

Fall 2021 | No. 115

Chair's Message

Joseph G. Lawrence



Dear members,

It is my pleasure and honor to serve as the Chair of the Board of Directors of the SPE Injection Molding Division (IMD). Our team of board members are pleased to continue to support technical activities that result in the continued growth and success of the plastics industry. Fall season is not only the time for brilliant fall colors but also a season of preparation for technical conferences. We are excited to receive ANTEC 2022 technical papers and would like to encourage the members of the division to submit high quality papers. I am also excited that IMD will partner with the Detroit section and provide technical content for the AutoEPCON conference to be held in person in May of 2022.

Our team of board members are working hard to provide continued value to our IMD members. Due to the pandemic and restrictions to the number of participants, we could not host the in-person IMTECH 2021 conference this fall as planned. However, you will soon be hearing about the dates and venue for the Injection Molding conference (IMTECH 2022) to be held in spring of 2022. Please consider becoming an IMD sponsor; the sponsorship dollars help the board to organize IMTECH conference and support technical programming such as TOPCONs, webinars, community outreach and senior capstone projects.

While we navigate during these uncertain times and the pandemic still ongoing, continue to stay safe and healthy.

Warm Regards,

Joseph G. Lawrence
2021-2022 SPE IMD Chair
Polymer Institute, The University of Toledo
joseph.lawrence@utoledo.edu

Promold Plastics

info@promoldplastics.com

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Keep the connection!

Join us on:



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OCTOBER 2021

SPE CAROLINA SECTION INVITES ALL SPE MEMBERS TO ATTEND A PRESENTATION ON "FLAKE SCAN" RAPID ANALYSIS

OCTOBER 20, 2021 - 11:00 AM TO 1:30 PM EDT

The presentation will be by Nikolas Wolf, of Sesotec

Summary

Designed from the ground-up as a quality check for bottle flake, the Flake Scan quickly scans and displays the count of the flakes, their material of composition, their color, a count of metal contaminants detected in the flake, and the relative percentages of every polymer found in the sample.

In person: The Polymers Center of Excellence, 8900 Research Dr., Charlotte, NC 28262

Remote: Via Zoom

RSVP

Please contact [Daeng Hawkins](#) at the Polymers Center to RSVP to save a seat or receive Zoom link.

PLASTICS IN AEROSPACE - INTERIORS AND EMERGING TECHNOLOGIES

OCTOBER 26, 2021 - OCTOBER 27, 2021

SPE is proud to host the second annual Plastics in Aerospace conference. This year's conference will focus specifically on aircraft interiors and emerging technologies including UAV/UAM. The growing trends of lightweighting, sustainability, connectivity, and electrification for the next generation of aircraft create a tremendous amount of opportunity for the growth of plastics, composites and adhesives in this specialized field. Learn what is being done and which materials are emerging as the prime candidates to revolutionize an industry from the thought leaders in this space.

FOR MORE INFORMATION: <https://www.4spe.org/i4a/pages/index.cfm?pageID=6796>

NOVEMBER 2021

SPE AUTOMOTIVE COMPOSITES CONFERENCE AND EXPO

NOVEMBER 2, 2021 - NOVEMBER 4, 2021 5:00 PM

The SPE Automotive and Composites Divisions jointly sponsor the annual Automotive Composites Conference & Exhibition (ACCE). This event is designed to educate and update automotive design and production engineers, sales personnel, and management from transportation OEMs and Tier suppliers about the benefits and expanding importance of thermoset and thermoplastic composites in passenger vehicles, light trucks, and other ground transportation applications. ACCE is the world's leading automotive composites forum. The event provides excellent networking opportunities and draws speakers, exhibitors, and attendees from the Americas, Europe, Asia, Africa, and the Middle East.

