



Congress program



microsys berlin
Micro-Optics and Micro-Optical Systems

Tuesday, 20 March 2012

SESSION 1: OPENING SESSION

9.00-9.20	1.1 Opening – Advanced Integration Technologies for Smart Systems K.-D. Lang, Chairman Fraunhofer-Institut für Zuverlässigkeit und Mikrointegration IZM, Berlin
9.20-9.40	1.2 Greetings: N. Zimmer, Permanent Secretary in the Senate Department for Economics, Technology and Research, Berlin
9.40-10.10	1.3 Key Note: Technique and equipment trends in high accurate device assemblies G. Kürbis, FINETECH GmbH & Co. KG, Berlin
10.10-10.40	1.4 Key Note: Microintegrated Diode Laser Systems for Displays, Communication and Spectroscopy G. Tränkle, Ferdinand-Braun-Institut, Leibniz-Institut für Höchstfrequenztechnik, Berlin
10.40-11.10	Coffee break

SESSION 2: PHOTONIC COMPONENTS I – DIODE LASERS

Moderation: G. Erbert, Ferdinand-Braun-Institut, Leibniz-Institut für Höchstfrequenztechnik, Berlin	
11.10-11.20	G. Erbert Ferdinand-Braun-Institut, Leibniz-Institut für Höchstfrequenztechnik, Berlin
11.20-11.40	2.1 Towards high optical power nitride laser emitters P. Perlin, S. Stańczyk, Institute of High Pressure Physics, Warsaw P. Wisniewski, M. Leszczyński, TopGaN Ltd., Warsaw M. Zajac, Ammono Ltd., Warsaw
11.40-12.00	2.2 Tapered diode laser modules for flying-spot display applications G. Blume, D. Feise, C. Kaspari, A. Sahm, B. Eppich and K. Paschke, Ferdinand-Braun-Institut, Leibniz-Institut für Höchstfrequenztechnik, Berlin C. Kaspari, LayTec AG, Berlin
12.00-12.20	2.3 Compact Customized ns Light Pulse Sources with Butterfly Housing and Integrated Electronics A. Klehr, Th. Hoffmann, A. Liero, S. Schwertfeger, H. Wenzel, G. Erbert, G. Tränkle, Ferdinand-Braun-Institut für Höchstfrequenztechnik, Berlin
12.20-12.40	2.4 AlxGa1-xN for Custom-made Photodetectors from UVA to UVC A. Knigge, M. Brendel, F. Brunner, S. Einfeldt, A. Knauer, M. Weyers, Ferdinand-Braun-Institut, Leibniz-Institut für Höchstfrequenztechnik, Berlin
12.40-1.00	2.5 Miniaturized, current-tunable, external cavity diode laser with single-mode emission and a narrow line-width at 633 nm A. Bawamia, B. Sumpf, G. Blume, B. Eppich, A. Ginolas, S. Spießberger, M. Thomas, G. Erbert, Ferdinand-Braun-Institut, Leibniz-Institut für Höchstfrequenztechnik, Berlin
1.00-1.30	Coffee break

Congress program



microsys berlin
Micro-Optics and Micro-Optical Systems

SESSION 3: PHOTONIC COMPONENTS II – APPLICATIONS SILICON PHOTONICS (JOINT SESSION WITH ITG-PKM)

