE President



Ned LeMaster - SPE MPD Most Valuable Division Member
The award recognizes his outstanding hard work, enthusiasm and dedicated service to the Division and its members

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Antec 2024- St Louis, MO



Symposium Honoring the Career Achievements of
SPE MPD Emeritus Member – Glenn Beall



Antec 2024- St Louis, MO



Pierre Moulinié - SPE Honored Service Member





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Awards Presented to MPD Members

Awards Presented to MPD Members

The Medical Plastics Division of the SPE is staffed by talented volunteers from all over the country and from many different companies and universities. Because we seldom have a chance to meet in person, it is hard to find the right occasion to give out recognition awards to deserving members.

In August this year, we learned that several of our members would be in the Midwest for business, and with the help of Louis Somlai and Kyle Kulwicki and a small gathering of other local members, put together an impromptu event. Those in from out-of-town were able to attend an evening Awards presentation reception. On August 14th, 2024, at the Guggman Haus Brewing Company, about 40 MPD members and friends gathered to enjoy and meet each other and then celebrate the awarding of awards that had been earned by our members.



Division Chair, Ned LeMaster called the group to order after we all gathered and had a chance to meet some newer attendees and friends. He explained that we were happy to finally be able to present some of our most hard-working members with the awards which they earned by volunteering their time and energy toward helping achieve the goals of the Medical Plastics Division. Ned engaged the group with a short trivia quiz related to “songs of the decades”. It was a fun way to transition from open discussion by all to getting the group’s attention. And judging by how fast the questions were answered we have some very smart music lovers! The correct answers earned the responder a nice little gift! Thanks for the fun intermission, Ned! Ned then announced that we would be recognizing several of our members. The following pages showcase the awards that were presented.

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Most Valuable Member 2023-2024: Chris Konitzer



Chris Konitzer (L) Presented with 'Most Valuable Member' by Awards Committee Member, Kyle Kulwicki (R)

During the past year, Chris Konitzer, a new member appointed to the board for a 1-year term in 2023 by Louis Somlai, offered to work with the MiniTec 2024 in Anaheim as a Sponsorship chair.

Chris attended not only our regular board of directors meetings but also the MiniTec committee meetings and as a result of his work brought in almost \$14,000 in MiniTec sponsorships for our division, which will be used to sponsor student education scholarships.

Great job, Chris!



Most Valuable Member 2022-2023: Rob Klein



**Rob Klein (R) Presented
with 'Most Valuable
Member' by Award
Committee chair and
Emeritus Member, Len
Czuba (L)**

Rob served as our division Technical Program Chair and led the effort to grow our MiniTec in Anaheim as well as host a full half-day session at ANTEC in St. Louis! Rob also led a significant effort to engage students into the programming of our division and visited several schools meeting with both faculty and students and sharing how participation in SPE/MPD programming can help them and their careers. We now have several grad students and new grads regularly participating in our MPD meetings and helping us promote our activities! The outreach to academia is on-going and growing!

One more program that Rob led was called the "Medical Polymers Virtual Workshop". This was a 2-hour on-line offering of presentations taught by Industry Leaders from our MPD BoD. This short course entitled "Medical Plastics & Polymers: Fundamentals and New Growth Drivers (that You Need to Know)". Designed as an introduction to anyone new to the MedTech industry, this program was presented twice in October 2023. The response from attendees confirmed that it was very well received!

Rob has stepped back from being our MiniTec conferencing chair but is still actively involved as our division TPC and continues to work with the outreach to students and academia. Thanks Rob for your years of service and especially this, your MVP year and for your continued involvement!

34



Medical Plastics Division Chair 2022-2024: Louis Somlai



**Louis Somlai (R)
Presented with 'Medical
Plastics Division Chair'
Award by Current Division
Chair, Ned LeMaster (L)**

Louis Somlai served MPD as the Division Chair for two years ending July 1st, 2024 when current Chair Ned LeMaster officially took over that role. During Louis' term, the membership engagement increased significantly and this was largely responsible for the growth of our activities and outreach to our members.

Our programs provided many educational offerings of interest to all those involved with polymers in the MedTech and pharmaceutical industry. He led the communication committee and during his term, initiated the "Happy Hour Webinar series" with the help and leadership of Pierre Moulinie'. As Chair, Louis led by his example and astute ability to guide the division allowing us to grow into areas not served regularly.

One particularly important effort was when Louis met and requested help from Past SPE President Norm Fowler (1997-1998) to work with a team of MPD board members to put together a Long-Term Strategic Plan for the Medical Plastics Division. A small team of board members worked with Norm and crafted a working Strategy Plan which is now leading the work and efforts of all our division efforts. Great work Louis! Thanks for your leadership and friendship!



Membership Committee Chair 2017-2024: Ravishankar Ayyar



The last award was presented by our immediate Past Division chair, Louis Somlai.

Ravi has been our Division Membership Chair for 8 years, serving under 5 division board chairmen. He has quietly worked behind the scenes doing his job with his usual good attention to detail and our division has benefitted from his work and years of service.

(Ravi is not leaving our board, but due to family commitments in India, must step back from his leadership role at the present time.)

Ravi has also accepted a role to be an MPD envoy to the newly emerging SPE India chapter.

We wish Ravi all the best in the future, and thank him for his long tenure and service to MPD!

**Ravishankar Ayyar (R) Presented with
'Membership Committee Chair' Award
by Past-Chair, Louis Somlai (L)**

Awards Presented to MPD Members

The evening came to a close while those still in attendance got together for a few group pictures. Everyone had a good time, and our very committed volunteers were recognized for their hard work!