FOR MORE INFORMATION <https://speautomotive.com/acce-conference/>



WEBINAR: HOW TO IMPLEMENT A PURGE PROGRAM AND STOP WASTING MONEY

NOVEMBER 3, 2021 11:00 AM (EST) - 12:00 PM (EST)

Many processors know that they should implement a purge program but just don't know how to get started. This presentation will discuss what data to collect, how to collect it, and how to measure performance when you introduce purging to your process. Our purging expert will explain different tangible ways purging compounds can improve efficiency and will discuss several customer examples of how purge programs helped them reduce costs.

FOR MORE INFORMATION: <https://www.4spe.org/i4a/pages/index.cfm?pageid=7020>

WEBINAR: ACRYLIC PROCESSING AIDS FOR PVC FOAM

NOVEMBER 9, 2021 11:00 AM (EST) - 12:00 PM (EST)

It doesn't take a PhD to know that creating materials that are lighter weight, yet durable is a complex challenge. It does, however, take some serious brain power to create new products that can withstand extreme elements while utilizing less material. That's why we're inviting you to learn how (PARALOID™ and SURECEL™) Acrylic Processing Aids can efficiently enable PVC Foam Technology with consistent quality, broad processing conditions, and improved sustainability footprint.

FOR MORE INFORMATION VISIT: <https://www.4spe.org/i4a/pages/index.cfm?pagelD=7009>

WEBINAR: PLASTIC DATASHEETS: WHAT THEY DO AND DON'T TELL US

NOVEMBER 11, 2021 11:00 AM (EST) - 12:00 PM (EST)

UL Prospector lists tens of thousands of different plastic resins. When tasked with material selection, 99% of us turn to the typical property data sheet. What are the issues with the single point numbers listed on these datasheets? Why does sole reliance on this information often lead to failed product? What should we be doing instead? Selecting the proper material for an application requires the right data. While plastic project have evolved over the past 50 years, the data we are given has not evolved. This webinar will present the deficiencies of the information presented on plastic data sheets, and suggest what is really needed.

FOR MORE INFORMATION VISIT: <https://www.4spe.org/i4a/pages/index.cfm?pagelD=6500>

ANTEC® 2022 Returns as In-person Event



ANTEC® 2022 Returns As In-Person Event

SPE is hosting ANTEC® 2022 in-person, co-located with PLASTECH® South, an Informa event, in Charlotte, NC, June 14-15. PLASTECH® South is a comprehensive annual plastic design and manufacturing event for plastics professionals, suppliers and buyers to discover innovation, engineer new technology, and to expand their networks. ANTEC® 2022 will also include an online component.

“Our attendees are thrilled that we’re returning to in-person ANTEC® in 2022,” said Patrick Farrey, SPE’s CEO. “And by co-locating with PLASTECH® South, we will have even more ways for SPE members and plastics professionals to all finally see each other again face-to-face.”

The presentations at the in-person event will be selected/invited based on the applicability of their topic across a wide cross-section of the plastics value chain. Presentation/speaker selection, which will occur through a paper submission/review process and/or through invitation, will be considered based on the quality, relevance and newness of any research done in the field as well as the speaker’s position in the plastics industry. Technical Papers that are not selected for in-person ANTEC® will be recorded and delivered virtually over a schedule that will be announced soon.

The tentative schedule for in-person ANTEC® 2022 is as follows:

Day 1 (June 14)

- 8:00 am – 12:00 pm: SPE Meetings
- 1:00 – 5:00 pm: ANTEC® Sessions
- 5:00 pm: Evening Networking Events

Day 2 (June 15)

- 8:00 am – 12:00 pm: ANTEC® Sessions
- 12:00 – 1:30 pm: SPE Networking and Honors & Awards Presentations
- 1:30 – 5:00 pm: ANTEC® Sessions
- 5:00 pm: SPE Chapter Networking Events

“The goal is to have people come together and share the high-quality content that ANTEC® is known for,” said Farrey. “By combining the in-person content with additional recorded content, we can deliver a full ANTEC® experience to our attendees, near and far.”

More details will be announced soon.

