



MPD NEWSLETTER



MARCH 2016

LETTER FROM THE CHAIR



Hello Fellow Members of the Medical Plastics Division:

I recently saw an article in the popular news about a hydrogel bandage with electronic components that were meant to monitor health (do you have a fever?) or to deliver a drug (automatic pain relief!). This told me that our plans for ANTEC 2016 are very topical.

The Medical Plastics Division is sponsoring a panel discussion for ANTEC 2016 with the working title of "From Implantables to Wearables: Biocompatibility and Regulatory Requirements – A Panel Discussion." There are many interesting questions of so-called wearables or "smart bandages" from the perspective of design, materials, and regulatory requirements. Is a "wearable" merely a consumer electronic device like a mobile phone or a watch, or is it a medical device? We plan to have experts and stakeholders from resin supply, design, engineering, toxicology, and regulatory in this panel discussion. All people are welcome to participate and express their views and opinions.

We will have at least one half-day session at ANTEC 2016 in the usual format of podium presentations, with a keynote speaker followed by submitted presentations (there might be two sessions).

The MPD held elections for the board of directors in January. I am pleased to welcome two new members to the Board, Bhavin Shah and Louis Steven Somlai.

It is my pleasure to announce that the MPD nomination of Steve McCarthy as Fellow of the Society has been accepted. Congratulations, Steve.

In addition to the technical programs, MPD will be holding business meetings and social gatherings during the week of ANTEC 2016. Keep an eye out for a schedule of events in the newsletter.

In collaboration with the Piedmont-Coastal Section of SPE, the Medical Plastics Division has also assembled a MiniTec conference. Titled "Recent Advances in Medical Plastics: Materials and Processing," the conference will be held in the Research Triangle Park (Raleigh, Durham, and Chapel Hill) of North Carolina on 12 APR 2016. For the program and more

information, check the Events page at SPE or follow this link: <http://www.4spe.com/Events/event.aspx?EventID=67269>.

I look forward to ANTEC every year because all the work of the previous year seems to culminate with this conference. And I must confess, I look forward to seeing everyone in person. I hope to see you there.

Norris M. Tollefson
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The Medical Plastics Division is pleased to be working with the Piedmont-Coastal Section to bring you **Recent Advances in Medical Plastics: Materials and Processing** in our 1-Day MiniTec format. The event is right around the corner on April 12th, and you don't want to miss this amazing line up of guest speakers! Below is a list of the speakers and their chosen topics. To register for this event, please go to <https://www.eiseverywhere.com/ehome/161697>. If you have any questions, please contact the Event Chair, Dan Fuccella at dan@ati-engineers.com or call at 919-349-5911. We hope to see you there!

Keynote Speaker:

Jeff Clark – HyperBranch Medical Technology

Title: Dendritic Polymers for Use in Novel Medical Tissue Sealing Applications

Advanced Plastics Materials:

Mark Yeager – Covestro LLC (formerly Bayer Material Science)

Title: Improving the Durability of Fabricated Plastics: Addressing Molded-In Stresses

Doug Prundl and Rabia Baz – Evonik Corporation

Title: Innovative Medical Polymers

MiniTec Speakers (Cont.):

Rose Catherin – Solvay Specialty Polymers

Title: Ixef® PARA Single-Use Instrument Life Cycle Analysis

Suneel Bandi – Evonik Corporation

Title: High Performance Polymers for Medical Applications

Tom Markley – Eastman Chemical

Title: Solvent Bonding of Flexible Non-Phthalate PVC Tubing to Different Medical Plastic Luers

Advances in Processing of Medical Plastics:

Maureen Reitman – Exponent

Title: Characteristics and Stability of Implantable Polypropylene Fibers

Wilson Lee – Plasmatreat

Title: Openair® Plasma Improves Adhesion of LSR to Medical Grade Polymer Substrate Materials

Scott Steele – Plastic Technologies, Inc.

Title: How the Latest Modeling / Simulation Tools Can Positively Impact Medical Device Packaging

Greg Paulsen – Xometry

Title: Rapid Prototyping Using Additive Manufacturing

Christian Herrild – Teel Plastics

Title: Solving Customer Problems Using Co-extrusion: A Case Study

Tilak Shah – Polyzen, Inc.