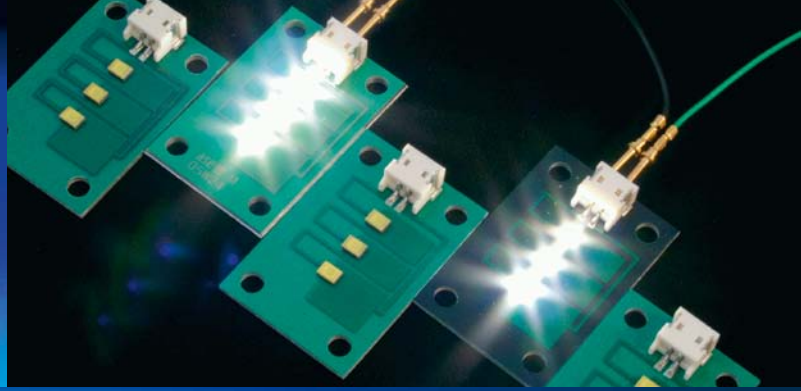
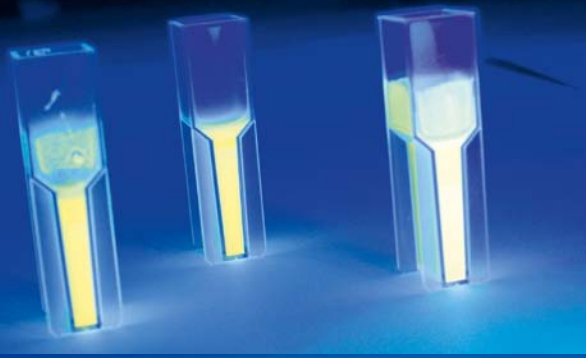
Moderation: U. H. P. Fischer-Hirchert, University of Applied Sciences Harz, Wernigerode

1.30-1.40	U. H. P. Fischer-Hirchert University of Applied Sciences Harz, Wernigerode
1.40-2.00	3.1 Silicon Nanophotonics and Photonic Wire Bonding: Technologies for Terabit/s Interconnects C. Koos, Institut für Photonik Quantenelektronik des KIT
2.00-2.20	3.2 Polymeric optical micro-ring resonators for bio-sensorical applications R. Landgraf, Fraunhofer Institute for Photonic Microsystems
2.20-2.40	3.3 Research about CMOS-compatible light emitting devices for integrated Si-photonics M. Kittler, Joint lab IHP / BTU Cottbus
2.40-3.00	3.4 Merging Plasmonics and Silicon Photonics Technology towards Tb/s routing in optical interconnects T. Tekin, Technische Universität Berlin
3.00-3.20	3.5 Silicon Photonics System Integrated by Ultra High Precision Photonic Packaging Techniques H. Schröder, Fraunhofer-Institut für Zuverlässigkeit und Mikrointegration IZM, Berlin
3.20-3.30	Conclusion Chair ITG 5.4.1 Andreas Umbach
3.30-4.00	Coffee break

SESSION 4: PHOTONIC PACKAGING

Moderation: K.-D. Lang, Fraunhofer-Institut für Zuverlässigkeit und Mikrointegration IZM, Berlin

4.00-4.10	K.-D. Lang, Fraunhofer-Institut für Zuverlässigkeit und Mikrointegration IZM, Berlin
4.10-4.30	4.1 Prototype Packaging of Components with 100 GHz RF and Optical Connections Ö. Karpuzi, Fraunhofer-Institut für Nachrichtentechnik, Heinrich-Hertz-Institut, Berlin
4.30-4.50	4.2 Development and Packaging of Organic Microdisplay on 200 mm wafer Ch. Schmidt, K. Fehse, B. Richter, R. Herold, U. Vogel, Fraunhofer-Institut für Photonische Mikrosysteme IPMS, Institutsteil Center for Organic Materials and Electronic Devices Dresden (COMEDD), Dresden
4.50-5.10	4.3 Optical Transceiver on Polymer Integration Platform Z. Zhang, D. de Felipe Mesquida, W. Brinker, J. Wang, C. Zawadzki, N. Keil, N. Grote, Fraunhofer-Institut für Nachrichtentechnik, Heinrich-Hertz-Institut, Berlin
5.10-5.30	4.4 Dielectric Elastomer Actuators for Integration in Photonic Systems M. Heimann, H. Schröder, Fraunhofer-Institut für Zuverlässigkeit und Mikrointegration IZM, Berlin G. Kofod, R. Waché, University of Potsdam B. Kusmaul, Björn, H. Krüger, Fraunhofer-Institut für Angewandte Polymerforschung IAP, Potsdam
5.30-7.30	Get-together



Congress program



microsys berlin
Micro-Optics and Micro-Optical Systems

Wednesday, 21 March 2012

SESSION 5: LED AND SYSTEM INTEGRATION

Moderation: M. Kneissl, Ferdinand-Braun-Institut, Leibniz-Institut für Höchstfrequenztechnik, Berlin