ANTEC® 2022 - CALL FOR PAPERS



ANTEC® 2022
Charlotte, NC • June 14-15, 2022
Co-located with PLASTECSouth

You are invited to submit a Technical Paper for ANTEC® 2022.

Showcase the latest advances in industrial, national laboratory and academic work.

Papers will share findings in polymer research and/or new and improved products and technologies. Topics include:

- Additive Manufacturing/3D Printing
- Automotive
- Bioplastics
- Building and Infrastructure
- Color & Appearance
- Composites
- Electrical & Electronic
- Extrusion
- Flexible Packaging
- Foams
- Injection Molding
- Medical Plastics
- Sustainability and Plastics Recycling
- Rheology
- Thermoforming
- Thermoplastics Materials
- And more...

Paper Submission Deadline: November 15, 2021 (NO EXTENSIONS OR EXCEPTIONS)

For questions about submissions, contact:

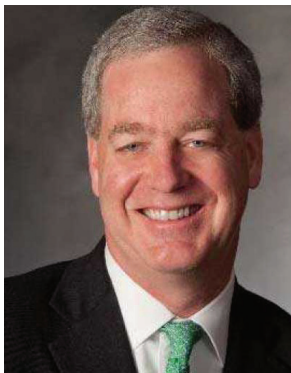
David Anzini
ANTEC® Program Chair
david.anzini@celgard.com

Submit Your Paper>

Join us October 21 from 5:00 PM - 6:30 PM as the Akron and Cleveland SPE sections proudly presents:

TEAM NEO JAY FORAN, SR. VP WITH PAUL BOULIER

ATTENDANCE IS FREE!



Speaker

Jay Foran, Senior Vice President

jforan@teamneo.org 216-363-5407

Jay helps businesses discover exciting growth opportunities in the Cleveland Plus region. He works with site selectors and corporate clients and helps them navigate through the regional economic development framework, partnering with local and state economic development groups.

Prior to joining Team NEO, Jay was Vice President, Business Development for The Lake West Croup LLC, a management consulting firm, Jay also served in a variety of key leadership positions with Procter & Gamble during a lengthy and distinguished career where he was responsible for a variety of business building initiatives that have been emulated throughout the consumer products industry.

Jay was named as one of America's Top 50 Economic Developers by Consultant Connect in 2015 and he is an Executive Committee member of the Ohio Aerospace & Aviation Council. Additionally, Jay has an impressive record of leadership in enabling successful civic advocacy organizations, private and public campaigns, and assessments to support community sustainability. He currently sits on the Board of Trustees for Lakewood Hospital Foundation, and is a Lakewood Alive Founder, Officer and Board Member.

Additive Manufacturing Cluster (virtual)

Agenda:

- 5:00 - 5:15 Introduction and presentation setup by Susan and/or others at SPE
- 5:15 - 5:30 Overview of Manufacturing Value Chain and Assets in NEO/Ohio and why it's important to grow
- 5:30 - 5:45 "Current State" of Additive Manufacturing; where it currently fits with "conventional" plastics manufacturing, and relevant use cases
- 5:45 - 6:00 Overview of Additive Manufacturing Cluster; objectives, partners, capabilities as a resource - "seeker/solver" concept and some success stories
- 6:00 - 6:15 Overview our current work in developing a Polymer Cluster; participants, current thinking, areas of focus, etc.
- 6:015 - 6:30 Quick Q&A and solicitation for future ideas/areas of interest



Speaker Paul Bouler

Paul serves as the Vice President for Industry and Innovation at Team NEO. He is responsible for developing and executing direct-to-company business growth and attraction for Team NEO in the region's core industries including: energy, oil and gas, metal fabrication and machinery; polymers, chemicals and coatings, as well as packaging and transportation.

Team NEO is a privately-funded regional business attraction and growth organization. It is a nonprofit that markets Northeast Ohio to the world, attracts new businesses and helps those that are here to grow. Team NEO is the Northeast Ohio regional partner for JobsOhio, a private, nonprofit corporation that drives economic development and job creation for the state, as well as working closely with economic development organizations across 18 counties.