Title: The Benefits of Using Contract Manufacturing Specialists in the Development of New Medical Devices

[**REGISTER HERE!**](#)

ADVANCES IN MEDICAL PLASTICS: MATERIALS AND PROCESSING

MINITEC SCHEDULE

Tuesday

April 12, 2016

North Carolina

Biotechnology Center

15 TW Alexander Drive

Research Triangle Park, NC

27709

Schedule of Events:

7am—8am

Check-In & Continental Breakfast

8am—5pm

All Day MiniTec Lunch and Breaks Incorporated

8am—6:30pm

Tabletop Exhibition (Entire Day)

5pm to 6:30pm

Networking Reception

Contact Information:

Dan Fuccella

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E-mail: dan@ati-engineers.com



You're invited to come join us for ANTEC 2016, one of the largest gatherings of plastics professionals in the United States. It is a great opportunity to network with colleagues, participate in the medical plastics sessions, find a new vendor in the exhibit hall, and maybe learn something new from one of the other plastics divisions that you can apply in an out-of-the-box way.

Medical Plastics Division is putting on two sessions with one being papers from academia and industry, and the other being a special panel discussion with the working title of "From Implantables to Wearables: Biocompatibility and Regulatory Requirements – A Panel Discussion."

We highly encourage you to come be a part of ANTEC 2016. To register, click [here](#). To find more information, click [here](#). If you have any questions about the Medical Plastics Program, please contact Pierre Moulinie at pierre.moulinie@covestro.com.

TECHNOLOGY AND NEWS



6 Keys To Choosing A Medical Device Contract Manufacturer

The relationship between an OEM and a contract manufacturer (CM) is similar to a marriage: Pick the right partner and have a long, happy, and profitable future together. Pick the wrong one, and there's extra work, unhappiness, and a short-lived future. Each CM has something unique to offer, but that fit is dependent upon what you want to gain from the relationship.



Medtech Material Selection For Performance And Feel

By Eric Larson, Art of Mass Production

When designing a medical device, material selection can be difficult, especially with thousands of plastic material options available. While material properties, environmental effects, regulatory requirements, and cost almost always are considered, "feel" is often overlooked despite its importance to user and patient satisfaction, as well as market success.

3D Opportunity In Medical Technology: Additive Manufacturing Comes To Life

Given the strong alignment of AM capabilities with the medical device segment's needs, and the medtech industry's ability to support investment in new technologies, it is perhaps no surprise that AM has made substantial inroads with health care practitioners and service providers. Our goal here is to investigate ways that AM may influence the trajectory of the medical device segment. *By Glenn H. Snyder, Mark J. Cotteleer, and Ben Kotek, Deloitte*

Color In Medical Products

The delivery of health care is evolving to take into account the entire patient experience. Medical products and devices have a significant impact on that experience. *By Dan Stipe, Forma Medical Device Design*

Hydrogels For Medical Devices

Medtronic's OEM division offers latex-free hydrogels in bulk rolls or in slit widths. These medical device hydrogels are used in applications, including ECG signaling, defibrillation, electrosurgical and iontophoretic return electrodes, T.E.N.S., wound care, cosmetics, and non-skin adhesives.

For additional content on medical device development, visit www.meddeviceonline.com



EVENTS CALENDAR

Shape Extrusion TopCon	Mar. 29-31, 2016
MINITEC-Charlotte	April 12, 2016
Thermoset TopCon	April 16-20, 2016
ANTEC 2016, Indianapolis	May 23-25, 2016
NE TopCon, Canada	Aug. 18-19, 2016
MINITEC-Minneapolis	Fall (TBD), 2016

If you are interested in promoting your event or webinar in the MPD newsletter, please send an email to

mailto:Sood_nitink@yahoo.com

AND THE AWARD GOES TO...

We would like to congratulate Steve McCarthy on becoming a Fellow of the Society of Plastics Engineers! The honor of becoming a Fellow was established in 1984 to recognize Society members who have made outstanding contributions in plastics science, engineering or management. In that time, only 309 members have become fellows. Please join the board in congratulating Steve on his accomplishment and thank him for his

service to the Medical Plastics Division and SPE as a whole.

A WARM WELCOME

The medical plastics division recently held board elections, and we give a warm welcome to Bhavin Shah and Louis Steven Somlai, our newest board members. Profiles of the two new board members are below:

Bhavin received his B.S in polymers engineering from Pune University, India, followed by an M.S and Ph.D from University of Massachusetts Lowell in plastics engineering in 2012. He currently works for Tepha Inc. as a development engineer providing solutions to a variety of technical issues related to device applications in orthopedic, general, and plastic surgeries.

Louis Somlai received his B.S in applied chemistry from the University of Cagary and his Ph.D in Polymer Science and Engineering from the University of Southern Mississippi. He also completed a post doctorate fellowship at Case Western Reserve University. Louis has 12 year of medical device and manufacturing and materials engineering experience through his work with Baxter, CSP Technologies, and Eli Lilly & Company. He currently works as a Senior Consultant engineer at Eli Lilly.