10.00-10.10	M. Kneissl Ferdinand-Braun-Institut, Leibniz-Institut für Höchstfrequenztechnik, Berlin
10.10-10.30	5.1 Waferlevel Assembly of Micro-Optical Components for Volume Production J. Kubelka, ArgoTech a.s., Trutnov J-R. Kropp, InBeCon GmbH, Berlin
10.30-10.50	5.2 Development of an Integrated Camera System with an Algorithmically Implemented Lens R. Utz, L. van Hemmen, Technische Universität München, Physik Department, Garching A. Hilgarth, E. Jung, K-D. Lang, Fraunhofer-Institut für Zuverlässigkeit und Mikrointegration IZM, Berlin
10.50-11.10	5.3 Advanced Packaging Technologies for Ultra-High Brightness LED R. Jordan, Fraunhofer-Institut für Zuverlässigkeit und Mikrointegration IZM, Berlin
11.10-11.30	5.4 Design, Dimensioning and Characterization of an UV- LED Radiant Source with Primary Optics N. Morgenbrod, OSRAM P. Rotsch, R. Schubert, S. Herold, H.Zeng, OSA Opto Light GmbH, Berlin R. Zhytnytska, Ferdinand-Braun-Institut, Leibniz-Institut für Höchstfrequenztechnik, Berlin
11.30-11.50	5.5 Efficiency Optimization and Chip Design of UV-A- and UV-B-LEDs S. Einfeldt, A. Knauer, V. Kueller, Ferdinand-Braun-Institut, Leibniz-Institut für Höchstfrequenztechnik, Berlin N. Lobo, T. Kolbe, J. Stellmach, Institute of Solid State Physics, Technische Universität Berlin, Berlin
11.50-12.30	Coffee break

SESSION 6: OPTICAL METROLOGY

Moderation: D. Oberschmidt, Fraunhofer-Institut für Produktionsanlagen und Konstruktionstechnik IPK, Berlin





12.30-12.40	D. Oberschmidt Fraunhofer-Institut für Produktionsanlagen und Konstruktionstechnik IPK, Berlin
12.40-1.00	6.1 Ultra Precision Machine Integrated Shape Measurement of Specular Freeforms by Phase Shifting Deflectometry E. Uhlmann, M. Kurz, Institute for Machine Tools and Factory Management, Technische Universität Berlin G. Häusler, C. Faber, E. Olesch, C. Röttinger, Institut für Optik, Information und Photonik (IOIP), Universität Erlangen-Nürnberg, Erlangen
1.00-1.20	6.2 Miniaturized SPR-system for point-of-care diagnostics E. Uhlmann, C. Hein, L. David, Institute for Machine Tools and Factory Management, Technische Universität Berlin D. Oberschmidt, A. Spielvogel, Fraunhofer-Institut für Produktionsanlagen und Konstruktionstechnik IPK, Berlin J. Langbein, Institut für Biotechnologie, Technische Universität Berlin
1.20-1.40	6.3 Integrated Measuring for IPS² in the Micro Production E. Uhlmann, C. Gabriel, C. Stelzer, Institute for Machine Tools and Factory Management, Technische Universität Berlin
1.40-2.00	6.4 Calibration source as used in the MERTIS spectrometer / radiometer for exploring planet Mercury during the ESA Mission BepiColombo G. Wahnschaffe, Astro- und Feinwerktechnik Adlershof GmbH, Berlin
2.00	End of the congress

