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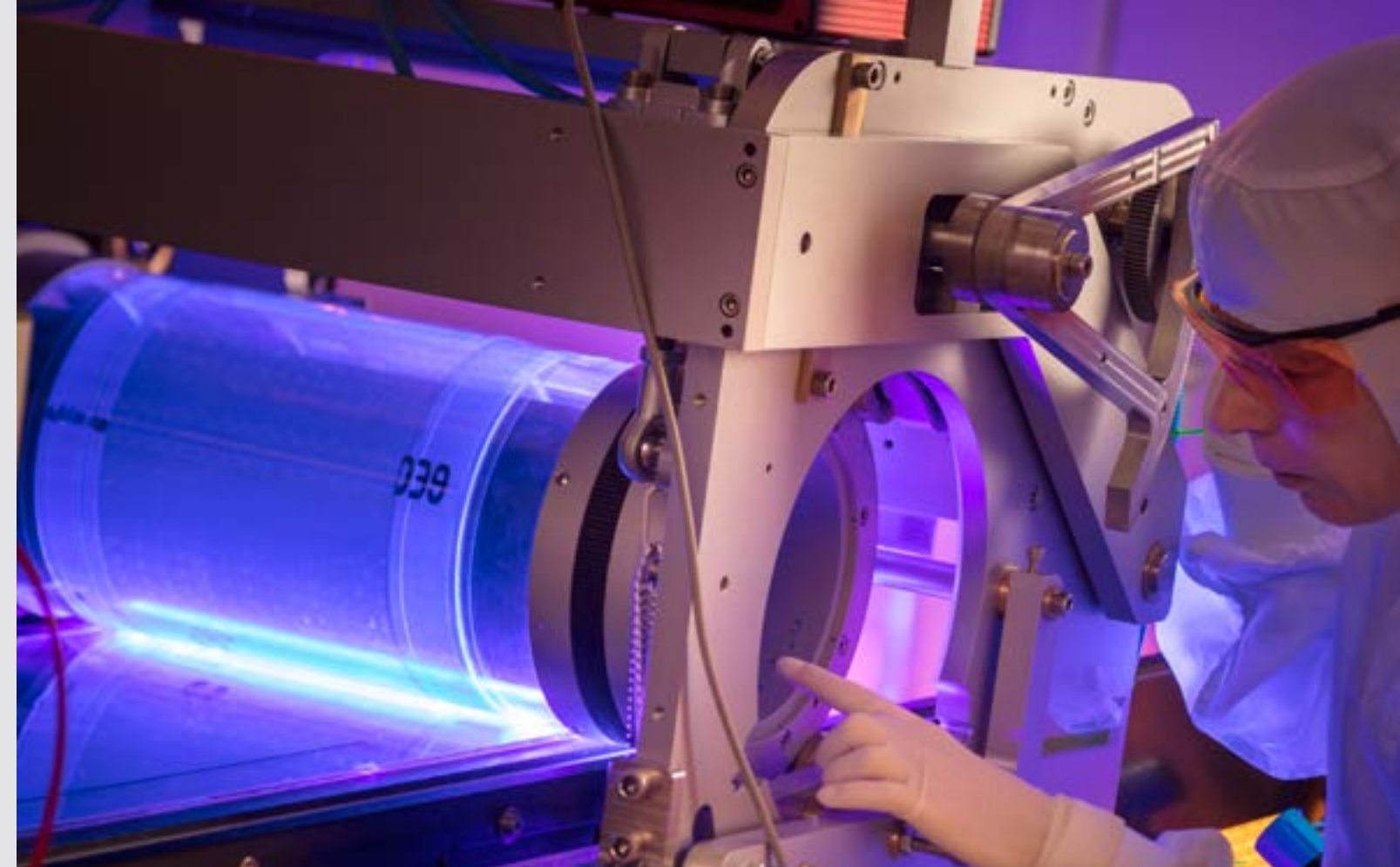
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NILindustrialday

March 08 – 09, 2018

Parkhotel Schönbrunn

Hietzinger Hauptstraße 10-16, 1130 Vienna, Austria



PROGRAM

March 08, 2018

12:30 Opening, welcome & agenda

- Christoph Breitschopf, PROFACTOR
- Gabi Grützner, micro resist technology

12:40 Applications I (Chair: Daniel Fechtig, PROFACTOR)

- 12:40 **High Performance Microbatteries and Biosensors via Nanoimprinting of 3-D Metal Oxide Electrodes**
- James Watkins, University of Massachusetts Amherst
- 13:00 **Metasurface Optical Solar Reflectors Using AZO Transparent Conducting Oxides for Radiative Cooling of Spacecraft**
- Maksim Zalkovskij, NIL Technology ApS
- 13:20 **High hardness and anti-fouling moth-eye structures made by UV-NIL**
- Jun Taniguchi, Tokyo University of Science
- 13:40 **Safe by design bactericidal surfaces via nanoimprinting of surface nanocomposites**
- Isabel Rodriguez, IMDEA Nanoscience

