

# Nordic Nanolab Network Webinar

## Maskless Aligner Systems (MLA)

10 – 11 May 2021

*Registration deadline: 9 May 2021*

*The Nordic Nanolab Network invites all users to its first topical webinar with four tutorials on maskless aligner systems*

### **MONDAY 10 MAY: 09:00 – 10:00: BASIC OPERATION OF MLA TOOLS**

Chair Leif S. Johansen DTU Nanolab. Presenter: Jens Hemmingsen DTU Nanolab

- Principle of operation
- From design to pattern
- Alignment modes

**10:00 – 10:30 DISCUSSION – PLEASE USE THE Q&A TAB**

### **10:30 – 11:30: ADVANCED FEATURES AND POSSIBILITIES OF MLA TOOLS**

Chair Leif S. Johansen DTU Nanolab. Presenter: Jens Hemmingsen DTU Nanolab

- Advantages/limitations: Conversion PC, write modes, high aspect ratio (add-on features)
- Tradeoffs during specification and purchasing
- Optical proximity correction (OPC)

**11:30 – 12:00 DISCUSSION – PLEASE USE THE Q&A TAB**

### **TUESDAY 11 MAY: 09:00 – 10:00: GREY SCALE LITHOGRAPHY**

Chair Peter Köllensperger NorFab NTNU. Presenter Jens Høvik, NorFab NTNU

- Fundamental grey scale lithography
- "Mask" preparation
- Grey scale lithography on MLA 100 and 150
- Post processing: reflow etc.

**10:00 – 10:30 DISCUSSION – PLEASE USE THE Q&A TAB**

### **10:30 – 11:30: BEYOND MLA**

Chair, Ivan Maximov Myfab Lund

- Block Copolymer Lithography, BCP, Presenter Ivan Maximov Myfab Lund
- Displacement Talbot Lithography, DTL. Presenter Sarah McKibbin, Myfab Lund
- Adhesion lithography. Presenter Sihai Luo, NorFab NTNU
- Cross exposure with dipole illumination using DUV stepper. Presenter Matthias Keil, DTU Nanolab

**11:30 – 12:00 DISCUSSION – PLEASE USE THE Q&A TAB AND WRAP-UP**