- By MPD Emeritus Member, Len Czuba



Board members from MPD as well as from the Central Indiana Section



Many of the attendees at the MPD awards reception in Indianapolis on 14th August 2024



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Upcoming Events



MD&M MINNEAPOLIS MEDICAL POLYMERS

Minneapolis, MN • October 16, 2024

Presented by SPE Medical Plastics Division

Medical Polymers – Improving the Quality of Life

MedTech Trends in Design, Manufacturing, Packaging, and Sustainability



This MiniTec will be held on October 16, the first day of the 2024 MD&M Expo at the Minneapolis Convention Center.

Are you interested in sponsoring MPD events?
Email: Christopher Konitzer, christopher.konitzer@avient.com

Medical Polymers - Innovation for Life

Medical Polymer Trends in Design, Manufacturing and Sustainability

**Wednesday,
October 16, 2024**

MD&M Minneapolis
Minneapolis Convention
Center
Conference Rm 102F
Minneapolis, MN 92802

Schedule of Events:

8:00a
Registration & Poster Setup

All Day MiniTec Rm 102F
8:55a Welcome
9:00a – 4:00p
(Lunch & Breaks Included)

Poster Exhibition
9:00a – 7:00p Rm 102A
Poster session 4:00 – 6:00p

4:00p – 7:00p Rm 102A
Membership Network
Reception & Poster Session
(Included in Registration)

Registration to Attend:
Will be managed by Informa
for all conference attendees

Info & Online Registration:
[Advanced Manufacturing
Minneapolis \(xpressreg.net\)](#)

Contact Information:

Chris Lyons
650-688-7384
cl Lyons@exponent.com
or
Rob Klein
513.755.5763
rklein@atricure.com

Sponsorships
Chris Konitzer
847-257-2865
christopher.konitzer@avient.com

Conference Chair: Chris Lyons; Exponent

Keynote Speaker Art Erdman Ph.D.

Founding Director at Bakken Medical Devices Center
"The Bakken Legacy: Role of Polymers in Med Devices"

Welcome Remarks - Room 102F
Conference Chair: Chris Lyons

Wednesday morning
**1a. Materials: Introduction & Trends in
Medical Polymers**
Rob Klein – AtriCure, Inc.
Chris Lyons - Exponent

Featured Keynote Presentation
hosted by Joanne Moody – Zeta Scientific LLC
Art Erdman – Professor of Mechanical
Engineering & Musician

Break

**1b. Innovative Applications Enabling
Therapeutics**
Moderator – Joanne Moody-Zeta Scientific LLC
Polymer Wafers for Noninvasive Delivery of
Protein Vaccines
Chun Wang – University of Minnesota

Biodegradable & Implantable Elastomers
Wei Shen – University of Minnesota

Wednesday late morning
1c. Advancements in Polymer Processing
Moderator – Chris Konitzer- Avient Corporation

**How Polymer Micro Rheology Influences
Medical Device Microstructure**
Patrick Haney –MTD Micro Molding

**Low Friction Compounds for Medical
Devices**
Shruba Manna – Foster Corporation

**Lunch
&
Informa Keynote Speaker**

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Wednesday afternoon
2a. Sustainability of Medical Polymers
Moderator – Louis Somlai – Eli Lilly & Co.

**Compatibilizer Design for Mechanical
Recycling of Polyolefin-Containing
Mixed Plastic Waste**
Chris Ellison – University of Minnesota

**Sustainability of a Novel Thermosetting
Resin for Potential Biomedical
Applications**
Wei Zheng – University of Wisconsin-Stout

Break

Wednesday late afternoon
2b. Device Failure Analysis & Prevention
Moderator – Len Czuba – Czuba
Enterprises, Inc.

**Evaluating Fatigue & Creep Performance
of Polymers for Medical Devices**
Paul Briant – Exponent

**Ensuring Material Biostability for
Chronically Implanted Medical Devices**
Kimberly Chaffin – Medtronic

Closing Remarks
Conference Chair: Chris Lyons

**Poster Session
&
New Member Reception**
Conference Room 102A

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The MPD Session at ANTEC® 2024 is scheduled on
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March 3-6, 2025

CALL FOR SPEAKERS

**CLICK HERE FOR MORE INFORMATION AND TO
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SPE is searching for dynamic speakers to present at ANTEC® 2025, taking place from March 3-6, 2025, at the Sheraton Philadelphia Downtown, Philadelphia, PA. ANTEC® provides an excellent opportunity for you to present your groundbreaking research and cutting-edge developments. We are seeking presentations that address the latest findings in plastics technologies, polymer research, new materials, innovative processes, and more. We are also focusing on scientific, technical, or industrial problems that may be solved through your presentation. Don't miss this opportunity to share your insights with an international audience comprised of leaders in plastics, innovators, scientists, academia, and influential decision-makers.

While papers and presentations will still include ANTEC's® traditional technical categories, they will also be organized into five program themes. We're looking for papers/presentations in these areas:

- **Polymeric Materials and Characterization**
- **Applications of Plastics**
- **Polymer Processing**
- **AI in Digitalization**
- **Circular Economy**

IMPORTANT: Abstracts must be submitted to be considered. You cannot submit your final paper/presentation without approval of the abstract.

Abstract Submission Timeline:

- **Abstract Submission Deadline: October 4, 2024**
- **Accepted Speakers Notified: November 6, 2024**
- **Paper/Presentation Submission Deadline: December 20, 2024**

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The newsletter, as scheduled, is prepared and circulated four times per year. Every MPD member receives a copy emailed directly to their listed address. Additional copies are also circulated via the Chain and broader social media (LinkedIn, Twitter) in our continuing effort to reach new and prospective members and other interested individuals.

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