



# Welcome to Nanoscribe Headquarters!

Nanoscribe GmbH & Co. KG

Martin Hermatschweiler, CEO & Co-Founder

May 11th, 2022

EPIC Meeting on Advanced Microoptics

# Nanoscribe worldwide in figures



**BiCO**



**3,000+**

system operators

Boston

**1,300+**

publications

Karlsruhe

**35%+**

R&D intensity

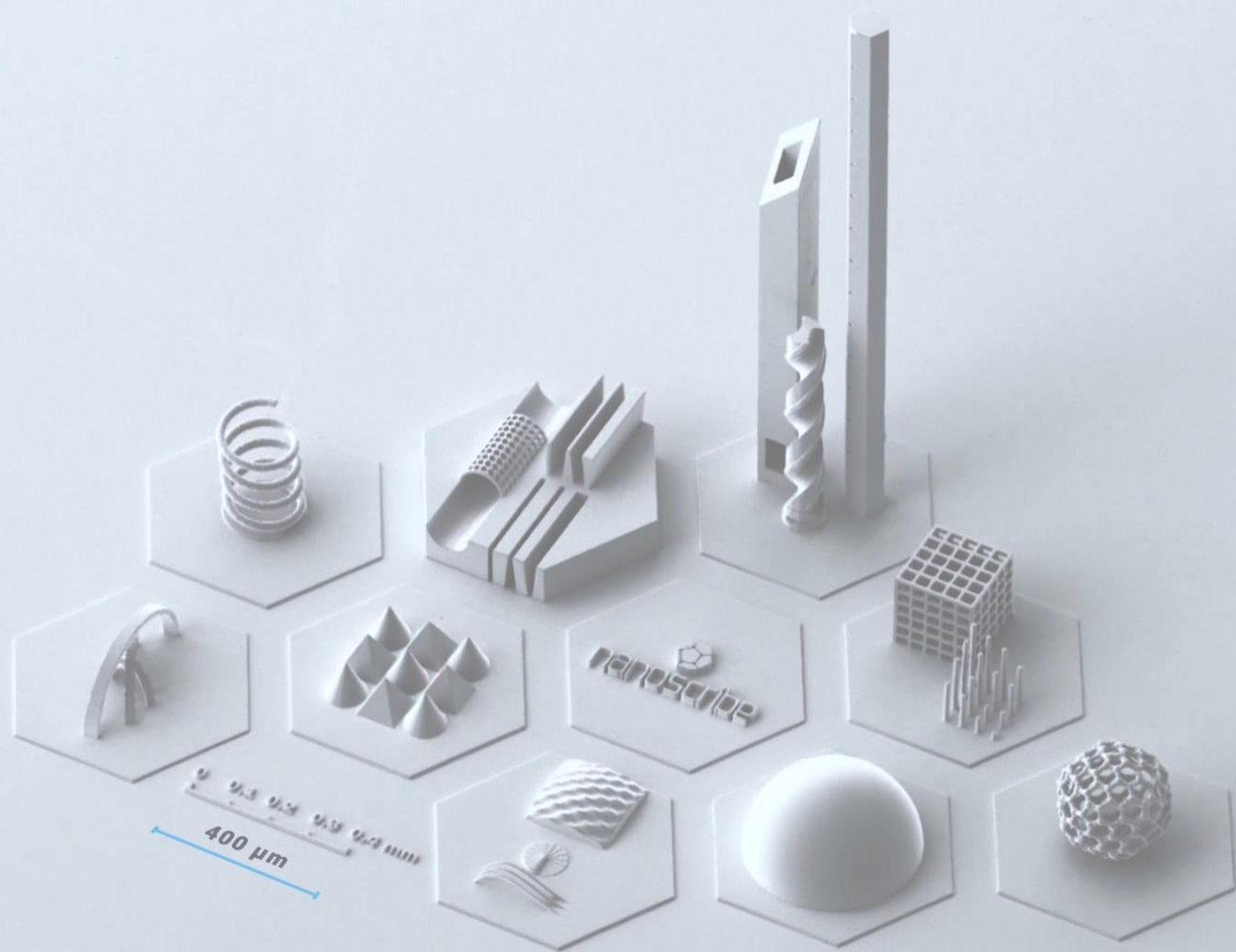
Shanghai

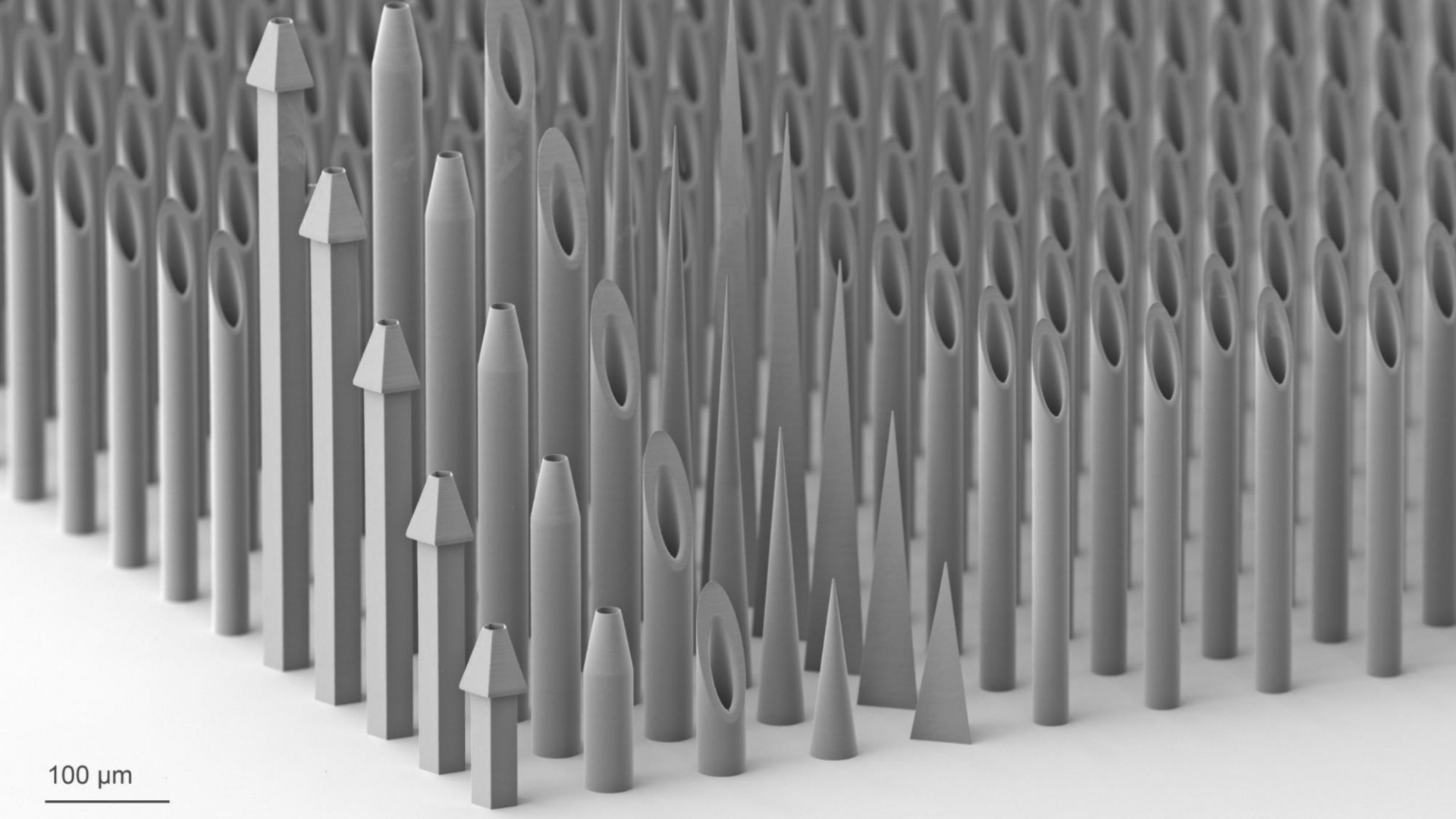
**100+**

employees