COMMUNICATION TEAM NOTES....

We hope you enjoyed this March 2016 issue of the MPD Newsletter! The next issue of the newsletter will come after ANTEC. That issue will include pictures and a recap of ANTEC along with the papers of those that won best paper and best presentation during the MPD sessions. It should be a good read!

MPD Communications Team

CURRENT MEDICAL PLASTICS BOARD OF DIRECTORS

The volunteers that make up the Board of Directors are listed below, along with their contact information. We appreciate all our volunteers and we thank you for your involvement in the Medical Plastics Division of SPE. If you are interested in participating or would like more information, please reach out to anyone on the board. We look forward to hearing from you!

Name	Position	email
Norris M. Tollefson	Chair	norris.tollefson@alcon.com
Mark Bonifacio	Past Chair	mark@bonifacioconsulting.com
Ben Poon	Secretary	benjamin.poon@baxter.com
Austin Coffey	EU Rep.	austin.coffey@gmail.com
Pierre Moulinie	Tech. Program Com.* Chair	pierre.moulinie@bayer.com
John Thomas		john.t@bonifacioconsulting.com
Lorie Lodico	Communications Com.	lorie.lodico@gmail.com
Glenn L. Beall	Historian	glennbeallplas@msn.com
Ali Ashter	Treasurer/Finance Com./Tech. Program Com.	ashter2000@gmail.com
Len Czuba	Councilor/Finance Com./Tech. Program Com.	lczuba@aol.com
Margie Hanna	Finance Com.	m_hanna@yahoo.com
Steve McCarthy	Finance Com. Chair	stephen_mccarthy@uml.edu
Michael Wallick	Awards Com. Chair	mwallick@invibio.com
Maureen Reitman	Tech. Program Com./Awards Com.	mreitman@exponent.com
Ed Fewkes	Membership Com. Chair	fewkesej@corning.com
Harrison Yu	Awards Com.	harrisonyu@comcast.net
Kathy Schacht	SPE Liaison	kschacht@4spe.org
James Madenjian		jmplastics@aol.com
Vipul Dave		vdave1@its.jnj.com
Nitin Soon	Communications Com.	Sood_nitink@yahoo.com
Bob Herman	Education Com. Chair	quarkreh1@gmail.com

*Com. Is shorthand for Committee

FUTURE MEDICAL PLASTICS BOARD OF DIRECTORS FOR 2016-2017

ANTEC marks the end of the 2015-2016 term and starts the 2016-2017 term. The following lists the board of directors for the upcoming year, their positions, and contact information. The list is in alphabetical order by first name.

Name	Position	email
Ali Ashter	Treasurer/Finance Com./Tech. Program Com.	ashter2000@gmail.com
Austin Coffey	EU Rep.	austin.coffey@gmail.com
Ben Poon	Secretary	benjamin.poon@baxter.com
Bhavin Shah	TBD	shah@tepha.com
Bob Herman	Education Com. Chair	quarkreh1@gmail.com
Ed Fewkes	Membership Com. Chair	fewkesej@corning.com
Glenn L. Beall	Historian	glennbeallplas@msn.com
Harrison Yu	Awards Com.	harrisonyu@comcast.net
James Madenjian	TBD	jmplastics@aol.com
Kathy Schacht	SPE Liaison	kschacht@4spe.org
Len Czuba	Councilor/Finance Com./Tech. Program Com.	lczuba@aol.com
Lorie Lodico	Communications Com.	lorie.lodico@gmail.com
Louis Steven Somlai	TBD	Somlai_louis@lilly.com
Margie Hanna	Finance Com.	m_hanna@yahoo.com
Mark Bonifacio	TBD	mark@bonifacioconsulting.com
Maureen Reitman	Tech. Program Com./Awards Com.	mreitman@exponent.com
Michael Wallick	Awards Com. Chair	mwallick@invibio.com
Nitin Soon	Communications Com. Chair	Sood_nitink@yahoo.com
Norris M. Tollefson	Past Chair /Assistant Treasurer/ Finance Com./Awards	norris.tollefson@alcon.com
Pierre Mouline	Division Chair	pierre.moulinie@bayer.com
Steve McCarthy	Finance Com. Chair	stephen_mccarthy@uml.edu
Vipul Dave	Tech. Program Com. Chair	vdave1@its.jnj.com

*Com. Is shorthand for Committee

