

NILindustrialday



March 13 – 15, 2014 OÖ KULTURQUARTIER (Ursulinensaal) OK Platz 1, 4020 Linz (AT)



















NANOIMPRINT LITHOGRAPHY (NIL) APHY (NIL)

... the technology

Large area nanostructuring is one of the main problems in nanotechnology. Nanoimprint Lithography (NIL) provides a versatile and cost efficient solution to achieve ultra high quality, large area nanostructures. In all variants of NIL, a nanostructured stamp is brought into contact with the substrate, resulting in a pattern transfer. Well known variants of NIL are hot embossing, UV-based nanoimprint lithography (UV-NIL) and micro- or nano-contact printing (μ -/n-CP).

NILAUSTRIA

... the project

The idea behind NILaustria was to advance NIL by using it for various applications in basic as well as applied research and also addressing bottlenecks. The use of NIL for different processes and purposes led to improvements of its performance and its possibilities to find a large range of industrial uses. With nanotechnology on the brink of its full commercial impact NIL could be the essential tool to make its full potential available and NILaustria supplies the necessary input.

The project cluster NILaustria was funded by the Austrian Federal Ministry for Transport, Innovation and Technology within the Austrian Nanoinitiative (www.nanoinitiative. at). More information on the individual projects and the project consortium can be found on this webpage: www.nilaustria.at

For companies interested in NIL and in NILaustria there is the possibility to join the Business Interest Group (BIG). Members of this group will be informed at first hand of the non-confidential results of the projects and can contribute their views and ideas. Yearly meetings are organized where NILaustria members and members of the BIG exchange their ideas and views. The last BIG meeting takes place at March 13 in the morning. To join the BIG, in order to be able to attend the last BIG meeting, please contact iris. bergmair@profactor.at.

THE NIL INDUSTRIAL DAY INDUSTRIAL DAY

... the event

In March 2013 the NILindustrialday was hosted by PROFACTOR, the coordinator of the NILaustria project cluster, as the succeeding event of NaPaNil Industrialday for the first time. Since the NILaustria projects will present their results in March 2014, PROFCATOR takes the opportunity and hosts the NILindustrialday 2014 again.

The international symposium will start on Thursday, March 13, 2014 after lunch-time. The lectures will finish on Friday, March 14 after lunch. The scientific part will be followed by social activities (at Friday afternoon visit of voestalpine Stahlwelt in Linz and at Saturday, 15 March skiing in the mountains south of Linz).

The program will provide ample opportunities to share ideas and discuss technical and process details related with NIL. Internationally recognized experts will discuss highlights and trends by oral presentations of the latest R&D results. The dialogue between R&D and industrial people will be stimulated through a small industrial exhibition and workhops for in depth discussions of relevant NIL issues as well as initiation of further business cooperations.

The agenda covers all relevant facts, ranging from NIL materials, NIL equipment, all major imprint processes to business-relevant applications: The use of NIL in electronics industry is well known, however NIL is leaving academics and becoming commercially relevant in further business areas. We are presenting both, the state of research and possible commercial use of NIL e.g. in optics and life sciences.

PROGRAM*

March 13, 2014

NILindustrialday (part 1)								
12:00	Registration							
13:45	Opening, welcome & agenda - M. Mühlberger, PROFACTOR - G. Grützner, micro resist technology - A. Freudensprung, ecoplus - A. Pogany, BMVIT							
14:00	Session I - H. Scheer, University Wuppertal - J. Harming, EV Group - T. Nielsen, NIL Technology ApS - I. Bergmair, PROFACTOR							
15:05	Break							
15:45	Workshops 1 – 3 Large-area stamps Chair: M. Mühlberger, PROFACTOR Materials for NIL Chair: H. Schift, PSI NIL for Additive Manufacturing Chair: I. Bergmair, PROFACTOR							
17:15	Break							
17:45	Session II N. Kehagias, ICN Barcelona R. Kirchner, PSI F. Guillemot, Saint Gobain							
19:00	Closing Day 1							
19:45	Dinner at restaurant Pöstlingbergschlössl							

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NILindustrialday (part 2)								
08:30		Opening, welcome & agenda M. Mühlberger, PROFACTOR						
08:40	Session III - C. Peroz, aBeam - molecu - M. Thesen, micro resist te - J. Law, IMRE - a*star - J.C. Cau, Innopsys - T. Tanaka, Asahi Kasei							
10:10	Break							
10:30	Workshops 4 – 6 Nano injection molding NIL for Life Sciences NIL roadmap	Chair: M. Rohn, PROFACTOR Chair: G. Bauer, Sony DADC Chair: M. Mühlberger, PROFACTOR						
12:00	Buffet lunch by restaurant U.HOF							
13:00	Session IV - A. Schleunitz, micro resist - F. Wippermann, Fraunhofe - S.Y. Chou, Princeton Unive	r IOF						
14:30	Closing Day 2							