Paul is also the CEO, for the past 10 years, of Advantage Growth Solutions LLC, a management consultancy focused on helping manufacturers growth, both organically and acquisitively. He provides commercial and technically focused insights to Fortune 1000 companies.

He also is the founder/CEO of Seauciel LLC, a startup driving to commercialize advanced technologies to create value-added materials from commingled plastics waste.

He has extensive experience in building and growing businesses from startups to multi-\$B corporations. He has been a solution provider to the plastics industry for over 40 years, working with OEMs, Fabricators and Converters, and raw material providers to drive results and innovation in the packaging, electrical and electronics, transportation, industrial and medical markets. He has successfully led efforts in seven major acquisitions; creating strategy, scouting opportunities, executing deals and creating teams for efficient integration.

Paul's previous experience includes senior executive roles in general management, marketing sales, research and development, operations, and organizational design and development including: Chief Marketing Officer of A. Schulman (now LyondellBasell), a global thermoplastics compounder serving the packaging, transportation, consumer products, industrial and agricultural markets; Vice President of Marketing and Sales at Core Molding Technologies, a designer/molder of reinforced composite products has also held Executive Business Leadership roles at Avery Dennison, a manufacturer of high-performance adhesives and consumer products, and NOVA Chemicals, a global manufacturer of Styrenics polymers, polyethylene and petrochemicals.

Paul earned a MS in Plastics Engineering from UMASS Lowell and a BS in Chemistry from Worcester Polytechnic Institute (WPI). He has been awarded three patents, with one pending. He also completed advanced studies in Global Marketing and Business Strategy at University of Pittsburgh's Katz Graduate School. Paul actively volunteers and mentors entrepreneurs in business strategy/planning as well as contributing to venture groups through the Akron (OH) ARCHAngels, WPI Business School (MA), and Fusion Pointe, a Naples (FL) West Coast Venture Group.

JOIN TODAY:

Join on your computer or mobile app

[Click here to join the meeting](#)

Join with a video conferencing device: 672234403@t.plcm.vc

Video Conference ID: 112 616 040 3

Alternate VTC instructions

Or call in (audio only)

+1 872-704-0966, 230739834# United States, Chicago

Phone Conference ID: 230 739 834#

F

September 30, 2021

Respectfully Submitted by Secretary Tom Giovannetti

Welcome & Opening Remarks – Guest - Mr. Jerry Blackerby, Manager, Mastip Inc. Presented by Joe Lawrence and Tom Giovannetti

Chair Joe Lawrence called the meeting to order at 9:00 AM EST and welcomed all attendees.

Roll Call

Motion: Previous minutes approved by Tom Giovannetti, and seconded by Pete. Motion passes

Financial Report – Ray McKee, Treasurer of IMD

Ray McKee presented the General Balance Sheet Overview. A balance started at \$48,000, paid some awards and renewed website for 4 years. The final balance is 46,500. No SPE rebate check yet. Last year's check was \$7,605. Not much income or expenses. Taxes will be filed soon.

Council Update – Edwin Tam

No Council Report at this time.

Technical Director Report – Pete Grelle, Technical Director and Chad Ulven

ANTEC 2022 update and TOPCON activities review

Next year's ANTEC will be held June 14-15, 2022. Co-located with Plastec South in Charlotte, NC. Chad Ulven TPC. There are currently 70 papers with live streaming, then several weeks of online papers. A call for papers is now open and closes on November 15.

Auto EPCON, May 3, 2022 will be in person

The Automotive Division will not participate for the first time ever. IMD can provide sponsorship and tech content for share of the profits(\$15-20K). The typical profits are \$60-100K with 360-400 registrants. David Okonski is asking for help. Ray McKee said that historically the Auto EPCON is IMD are the most profitable events.