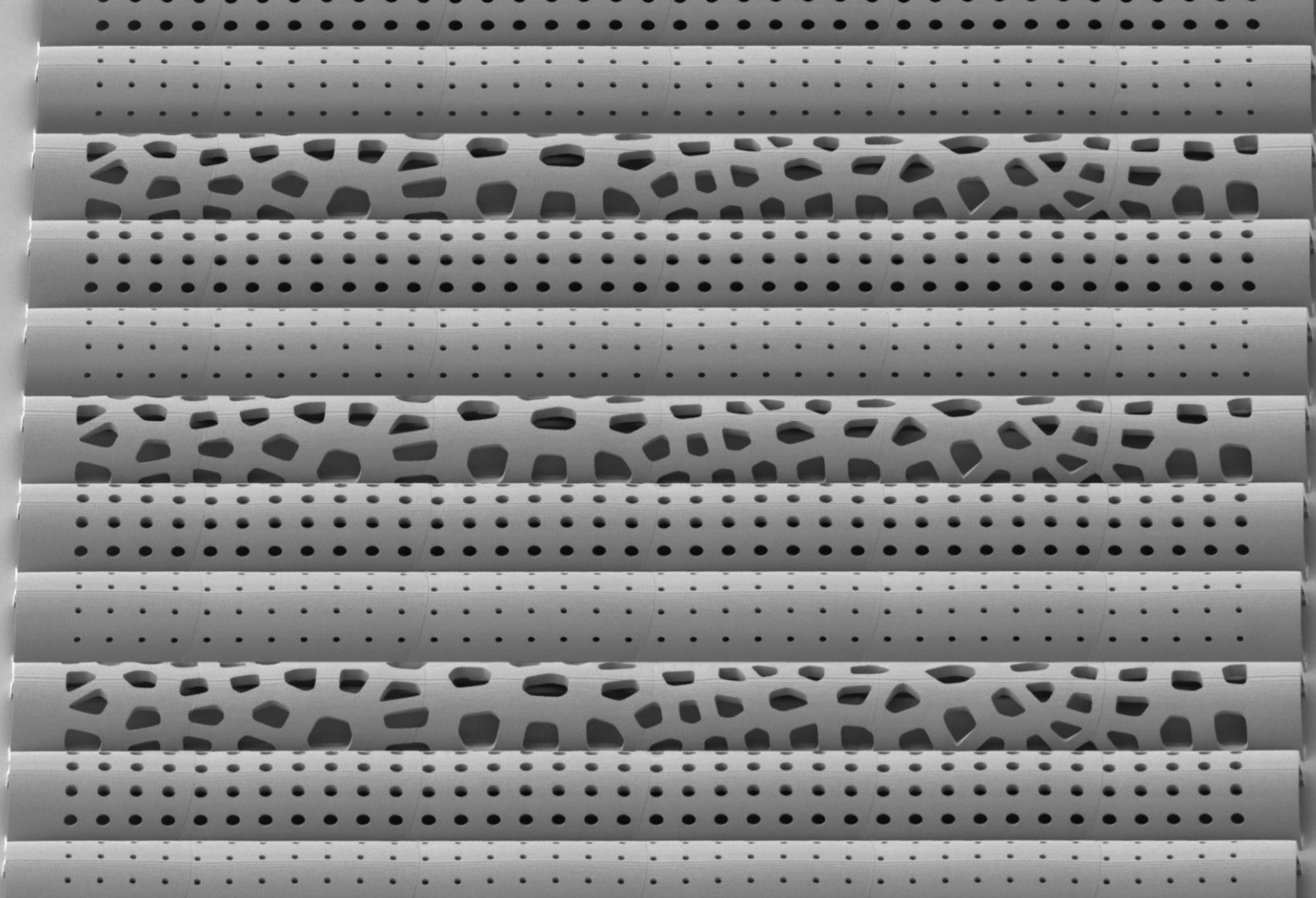
**14+**

years of success

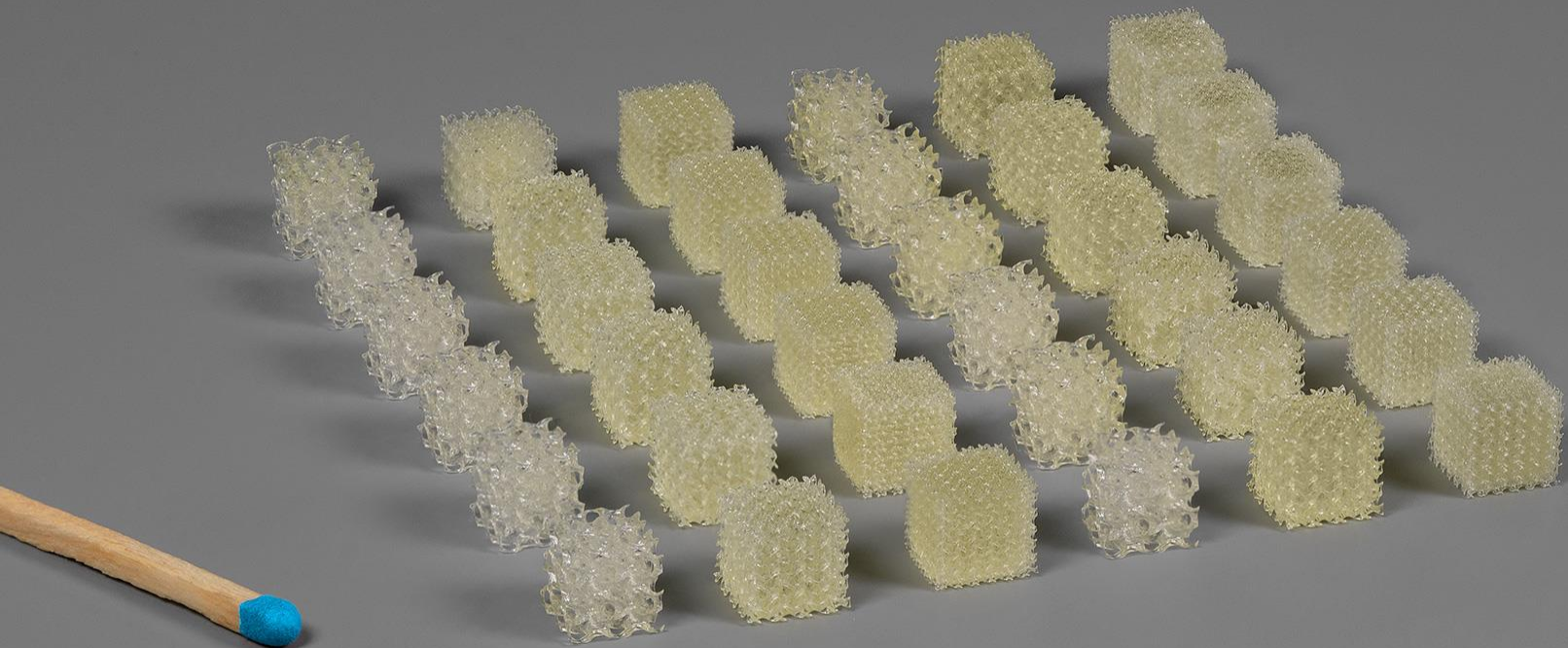




100  $\mu\text{m}$







10 mm

# High Precision Microfabrication Systems Product lines



▶ Quantum X align



New



“Best in class  
3D printer with  
nanoprecision  
alignment system”

▶ Quantum X bio



New

“The world’s  
most accurate  
3D bioprinter”

▶ Quantum X shape



“Fastest and most  
accurate 3D printer  
in class”

