



# NILindustrialday

March 10 – 11, 2016

# Arcotel Wimberger

Neubaugürtel 34 - 36, 1070 Vienna (AT)



*micro resist  
technology*



# NANOIMPRINT LITHOGRAPHY (NIL)

... the technology

Large area nanostructuring is one of the main challenges 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 ( $\mu$ -/n-CP).



# THE NIL INDUSTRIAL DAY

... the event

After a successful event in March 2015 in Berlin, PROFACTOR takes the opportunity and hosts the NILindustrialday 2016 again in Vienna.

The international symposium will start on Thursday, March 10, 2016 after lunch-time. The lectures will finish on Friday, March 11 after lunch. The scientific part will be followed by social activities on the March 10 in the evening. We will enjoy the view over Vienna in the Gigant Ferris Wheel.

The program will provide ample opportunities to share ideas and discuss technical and process details related with NIL. Internationally recognized experts will discuss high-lights and trends and will present their latest R&D results. The dialogue between R&D and industrial participants will be stimulated through a small industrial exhibition and workshops on life sciences and NIL on curved surfaces for in depth discussions as well as initiation of further business cooperations.

The agenda covers impact topics for industrial implementations. We are presenting both, the state of research and in industries as well as news and novel concepts.

# PROGRAM\*

March 10, 2016

NILindustrialday (part 1)

- 11:30 Registration
  - 12:30 **Opening, welcome & agenda**
    - M. Mühlberger, PROFACTOR
    - G. Grützner, micro resist technology

12:40 What's new?

- M. Rommel, Fraunhofer IISB
  - H. Lee, Korea University
  - A. Kirstensen, DTU Nanotech
  - Y. C. Lee, Natl. Cheng-Kung, Taiwan University
  - S. Chou, Princeton University

14:20 Break

15:00 Imprint and Functional Materials

- M. Vogler, micro resist technology
  - M. Karppinen, VTT Technical Research Centre of Finland
  - J. Watkins, University of Massachusetts
  - B. Stadlober, Joanneum Research - Materials
  - K. Munechika, aBeam Technologies
  - T. Ruhl, temicon GmbH

16:30 Break

17:15 Industrial Implementation/Foundries

- H. Zaglmayr, EVG Group
  - M. Verschurren, Philips Group Innovation, Intellectual Property & Standards
  - T. Nielsen, NIL Technology ApS
  - B. Heidari, Obducat
  - K. Chong, IMRF - A\*STAR

18:30 Closing Day 1

19:30 Ride with *The Vienna Giant Ferris Wheel*

20:00 *Dinner at restaurant Stadtgasthof Eisvoegel*

March 11, 2016

NILindustrialday (part 2)

- 08:25 Opening, welcome & agenda
    - M. Mühlberger, PROFACTOR
  - 08:30 **3D / Additive Manufacturing**
    - H. Schift, Paul Scherrer Institut
    - S. Howitz, GeSiM GmbH
    - M. Mühlberger, PROFACTOR
    - M. Papenheim, University Wuppertal
    - D. Colle , Heidelberg Instruments
    - F. Holzner, SwissLitho
    - M. Guttmann, Karlsruhe Institute of Technology

10:15 Break

## 10:45 *Discussion Sessions (parallel)*

Nanostructures for life sciences

- I. Bergmair, Sony DADC Biosciences
  - S. Köstler, Joanneum Research
  - H. Brückl, Donau-Universität Krems
  - J. Dostalek, Austrian Institute of Technology

## NIL on curved surfaces

- M. Mühlberger, PROFACTOR
  - R. van Brakel, Philips Group Innovation, Intellectual Property & Standard
  - H. Yee Low, Singapore University
  - M. Sonne, Technical University of Denmark
  - G. Kofod, Inmold

11:45 Buffet lunch

13:00 Future Visions

- L. Lindvold, Stensborg
  - S. Landis, CFA

13:45 Closing Day 2

\* the content is subject to change

# ORGANIZER



PROFACTOR is a private, applied research company with headquarters in Steyr and Vienna which researches and develops 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 coordinates the NILaustria cluster.

Profactor GmbH  
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micro resist technology develops, produces and supplies materials for microelectronic devices, semiconductors, 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).

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# SPONSORS



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# ADMINISTRATIVE AND GENERAL INFORMATION

## Registration and Fees

Information on registration is available on the conference website

The registration form should preferably be completed online:

[www.nil-industrialday.org](http://www.nil-industrialday.org)

\* please find more information about VPTÖ here: [www.vptoe.at](http://www.vptoe.at)

## Travel information

Arcotel Wimberger, Neubaugürtel 34-36, 1070 Vienna (AT)

BY T.D. AIN

Exit Vienna Meidling railway station. To reach the conference venue (Arco-tel Wimberger) take U6 to stop "Burggasse/Stadthalle" or take to the no. 18 or no. 6 tram from the „Westbahnhof“ and get off at the last stop "Burggasse/Stadthalle" or walk towards "Urban-Loritz-Platz" for five minutes.

BY DR. ANIE

Arrival at >> Vienna Airport:  
Distance: ~ 13 km

Either you take a taxi: ~ 35 min. or take the airport shuttle bus to the Westbahnhof, then change to the no. 18 or no. 6 tram and get off at the next stop "Burggasse/Stadthalle" or walk toward "Urban-Loritz-Platz" for five minutes.

BV CAB

Follow roadway A1, take exit “Wien-Auhof” and continue straight ahead to “Margaretengürtel”, where you turn left following the sign to Prague (Praha). Continue along this street to the Western Railway Station (“Westbahnhof/Stadthalle”) until you see the hotel on the right hand side. (Address: Neubaugürtel 34-36).

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#### Overall coordination

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