



Dr. Daniel Brassard
Research Officer
Functional Nanomaterials group
Industrial Materials Institute
National Research Council of Canada

Professional Bio:

Daniel Brassard is a Research Officer at the Industrial Materials Institute of the National Research Council of Canada in Boucherville, Quebec. He received a B.Eng. in Engineering Physics from École Polytechnique, Ph.D. in Material Science at University of Quebec, and was a NSERC Postdoctoral Fellow in Experimental Medicine at Laval University. His research focuses on the design and fabrication of polymer microfluidic systems, digital microfluidic devices and their application in biological assays.

Presentation Title:

Functional & Economical Considerations for Plastics in Human Diagnostics

Presentation Abstract:

In this presentation, we review the potential of microfluidics for rapid point-of-care medical diagnostics. We present the opportunities, the needs and the major roadblocks that hinder the development and commercialization of advanced disposable diagnostic devices. In particular, we will discuss how the lack of suitable technologies and materials for low-cost mass-production critically hinders the commercial development of this field.





Steve Broadbent
Elast/LSR Process Engineer
ENGEL North America

Professional Bio:

Steve joined ENGEL in March 2008 to support sales staff and customers with specifications and processing issues related to ENGEL's Elastomer product line. Prior to joining ENGEL he worked for 18 years in the elastomers molding industry as a process technician and process engineer specializing in injection and transfer molding of thermoset elastomers.

Presentation Title:

High Standards. Soft Parts.
Silicone applications in the Medical industry

Presentation Abstract:

The presentation will cover eight individual studies of how silicone materials were implemented to solve problems in the healthcare industry. It will also review the correct machine platform and options specific to medical molders. Details of pre-qualification and certification to ISO standards prior to shipment will be reviewed.



Michael Flemmens
Technology Manger for Authentications Systems
ARmark Authentication Technologies, LLC

Professional Bio:

Mr. Flemmens is the Technology Manger for Authentications Systems for ARmark Authentication Technologies and co-inventor of the technology platform. Mr. Flemmens has a broad knowledge base concerning incorporation of security features throughout mainstream manufacturing processes. This includes primary and secondary packaging applications, direct product inclusion including injection and blow molding, as well as direct extrusion production. His responsibilities include pharmaceutical, medical, secure documents, labels, packaging, food and agriculture defense, apparel, consumer products, credentialing, and ID applications. He works directly with the customer on all phases of adoption including, R&D, sales, and customer production.

Presentation Title:

Authentication Features for Medical Device and Packaging

Presentation Abstract:

Counterfeiting and illegal diversion of products, are all too common in today's global marketplace. ARmark Authentication Technologies has developed a technology which enables brand owners and manufacturers to detect non-authentic products, determine site of manufacture, and identify illegal diverted goods. This technology requires no capital expenditure, is a manufacturing drop in solution, does not alter functionality or appearance, is custom for each client, can be manufactured with regulatory compliant materials, and is cost effective. Typical uses include marketplace monitoring, trademark protection, reduction of recall exposure, diversion monitoring, and counterfeit determination.





Dan Hazen, MKS Instruments
Product Manager
Controls Product Group

Professional Bio:

Dan works for the Controls group of MKS Instruments as product manager for advanced industrial applications. Dan has published numerous articles and presented at plastics conferences around the world on multivariate technology for improved injection molding processes. Dan holds degrees in Plastics Engineering from Penn State and The University of Massachusetts Lowell.

Presentation Title:

Multivariate Closed-Loop Control for Parametric Release in Injection Molding

Presentation Abstract:

This presentation will focus on a new approach for online process optimization and control for injection molders. As the injection molding process is highly complex and multivariate in nature, this new approach will utilize a multivariate technique to allow medical molders to optimize a process based on multiple quality attributes to ultimately achieve parametric release on their processes.



Robert Herman
Sales Manager - Business Unit Medical
ENGEL Austria GmbH

Professional Bio:

Robert Herman earned his bachelor of science in mechanical engineering from Pennsylvania State University in December, 1984. He worked as an engineer-in-training for the Commonwealth of Pennsylvania, and then in 1991 earned a certificate of qualification to supervise certified performance testing of cleanrooms and cleanroom systems, from the National Environmental Balancing Bureau. After graduation, Robert had several years of experience in the design, testing, and certification of cleanrooms and systems.

In 1993 Robert relocated to Austria where he worked for 6 years as an environmental engineer for the steel industry, in the basic design of gas cooling, cleaning, and energy recovery systems. Then in 1998, Herman joined ENGEL Austria GmbH as a sales manager helping to provide injection molding solutions to the medical industry.

Presentation Title:

Best Practices for Medical Molding: Pipette Tips and Petri Dish Manufacturing

Presentation Abstract:

ENGEL



Joachim Kragl
Director of Advanced Molding Systems and Processing
ENGEL North America

Professional Bio:

Joachim Kragl graduated from the TGM College for Polymer Engineering and Processing in Vienna, Austria in 1992. Upon graduation he immediately began working as an applications engineer for ENGEL Austria GmbH. In 1999 he transferred to ENGEL's research and development department and became technology manager for MuCell, in-mold labelling and in-mold film decorating activities. Kragl moved to Guelph, Ontario to join ENGEL Canada in October 2000 and was promoted to the firm's manager of processing technology in 2003. He assumed his current role as director of advanced molding systems and processing for ENGEL North America in July 2009, and now works out of the York, PA facility.

Presentation Title:

Advanced and Novel Processes and Technologies for Medical Device Manufacturing

Presentation Abstract:

The presentation will cover several novel & innovative process technologies which are of particular suitability for future & current cutting edge medical devices. Areas under review include molding of micro & nanostructures, resorbable implants or implantable drug delivery systems along lab on a chip and potential MEMS applications.