▶ Quantum X



“World’s first 2GL<sup>®</sup>  
Two-Photon  
Grayscale  
Lithography system”

▶ Photonic Professional GT2



“The most field-proven  
high-precision 3D printer  
for fundamental  
innovations”



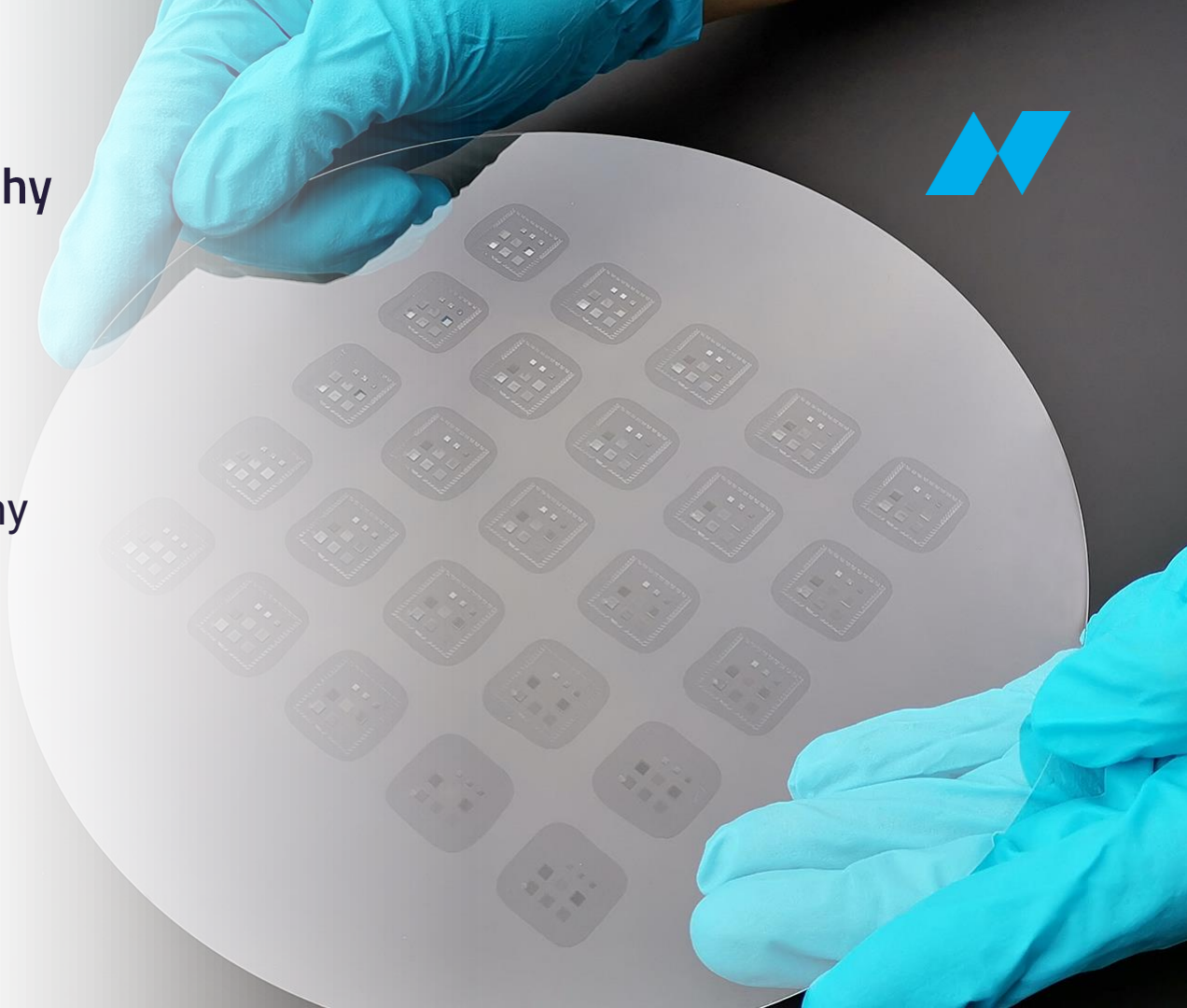
# Photoresins / Biomaterials / Slurries



- ▶ **Open platform** with broad range of own, 3rd party and custom resists
- ▶ Universal & functionalized resins
- ▶ GP-silica for 3D printing of glass microstructures
- ▶ Biocompatible & biodegradable materials incl. hydrogels
- ▶ Low fluorescent material
- ▶ High refractive index material
- ▶ Soft, flexible & elastic material