14:00 Networking & Exhibition

14:40 Mastering I (Chair: Michael Hornung, AMO GmbH)

- 14:40 **Fabrication of shallow hydrophobic surfaces using high-resolution grayscale lithography and soft-mold imprint**
- Robert Kirchner, TU Dresden, Institute of Semiconductors and Microsystems
- 15:00 **Towards industrial scaling of non-CMOS applications using 5keV multi-ebeam lithography**
- Marcel van Kervinck , MAPPER Lithography B.V.
- 15:20 **Electron Multi-Beam Mask Writing for leading-edge 193, EUV and NIL Masks**
- Hans Loeschner, IMS Nanofabrication

15:40 Networking & Exhibition

16:20 Equipment (Chair: Anja Haase, Joanneum Research)

- 16:20 **Aurora: High volume production of micro- and nanostructured glass sheets for display applications**
- Bram Titulaer, Morphotonics B.V.
- 16:40 **Challenges and solutions for the industrial production of micro- and nanostructured films and rigid material**
- Wilfried Schipper, temicon GmbH
- 17:00 **High fidelity replication of complex surface structures by SmartNIL**
- Martin Eibelhuber, EV Group (EVG)
- 17:20 **AutoSCIL: status update on tooling, materials and processes**
- Marc Verschurren, SCIL Nanoimprint Solutions

17:40	Closing Day 1
17:50	Walk to the Metro-Station „Hietzing“: Transport to the City Centre for Sightseeing Tours
18:30	<i>Sightseeing Tours</i> <ul style="list-style-type: none">• <i>Imperial Crypt</i>• <i>Stephansdom</i>• <i>Imperial Treasury</i>
20:00	<i>Dinner at restaurant „Labstelle“, (Wollzeile 1, 1010 Vienna) in cooperation with</i>



March 09, 2018

08:00 Networking and Exhibition

08:30 Opening, welcome & agenda

- Michael Mühlberger, PROFACTOR
- Alexander Pogany, bmvit

08:45 Processes and Materials (Chair: Hubert Teyssedre - CEA LETI)

- 08:45 **Step&Repeat UV-NIL for polymer shim fabrication and R2R imprinting of micro-optical structures**
- Anja Haase, Joanneum Research
- 09:05 **Nanoimprint replication of complex and undercut bioinspired nanostructures**
- Michael Mühlberger, PROFACTOR GmbH
- 09:20 **A novel large area NIL concept for superior surface-patterned optics and automotive applications**
- Florian Schlachter, AMO GmbH
- 09:40 **Latest Highlights of Materials and Replication Processes for Industrial Micro-Optics Manufacture**
- Marko Vogler, micro resist technology GmbH
- 10:00 **Determination of the photo curing rate of light curable resins for use in R2R and R2P NIL applications**
- Karlis Petersons, Stensborg A/S

10:20 Networking & Exhibition

11:00 Mastering II (Chair: Helmut Schiff, Paul Scherrer Institute)

- 11:00 **3D grayscale lithography with single nanometer accuracy using the NanoFrazor and its application for Nanoimprint mastering**
- Felix Holzner, SwissLitho AG
- 11:20 **3D Greytone Lithography Using E-Beam and Laser Direct Write for Master Making**
- Holger Sailer, Institut fuer Mikroelektronik Stuttgart (IMS CHIPS)
- 11:40 **Structural colour master stamp (fast and cheap, low-tech high-yield) from Morpho peleides butterfly wings**
- Ille C. Gebeshuber, TU Wien

12:00 Buffet lunch, Networking & Exhibition

13:20 Applications II (Chair: Manuel Thesen, micro resist technology)

- 13:20 **Smart Combination of Nanoimprint Lithography, Nickel Up-plating and Injection Molding for the Manufacturing of Superhydrophobic Plastic Lenses**
- Ilja Czolkos, NIL Technology ApS
- 13:40 **High-Speed Roll-to-Roll Hot Embossing of Micrometer and Sub Micrometer Structures Using Seamless Direct Laser Interference Patterning treated Sleeves for the Fabrication of Advanced Security Elements**
- Bogdan Voisiat, TU Dresden, Institute of manufacturing Science and Engineering
- 14:00 **Nanoimprint lithography for advanced light trapping in photovoltaics**
- Hubert Hauser, Fraunhofer Institute for Solar Energy Systems ISE

14:20 Closing Day 2