

Wednesday, November 14

1:05 p.m.	Opening	Dr. Frank Bartels, IVAM Microtechnology Network, Dortmund, DE
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Session:**Laser and Photonic Applications****Session chair:** Dr. Uwe Schnakenberg, RWTH Aachen, Aachen, DE

1:10 p.m.	Fully Digital Arrays of Silicon Photomultipliers (dSiPM) - A Scalable Technology for Fast Photon Detection	Dr. York Hämisch/Anja Schmitz, Philips Digital Photon Counting, Aachen, DE
1:30 p.m.	Glass Processing with Laser Technology for Medical Applications	Dr. Christoph Hermanns, MDI SCHOTT Advanced Processing GmbH, Mainz, DE
1:50 p.m.	Customized Photonic Systems for Life Science Applications	Jan Fehse, Fisba Optik AG, St.Gallen, CH
2:10 p.m.	Polishing with Laser Radiation	Christian Nüsser, Fraunhofer Institute for Laser Technology ILT, Aachen, DE
2:30 p.m.	High-Power Diode Lasers as All-rounder in Medical Applications for Soft Tissue Treatment	Andre Grütz, LIMO Lissotschenko Mikrooptik GmbH, Dortmund, DE
2:50 p.m.	The Challenge to build State-Of-The-Art Optical Devices for OEM.	Dr. Stefan Beyer, Berliner Glas KGaA, Berlin, DE
3:10 p.m.	Laser Machining of Polymer Medical Devices: Benefits and Challenges to Device Designers	Dr. David Gillen, Blueacre Technology, Co Louth, Ireland, IE

Session:**Miniaturized Electronics for Medical Products****Session chair:** Harald Pötter / Erik Jung, Fraunhofer Institute for Reliability and Microintegration IZM, Berlin, DE

4:00 p.m.	Micro Systems Technology as a Key for State-of-the-Art Diagnostics and Therapy - Update 2012	Harald Pötter, Fraunhofer Institute for Reliability and Microintegration IZM, Berlin, DE
4:20 p.m.	Microtechnology Enabling implanted Brain Computer Interfaces	Dr. Prashant Tathireddy, University of Utah, Utah, USA
4:40 p.m.	Smaller and Smarter Implants: Smart Sensors for Intracardiac Pressure Measurement	Dr. Volker Bödecker, Vital Sensors GmbH, Hanover, DE
5:00 p.m.	Innovative Prostheses using implantable Micro Systems	Martin Rohm, University of Heidelberg, Heidelberg, DE
5:20 p.m.	Point of Care Diagnostics: Driving Innovations with Micro Technologies	Claudia Gärtner, microfluidic ChipShop GmbH, Jena, DE
5:40 p.m.	The Future Role of Electronics in Medical Products – Opportunities for Innovations	Erik Jung, Fraunhofer Institute for Reliability and Microintegration IZM, Berlin, DE

Thursday, November 15**Session:****Microprecision, Manufacturing and Processing**

Session chair: Andrea Pick,

Aufgeräumt - Büro und Management, Krefeld, DE

11.00 a.m.	Highly Precise Differential Pressure Sensor for Medical Applications	Dr. Sophie Billat, HSG-IMIT, Villingen-Schwenningen, DE
11.20 a.m.	Precision Positioning in Medical and Biotechnological Application	Jens Klattenhoff, Feinmess Dresden GmbH, Dresden, DE
11.40 a.m.	From Lab-on-Chip to Embedded Diagnostic Systems	Dr. Nicolaus Hettler, CDA GmbH, Suhl, DE
12.00 a.m.	Metal Injection Moulding of Thin-Walled Titanium Parts	Vera Friederici, Fraunhofer Institute for Manufacturing Technology and Advanced Materials IFAM, Bremen DE
12.20 a.m.	Evaluation of Reusables for their intended Reprocessing Procedure - New Requirements by FDA	Anja Friedrich, BSL BIOSERVICE, Planegg / Munich, DE
12.40 a.m.	Mo(o)re Biotechnology through MEMS - a Marriage between two State-Of-The-Art Technologies	Hans Bouwes, iX-factory GmbH, Dortmund, DE
1.00 p.m.	When Medical Devices Miniaturization pushed out the Physical Limits: Manufacturing a 25 µm ID Metal Tube	Guy Mansart, MINITUBES, Grenoble, FR
1.20 p.m. Break		
1.40 p.m.	Hermetic Sealing of Intracorporeal Devices by Solderjet Bumping	Thomas Burkhardt, Fraunhofer Institute for Applied Optics and Precision Engineering IOF, Jena, DE
2.00 p.m.	Development of Customized PPG Sensors - Miniaturization Technologies and Examples for Medical Applications	Dr. Olaf Brodersen, CiS Forschungsinstitut für Mikrosensorik und Photovoltaik GmbH, Erfurt, DE
2.20 p.m.	Organic Surface Modification: A Key Process for Micro- and Nanotechnology based Devices	Dr. Luc Scheres, Surfix BV, Wageningen, NL
2.40 p.m.	Electropolishing in Medical Technology	Siegfried Pießlinger-Schweiger, POLIGRAT GmbH, Munich, DE
3.00 p.m.	Novel Pattern Structuring of Metallic Thin Film Layers at Polymers for Biosensor Applications using Plasma Activated Plating	E-R. Weidlich, GRT GmbH&Co. KG, Hamm, DE M. Hanner /B. Gründig, Senslab GmbH, Leipzig, DE J. Borris/ M. Thomas, Fraunhofer IST, Braunschweig, DE
3.20 p.m.	New Chances for Medical Devices with Flexible Printed Circuits	Markus Voeltz, Mektec Europe GmbH, Weinheim, DE
3.40 p.m.	Microprecision through Innovation Team Diversity	Richard Stephens, Invetech, San Diego, CA, US