Christoph Lhota
Vice President - Business Unit Medical
ENGEL Austria GmbH

Professional Bio:

Christoph Lhota graduated with a degree in polymer engineering from the Mining University Leoben in 1994. Since then he held several positions in the plastics machinery industry including Vice President Automation at Battenfeld Austria and Vice President Engineering at Maplan Austria. Christoph Lhota joined ENGEL at 2004 as a sales manager and advanced in 2007 to Vice President Business Unit Medical. Today he is devoted to the plastic medical device market worldwide and is working on business development and cleanroom capability development.

Presentation Title:

Preplan and Verify – Injection Molding machine Concepts for the Medical Industry

Presentation Abstract:

This presentation will cover the steps of creating a medical molding manufacturing process beginning at the customer specification and part application through realization of the product. Topics that will be discussed are all-electric and hybrid molding machines, GMP documentation, automation, validation of special systems, clean room development and qualification, risk analysis and traceability.



Philippe Mafille
Commercial Director
Plastisud

Professional Bio:

Philippe graduated from Oyonnax (France) with a degree in Plastic Engineering. He started to work in engineering and production, and then he moved to technical sales, developing liquid color for BASF for the French market. He was then appointed by Ewikon Hot Runner to open the French market and reach a significant market share in this field.

In 1992 he joined Husky as Area Manager, and then Injection Plastic Expert assigned to build up a system group for Europe and later become general manager for FRANCE.

He started at Plastisud 4 years ago for Marketing and development of a worldwide network for opening new markets.

Presentation Title:

Exceeding Customer Expectations – A Mold Partner for Turnkey Medical Systems

Presentation Abstract:

PLASTISUD





Lisa Mauro
Business Development Manager
Waldorf Technik Inc.

Professional Bio:

Lisa is a Plastics Engineering graduate of the University of Lowell in Massachusetts. She has enjoyed over 20 years in technical sales in the injection molding industry, including positions with the German tool maker FOBOHA, injection machinery supplier Ferromatik Milacron, and automation suppliers Conair Martin and Automated Assemblies.

Lisa has recently joined Waldorf Technik Inc. as the Business Development Manager of North America in January of 2011.

Presentation Title:

In-Line Automation and Inspection versus Bulk Production, Storage and Down Stream Assembly

Presentation Abstract:

This presentation will cover the highlights of in-line automation and inspection compared to bulk production, storage, down stream assembly and packing, including the following:

- Maintaining possession & orientation of molded parts upon ejection
- Ability to reject parts using vision inspection, prior to final assembly and pack-out, without interruption in production output
- 100% Quality Inspection
- Cavity sorting and it's effects on uptime
- Minimizing total steps from pellet to package
- Removal of risk
- Minimize human interface and total labor



Matthew Naitove
Executive Editor
Plastics Technology magazine

Professional Bio:

Matt Naitove has spent the last 39 years as an editor at *Plastics Technology* magazine. He has held every editorial title at the magazine, was chief editor from 1981 to 2009 and has been executive editor for the last three years. He has written about virtually every topic in plastics and has attended the last 13 NPEs and 11 K Shows.

Presentation Title:

Technology Advances for Molding Medical Parts

Presentation Abstract:

Visits to recent trade shows and to medical molders reveal a number of developments in machinery, tooling, and materials that can be useful for medical molding. Developments in micro-molding equipment and tooling, and in medical-grade TPEs, other thermoplastics, and LSRs are particularly active areas of R&D.



Morgan Polen
Vice President of Application Technology
Lighthouse Worldwide Solutions

Professional Bio:

Morgan has been working in contamination control and cleanrooms since 1984 and been involved with projects ranging from cleanroom design and construction, environmental monitoring program development, facility monitoring system validation protocol creation, particle counter design, biological sampler design, surface conditioning and cleaning systems, ESD Program creation and auditing, and currently is responsible for developing contamination monitoring programs for customers worldwide.

Presentation Title:

Fundamentals of Particle Counting in a Controlled Environments

Presentation Abstract:

The detection and measurement of sub-micron aerosol particles is critical to understanding air quality and is required in cleanroom and controlled environment classification and monitoring. Particle counters provide information critical to determining the number and size of particles in a given volume of air. Understanding the principals of particle counting and the related standards for testing and monitoring of cleanrooms and controlled environments is important to maintaining these environments.





Thomas W. Steipp
President & Chief Executive Officer
Liquidmetal Technologies, Inc.

Professional Bio:

Prior positions included CEO of Symmetricom (SYMM) and various Marketing and GM positions at Hewlett-Packard. Mr. Steipp graduated from the United States Air Force Academy with a B.S. in Electrical Engineering and earned a M.B.A. from Purdue University.

Presentation Title:

Liquid Metal Alloys – An Emerging Biomaterial

Presentation Abstract:

Liquidmetal Alloys are a new class of metal alloys that offer good corrosion resistance, exceptional hardness, up to 2% elasticity, and extremely high yield strengths in the as-molded condition. Furthermore, the unique characteristics of Liquidmetal Alloys allow for near net shape component fabrication with reduced post-cast finishing, obviating the need for expensive machining processes.





Michael Walper
President
HEKUMA Automation LLC

Professional Bio:

Michael Walper has over 20 years of capital equipment sales experience. He has owned and managed his own sales agency for the past 12 years. For the past 2 years he has been distributing HEKUMA products in North American and managing service and after market support for the same region.

Presentation Title:

Considerations for high speed/high precision automation in a clean room environment

Presentation Abstract:

An overview of the requirements for installing and running high speed/high precision automation in a clean room environment.

eLEXIS Group

HEKUMA