IMTECH Conference Discussion - Peter Grelle and Sue Montgomery

M. Holland has offered Zoom platform for free. Suggestions were made to have one virtual around the January 25-27 timeframe. The in-person event to be held April 26-28 timeframe. Cost would be \$59 SPE members and \$79 for non-SPE members . Thank you to Tom Gio, Amanda Nicholson and Saeed Farahani for volunteering to help with IMTech.

IMTECH Conference November 2021

Fact: Due to Covid restrictions, the venue will limit the number of participants to 30 only. However the venue will honor our deposit and let us reserve another date in 2022. Deposit already paid is \$4,650 (non-refundable).

Proposal: The organizers (Sue and Pete) would like to propose a hybrid event. The details will be sent in a separate email. A decision to be made on a virtual conference (one-day event for 4 hours or a two-day event for 4 hours each). The two-day event can be held in two consecutive weeks. For each 4 hour session, at least six speakers are needed. We could have two topic areas for the two-day event, each with 6 speakers.

Proposed topics are:

Injection Molding 4.0: topics aligned with industry 4.0 with modernization in data collection, processing, artificial intelligence etc.

Sustainability: topics relevant to sustainability of molded plastics

Commitment from the Board: To make the virtual conference a success, we need commitment from the entire board. Support is needed to bring speakers, raise sponsorship dollars, and bring in more registrations/ participants. Request is being made to each of the board members to make at least one contribution (bring a speaker, raise money or bring participants).

Rationale: This conference was approved by the board as an injection molding conference, put together by the IMD. Without active involvement by each of the board members, it will be hard for two people to pull off a conference. We as a board need to make a joint decision whether we need such a conference and are willing to contribute to make this conference a success.

Action: Susan to confirm suggested dates for IMTech conference with venue and SPE HQ

IMD Newsletter Discussion - Angela Rodenburgh

No newsletter report. Board discussed having to publish three newsletters per year is a requirement.

By Laws Committee Update - David Okonski and Peter Grelle

Committee Members - Dworshak, Grelle, Okonski, Giovannetti, Pham, Foltz & Puglielli.

Hot Topics: attendance rules, term limits, too many committees. Working on Rev 02 draft with mid October meeting. Vote on by end of calendar year.

Action: By Law committee will present new by laws at winter meeting.

Board Nominations/Committee Chair Approvals - HO Pham and Lawrence

No report at this time. Joe asked if all committee chairs are ok with assignment. Nobody objected.

Membership Update -Eric Foltz

No report at this time.

Any New Business/Next Meeting Venue and Dates

Joe asked how to handle board status of Kishor Mehta and Jim Wenskus who do not attend meetings. Tom Turng suggested to have them nominated for emeritus status so they only have to attend one meeting per year.

Action: *Joe send note to Mehta and Wenskus asking if want to become emeritus status. Joe appoints Davide Masato, Assistant Professor Umass Lowell to board position for 1 year.*

Next Meeting and Dates

Pilla offers Clemson University locations for winter meeting, Greenville or Charleston, SC. Nicholson offers Polymer Center in Charlotte, NC for winter meeting. February 18th or 25th are suggested dates for winter meeting.

Adjournment

Motion: *Motion to adjourn(Grelle) and seconded (Pilla) Motion passes.(11:41 am CST)*



Sponsorship Opportunities



The Injection Molding Division (IMD) is the largest single entity within the Society of Plastics Engineers; we have just over 1,750 active members across the world comprising of professionals working in the industry as well as academia who care about and are concerned about the future of plastics. IMD membership promotes the responsible growth and use of plastics, and the IMD vigorously supports this initiative through education and innovative technical programs.

IMD sponsorship dollars will help the Board fund: community outreach programs that educate the masses about the many aspects of plastics, technical programs such as TOPCON's, Minitecs and Webinars, and student projects/activities at universities such as Penn State, Ferris State, Clemson and Western Michigan.

Sponsorship opportunities available for newsletter, website, ANTEC and IMTech.