Session:

Examining, Measuring, Quality Assurance

Session chair: Dr. Ulrike Michelsen,

Bartels Mikrotechnik GmbH. Dortmund, DE

4.20 p.m.	High Resolution Optical 3D Surface Inspection for Design and Process Control of Medical Devices	Jochen Hegenbart, Nanofocus, Oberhausen, DE
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4.40 p.m.	Obtaining Knowledge of Gas Type or Gas Concentration - New Achievements in Flow-Sensor Technology	Dr. Daniel Trautlein, Sensirion AG, Staefa ZH, CH
5.00 p.m.	MEMS Sensors For Medical Applications	Vassilis Grammatikakis, THEON Sensors, Athens, GR
5.20 p.m.	Innovative Sensing Solutions for Medical Applications	Dr. Adriano Pittarelli, Sensortech GmbH, Puchheim, DE

Friday, November 16

Session:

Electronic Manufacturing Services (EMS)

Session chair: Mona Okroy,
IVAM Microtechnology Network, Dortmund, DE

10.30 a.m.	Parylene: Biocompatible Barrier Protection for Medical Electronic Devices	Lonny Wolgemuth, Specialty Coating Systems, Indianapolis/Indiana, US
10.50 a.m.	Manufacturing Services for Communications Interfaces - Know-how in the Integration of Communications Technologies	Matthias Keith, Leesys - Leipzig Electronic Systems GmbH, Leipzig, DE
11.10 a.m.	Electronics And Traceability For Medical Systems	Frank Unland, Lacroix Electronics GmbH, Willich, DE

Session:

Microfluidic Enabled Innovation in Diagnostics

Session chair: Dr. Holger Becker,
microfluidic ChipShop GmbH, Jena, DE

12.00 a.m.	Microfluidic Enabled Innovation in Diagnostics – Promises & Reality	Dr. Holger Becker, microfluidic ChipShop GmbH, Jena, DE
12.10 a.m.	Detection of Nucleic Acid Amplicons by Lateral Flow in an Integrated, Commercially Available Development Platform	Dr. Brendan O'Farrell, DCN, Carlsbad, California, US
12.30 a.m.	Microfluidic Systems for the Investigation of Cellular Properties and Behavior	Vivienne Williams, Cellix Limited, Dublin, IE
12.50 a.m.	Low Cost Disposable Integrated Microsystem for Detection of Proteins and Nucleic Acids	Dr. Thanos M. Demiris, micro2gen Ltd, Athens, GR
1.10 p.m.	Multisense Chip – A flexible Microfluidic Platform for Enzyme Assays	Dr. Claudia Gärtner, microfluidic ChipShop GmbH, Jena, DE
1.30 p.m.	Spintronics for Single Cell Detection in Whole Blood	Dr. Oliver Hayden, Siemens, Erlangen, DE
1.50 p.m. - 3.00 p.m.	Hands on Test & Discussion: Live Demo of Systems and Components	Dr. Holger Becker, microfluidic ChipShop GmbH, Jena, DE Dr. Brendan O'Farrell, DCN, Carlsbad, California, US Vivienne Williams, Cellix Limited, Dublin, IE Prof. Dr. Ciara O'Sullivan, University of Rovira I Virgili, Tarragona, ES Dr. Claudia Gärtner, microfluidic ChipShop GmbH, Jena, DE Dr. Oliver Hayden, Siemens, Erlangen, DE