## Replication processes Nanoimprint Lithography

- ▶ 8" wafer replication
- ▶ Nanoimprint lithography
- ▶ Produced by our partner EV Group



## Replication processes

### Injection Molding

- ▶ Beam homogenizer
- ▶ Injection molded replica
- ▶ Sprue and runner still attached
- ▶ Produced by our partner kdg



# Printed optics on fiber tips



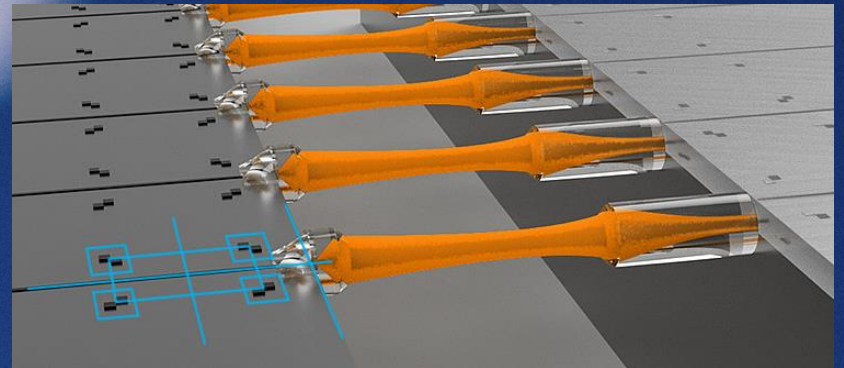
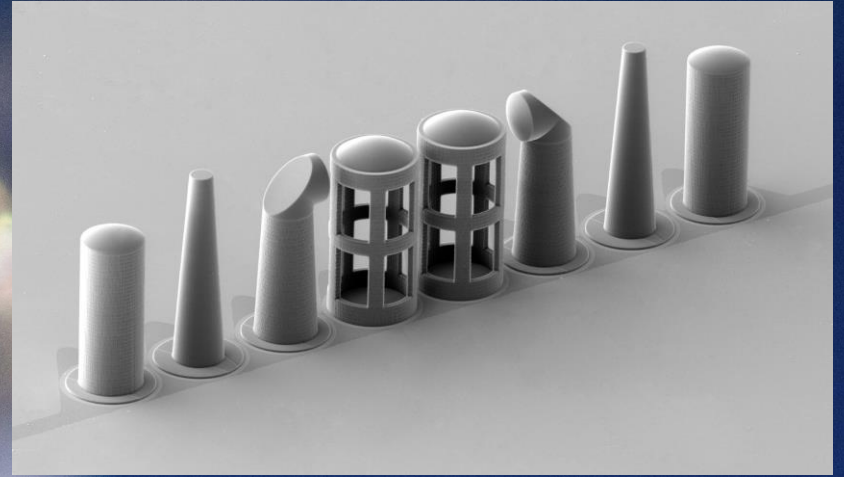
- ▶ Printoptix as spin-off company from University of Stuttgart
- ▶ Design & manufacturing of micro-optical systems custom-made
- ▶ Examples:
  - miniature endoscope objectives on imaging fibers
  - Microprojectors with 200  $\mu\text{m}$  diameter on the tip of a fiber
- ▶ [www.printoptix.com](http://www.printoptix.com)



Imaging system with central aperture on the tip of a 160  $\mu\text{m}$  imaging fiber.

# Quantum X align

Connect to the photonic world





Thanks for being with us!



Join our company visit  
Thursday, 14:00-15:30