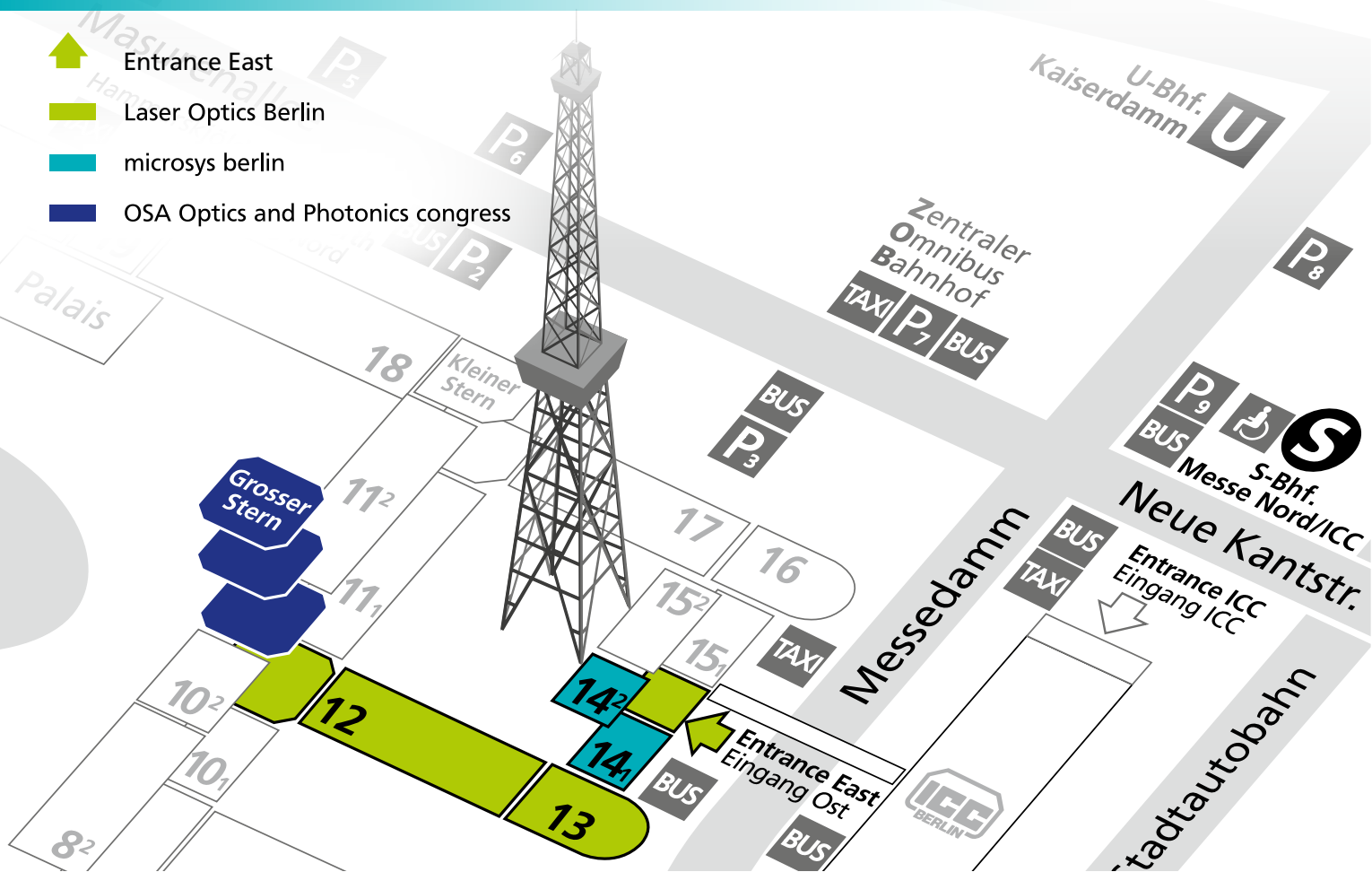


Important dates



microsyst berlin
Micro-Optics and Micro-Optical Systems

-  Entrance East
-  Laser Optics Berlin
-  microsyst berlin
-  OSA Optics and Photonics congress



Venue

Hall 14.2, Entrance East

Organizer

TSB Innovationsagentur Berlin GmbH

Co-organizer

Messe Berlin GmbH

Trade fairs

Laser Optics Berlin + microsyst berlin

19–20 March 2012, 10 am–5 pm

21 March 2012, 10 am–4 pm

Day ticket 16 €, reduced ticket €* 5

Unlimited pass 23 €, reduced ticket €* 11

Congress

microsyst berlin congress**

20–21 March 2012

Day ticket € 100, reduced ticket €* 20

Unlimited pass € 180, reduced ticket €* 30

Tickets and registration

Registration and tickets are available in our online ticket shop on: www.laser-optics-berlin.de

The congress language is German with English simultaneous translation.

* reduction for pupils and students

** all congress tickets including trade fair

www.laser-optics-berlin.de