E-mail for more information>

Processing and Molding Polymers with 1.5 Nanometer Titanates and Zirconates in Pellet Form

By Salvatore J. Monte, Kenrich Petrochemicals, Inc.

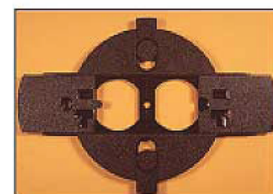
Added to the hopper just like a color concentrate, 2 to 3 parts of a phosphato titanate or zirconate in pellet masterbatch form per 1,000 parts of filled or unfilled compound provides a method (Function 1-Coupling) for in-situ interfacial nano-surface modification of most all inorganic and organic materials in a compound independent of the interface's hydroxyl content and absent the need for water to effect hydrolysis for coupling as with silanes while providing metallocene-like repolymerization catalysis (Function 2-Catalysis) and (Function 3) nano-intumescence for flame retardance resulting in: the use of larger amounts of regrind and recycle; copolymerization of blends of dissimilar addition and condensation polymers such as HDPE, PP and PET; prevention of delamination of PP/HDPE blends; faster production cycles at lower temperatures producing thermoplastic parts having less heat stress differentials, better finish, and increased stress-strain strength; and control of burn rate and burn rate exponent. Compounds having subject additives age better due to the removal of water at the polymer-reinforcement interface normally left when using a silane or no additives that cause loss of adhesion during water boil tests.

Introduction

OK. So you are up-to-date on Industry 4.0 and have the latest and greatest processing equipment, controls, sensors and software such as iMFLUX®. And you know your compound materials behavior such as "crystallinity" based on your data and pay attention to machine conditions to optimize their performance. But, the specific behavior of materials alone and in combination will always remain a challenge as the Internet of Things – the basis of 4.0 – depends on data and the data depends on the accumulated experience inputted.

Marcel Beraud, Director – Global Services AMT – The Association of Manufacturing Technology makes several key points

Injection Molded PC Electrical Outlet Cover



| INJECTION MOLDED POLYCARBONATE ELECTRICAL OUTLET PLATE COVER | | | | | | | | |
|--|---------|-------------------|-------|-------|--------|--------|----------|-------|
| Condition | Control | 1% CAPS KR 134S/K | | | | | | |
| | | #1 | #2 | #3 | #4 | #5 | #6 | #7 |
| Rear (°F) | 496 | 456 | 445 | 445 | 435 | 425 | 420 | 395 |
| Middle (°F) | 516 | 495 | 490 | 480 | 470 | 460 | 455 | 440 |
| Front (°F) | 528 | 509 | 498 | 485 | 485 | 475 | 475 | 465 |
| Injection Pressure | 1500 | 1200 | 1200 | 1000 | 1000 | 1000 | 800 | 800 |
| Injection Time (sec) | 11 | 8 | 8 | 8 | 8 | 8 | 7 | 7 |
| Injection Full Pressure (sec) | 4.5 | 2.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Cool (sec) | 30 | 25 | 23 | 20 | 25 | 22 | 20 | 18 |
| Total Cycle (sec) | 47.5 | 37.5 | 34.5 | 31.5 | 36.5 | 33.5 | 30.5 | 28.5 |
| Appearance | Good | Good | Good | Sinks | Better | ← | No Sinks | → |
| Fit ^a | Tight | Tight | Loose | Loose | Looser | Looser | Very | Loose |

Note^a: Tight fit caused by excessive shrinkage around gates.

[Read Full Story>](#)

Why A Dedicated System for Plastics Mold Development is Indispensable

When it comes to useful tools that can enhance teamwork efficiency, we usually think of the Product Lifecycle Management (PLM) systems. However, for the plastic part and mold designers, general-purpose PLM systems might not be satisfactory enough. The reason is that they cannot fully cooperate with the time-demanding yet complicated plastics mold development process, and it is usually too costly for small and medium-sized enterprises to adopt.