Social activities

On-site visit March 14, 2014

15:00 voestalpine Stahlwelt

19:00 Dinner at restaurant Schlossbrasserie

Skiing *March 15, 2014*

08:00 Transfer to ski area 09:00 Skiing Hinterstoder 17:30 Transfer back to Linz

^{*} the content is subject to change

ORGANIZER ZER

Z SOLYCLOS

PROFACTOR is a private, applied research company with headquarters in Steyr and Vienna which researches and developes industrial production technologies. PROFACTOR acts as an interface between science and business. Since 1995 in more than 1,240 projects PROFACTOR has demonstrated what can be created with applied production research. More than 400 customers in more than 1,240 projects have trusted PROFACTOR so far – from small businesses to enterprises.

Profactor GmbH
Functional surfaces and nanostructures
DI Dr. Michael Mühlberger

PROFACTOR coordinates the NILaustria

Im Stadtgut A2

cluster.

A-4407 Steyr-Gleink

www.profactor.at

micro resist technol

micro resist technology develops, produces and supplies materials for microelectronic devices, semiconductor devices and MEMS products including polymers for Nanoimprint Lithography. The customer services range from lithographic patterning of customers' substrates to the on-site introduction of its products into production. mrt has distribution contracts for European countries with DOW Electronic Materials (USA), MicroChem Corp. (USA), and DuPont (USA).

micro resist technology GmbH Dipl.-Chem. Gabi Grützner Koepenicker Str. 325 D-12555 Berlin www.microresist.de

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Registration and Fees

Information on registration is available on the conference website.

The registration form should preferably be completed online:

www.nil-industrialday.org

Registration fees and included services	Price (excl. 20% VAT) [EUR0]	Registration possible until:	Accommodation	Car parking space	Dinner March 12, 2014 19:00 – open end	BIG meeting March 13, 2014 09:00 – 12:30	Buffett lunch March 13, 2014	NILindustrialday (Part 1) March 13, 2014 13:45 – 19:00	Dinner March 13, 2014 19:45 – open end	NILindustrialday (Part 2a) March 14, 2014 08:30 – 12:15	Buffett lunch March 14, 2014	NILindustrialday (Part 2b) March 14, 2014 13:15 - 14:30	On-site visit March 14, 2014 15:00 – 19:00	Dinner March 14, 2014 19:00 – open end	Skiing March 15, 2014 08:00 – 19:00
NILaustria project cluster participant	250,-	Jan 24, 2014	-	-	1	1	1	1	1	1	1	1	-	-	-
BIG member * / VPTÖ member ** (early registration)	290,-	Jan 24, 2014	-	-	1	1	1	1	1	1	1	1	-	-	-
BIG member * / VTPÖ member ** (late registration)	350,-	Feb 22, 2014	-	-	1	1	1	1	1	1	1	1	-	-	-
Regular partici- pants (early registration)	350,-	Jan 24, 2014	-	-	-	-	-	1	1	1	1	1	-	-	-
Regular participants (late registration)	390,-	Feb 22, 2014	-	-	-	-	-	1	1	1	1	1	-	-	-
Students	150,-	Feb 22, 2014	-	-	-	-	-	1	1	1	1	1	-	-	-
Plenary speakers	0,-	Jan 24, 2014	-	-	1	-	1	1	1	1	1	1	-	-	-

^{*} please find more information about the NILaustria Business Interest Group (BIG) here; www.nilaustria.at/300.0.html

Travel information

OÖ KULTURQUARTIER (Ursulinensaal), OK Platz 1, 4020 Linz (AT)

VTRAIN

Exit Linz main railway station. To reach the conference venue (OÖ Kulturquartier) take the tram 1, 2 or 3 to the station "Mozartkreuzung". The conference venue is located approximately 200 m after the tram station on the right side. Please take the entrance at OK Platz 1.

>> Train schedul

PLANE

Arrival at >> Linz Airport:

Distance: ~ 13 km

Either you take a taxi: ~ 25 min. or the public bus number 601, change at the train station to tram 1.2 or 3:

- ~ 30min. Exit "Mozartkreuung"
- >> Train and Bus schedule

YCAR

Follow roadway A7, take exit "Hafen". Distance: ~ 2,5 km Follow the main street "Untere Donaulände" to the center, turn left into "Dametzstraße". The conference venue is located on the right-hand side after about 600 m. An indoor parking space is available, named "Zentrum-Garage" (address: Dametzstr. 34-36).

>> Google Maps

Imprint

Overall coordination
PROFACTOR GmbH
Functional Surfaces and Nanostructures

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^{**} please find more information about VPTÖ here: www.vptoe.at