Technology Trends and Solutions for Silicone Rubber Molding

16 November 2016, Wednesday, 9.00am – 15.15pm
MPH 1, Level 1, Innovis 2 Fusionopolis Way,
Fusionopolis 2, Singapore 138634

Introduction

Silicone rubbers, in particularly, liquid silicone rubbers are becoming increasingly important for many industry applications. The requirements for silicone rubber material properties as well as parts quality are more stringent. This seminar highlights latest research outcomes on silicone rubber materials and advanced manufacturing techniques.

Speakers from Momentive, Elmet, Engel, Eco-space and SIMTech will present market insight and growth opportunities of silicone rubbers, silicone rubber materials development, advanced dosing system and injection molding process, as well as mold, mold insert and part design & fabrication. A roundtable discussion will be held after the seminar to gather impactful feedback for SIMTech to engage with industry. This seminar and roundtable discussion will be a platform for researchers and companies who are interested on the emerging field of silicone rubber molding to share, network and identify collaboration & business opportunities.

Programme

9:00 am  Registration
9:30  Welcome Remarks by Mr Steven Tong, SIMTech
9:35  Latest Development of Silicone Rubber Materials and Applications
      by Mr Oliver Franssen, Momentive Performance Materials
10:15 Silicone Rubber Materials with Enhanced Properties by Dr Yu Suzhu, SIMTech
10:35 Tea break
10:55 The Right Equipment for Profitable LSR Production Innovative -
      Technology in Dosing and Mould Design by Mr Paul Fattinger, Elmet
11:35 Advanced Silicone Rubber Injection Molding Processing
      by Mr Leopold Praher, ENGEL Austria
12:15 Lunch
13:15 **Ultra-Precision Machining of Steel Mould Inserts for Injection Moulding**
   *by Dr Liu Kui, SIMTech*
13:35 **Silicone Rubber Product Design** *by Dr Joris Nooten, Eco-Space (S) Pte Ltd*
14:15 – 15:15 **Round Table Discussion (invited): Challenges In Molding pf LSR Medical Parts**
   *By Mr. John Lim, SIMTech*

**About the Speakers**

**Mr Oliver Franssen** studied Mechanical Engineering and Plastics Technology at the University of Technology RWTH Aachen / IKV and received his diploma in 1990. He started his professional career 1990 at Dätwyler / CH as project leader for rubber precision parts for the Automotive Industry. In 1996, Oliver joined DuPont-Dow Elastomers in Automotive Market Development. Between 2001 and 2003 he was the commercial director at Omnexus in Europe. In 2004 he joined Momentive Performance Materials (formerly GE Bayer Silicones) in Automotive Marketing for Elastomers. Since 2008 he is the Global Marketing Director of this segment.

**Dr Yu Suzhu** is a Research Scientist at SIMTech. She received her PhD from Nanyang Technological University of Singapore. Her research fields cover formulation and processing of polymer and biodegradable polymer composites and nanocomposites, polymeric film formation and patterning. She is currently leading the polymeric elastomer technology development track under Forming Technology Group, focusing on development of thermoplastic elastomers as well as solid and liquid silicone rubber precision molding. She has been involved in both industry and research projects and published many papers in prestigious journals.

**Mr Paul Fattinger** has more than 20 years experiences in mold making. In 1989, he started as a professional mould maker in company Drefts and Camo to build thermoplastic moulds for the electronic industry. In 1992, he joined company of Sterner as specialist for LSR molds and he was promoted to be application engineering and manager in 1993 in charging of LSR and 2 K molding. He founded Company of Elmet together with 3 partners in 1996. He has been positioned as R&D manager and Global technical customer support since 1996 and he has been responsible for the Asian Sales Market since 2005.

**Mr Leopold Prahe** studied mechanical engineering at the Technical High School in Waidhofen/Ybbs and received his engineering degree in 1986. He started his professional carrier 1986 at Strabag AG as project engineer for designing asphalt mixing plants. In 1988 he changed to ENGEL Austria to take over the responsibility for spare parts for large machines. Since 1994 he is with the Rubber / LIM Department stating as a sales engineer and in 2000 he took over the responsibility as a worldwide Sales Director for this segment.

**Dr Liu Kui** is a Senior Scientist and Group Head in Machining Technology Group at Singapore Institute of Manufacturing Technology (SIMTech). He also serves as an associate professor (adjunct) at the Department of Mechanical Engineering, National University of Singapore (NUS) and Co-Director of SIMTech-NUS Joint Lab on Large Format Machining. He received BEng and MEng degrees from Nanjing University of Aeronautics and Astronautics in 1989 and 1996, and PhD degree from NUS in 2002. Dr Liu’s research interests include ductile machining of brittle materials, nano/micro machining, ultra-precision machining, exotic material machining, high aspect ratio hole drilling, micro EDM and diamond tool fabrication. He has authored and co-authored more than 140 technical papers published in prestigious international journals and conferences. He is a senior member of SME, member of euspen and JSPE.
Dr Joris Nooten is a driven business developer with a solid network and convincing personality. He has technical education in chemistry and process technology from Eindhoven, The Netherlands. He has extensive knowledge of production processes and materials. Being an expert in LSR, his practical approach has helped many companies in making their first steps in this technology. With exposure to product design and marketing, he can translate designs into parts that are actually feasible, assisting engineers avoiding pitfalls. Joris has been in a senior management position for more than 10 years and has assisted with corporate efficiency programs and relocations. He is comfortable in boardroom sessions and easily engages in networking sessions.

Who Should Attend
Senior Management & Business Development Managers, Technical Managers, Project Managers, Product Engineers

Registration
Registration for this seminar is free of charge and seats are available on first-come, first-served basis. To reserve a place, please klick at the link below or copy it into your Web-Browser:


Contact Us
For more details, please contact:
Dr Yu Suzhu  Tel: +65 6793 8373, email: szyu@SIMTech.a-star.edu.sg
Mr John Lim Kee Yong  Tel: +65 6510 1695, email: kylim@SIMTech.a-star.edu.sg

Organised by

SIMTech
Singapore Institute of Manufacturing Technology (SIMTech)
73 Nanyang Drive, Singapore 637662
Tel: +65 6793 8383, Fax: +65 6791 6377
www.SIMTech.a-star.edu.sg

Supported by

Engel be the first