Plastics mold making has its unique design and manufacturing process. Frequent design changes and short delivery time make the situation even more challenging. Also, due to the high entry barriers of this industry, knowledge and skill gaps tend to occur. Under these circumstances, the preservation and inheritance of design experiences are extremely critical for enterprises today.

PLM focuses on managing the overall product lifecycle. It does not provide comprehensive features to bring design and engineering data together. The industry needs a platform to help acquire design and molding knowledge, and organize them in readable, searchable, and visualizable formats for future utilization. However, useful tools for tracing the design-optimization process, instant sharing and visualization of simulation results, comparing mold tryout and quality inspection data are missing in most PLM systems.

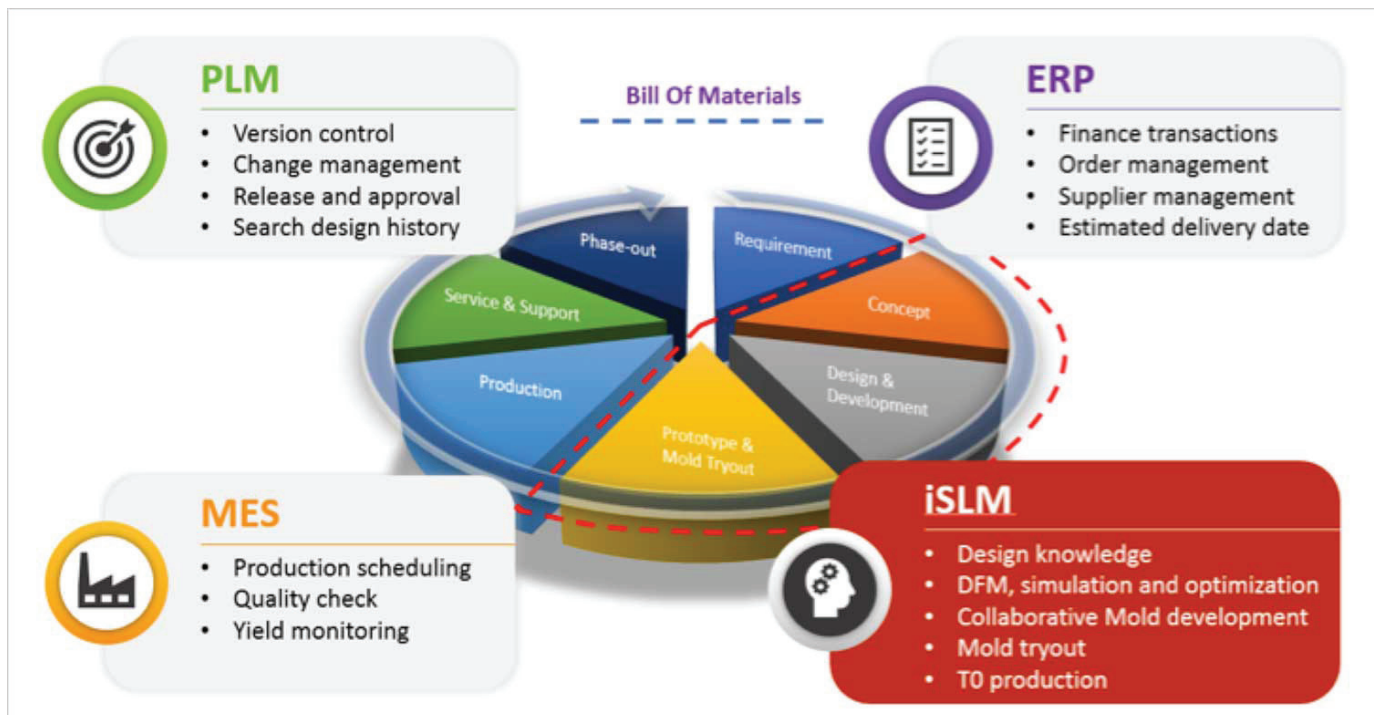


Figure 1: iSLM completes product development lifecycle management with its comprehensive capabilities to trace the design-optimization process and acquire molding knowledge

[Read Full Story>](#)

Tekleen Automatic Filters

Water filtration is one of the most effective and least expensive ways to solve equipment fouling and scaling problems caused by dirty water. Molds, heat exchangers, pipes, tubing, sensors, monitors and other parts become fouled when dirt particles in the water settle out on warm surfaces. Calcium & magnesium are the bonding elements that cement the dirt

onto the equipment. Chemical analysis shows that calcium and magnesium are less than 2%, while the rest is made up of airborne particles, rust, sand, biological organisms and other contaminants.



[Read Full Story>](#)

How to Evaluate the Performance of an Injection Molding Process?

An injection molding engineering system is composed of the following sub-systems: plastic material, part structure design, injection molding machine, injection mold, and molding process condition. In practice, the performance evaluation of an injection molding engineering system can't be done until the injection mold is developed, manufactured, and assembled; and a molding process condition is worked out to go with it. Therefore, in reality in the industry, the performance evaluation of an injection molding engineering system refers to more about for newly developed injection mold and molding process condition, assuming that the other three sub-systems – plastic material, part structure design, and injection molding machine – are fixed and can't be changed. And the process flow of the performance evaluation is also considered the qualification process of a newly developed injection mold with a specific molding process condition for the decision whether the mold should be approved capable or not to release for mass production.

Herein, we use a simplified example to directly demonstrate how to evaluate the performance of an injection molding engineering system; or saying, how to evaluate the performance of a process run by an injection mold going with a molding process condition, assuming that the plastic material, part structure design, and injection molding machine has been selected and fixed.

[Read Full Story>](#)

**Have news about your company?
Send in your press releases to share on the injection
molding division website.**

Email your news>



**INJECTION
MOLDING**

Top Reasons to Join SPE and its Injection Molding Division

Networking within the Plastics Industry

The Injection Molding Division (IMD) boasts the largest membership of all divisions within SPE. Joining the IMD allows you access to over 20,000+ members within your industry.

The Chain

SPE's very own community forum provides tools for you to share information, ask for help, discuss problems, exchange lessons learned, search for information, or simply stay connected with other SPE members.

Online Technical Library

Downloadable technical papers on every key topic in plastics.

PLASTICS INSIGHT

Bringing you weekly focused content from thousands of sources, covering product, research, trends, and more.

SPE PRO-Plastics Research Online

RSS Feed of the latest in plastics research.

Free subscription to "Plastics Engineering Magazine"

Awards and Scholarships for Students/Young Professionals

The Injection Molding Division is helping promote the plastics industry to students and young professionals, by offering scholastic and travel scholarships to students interested in the plastics industry.

SPE Conferences and Webinars

Discounts on 40+ SPE Conferences around the world. Bringing you in-depth information on materials, processes or industries to help you gain knowledge and expand your professional network.

Jobs in the Industry

Resources for job seekers. Post your resume free!

Visit www.4spe.org to join today.

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Secretary: Tom Giovannetti

Technical Director: Peter Grelle (Independent Consultant)

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Awards Committee: Kishor Mehta (Retired Plastics Engineer), Tom Turng (University of Wisconsin)

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Bylaws Chair: David Okonski (General Motors)

Bylaws Committee: Hoa Pham (Freudenberg Performance Materials LP),

Peter Grelle (Independent Consultant), Jeremy Dworshak (3M), Kishor Mehta (Retired)

Councilor: Edwin Tam (Teknor Apex)

Larry Geist (Ferguson Production)

Amanda Nicholson (Polymers Center)

ANTECTCP:

2020 Dave Okonski

2021 Joseph Lawrence

2022 Chad Ulven

2023 Raymond McKee

2024 Edwin Tam

2025 Lynzie Nebel

2026 TBD

EMERITUS:

Mal Murthy (Doss Corp.)

Larry Schmidt (LR Schmidt Assoc.)

Jim Wenskus (Retired Plastics Engineer)