3rd Thermal Probe Workshop
Program

Thursday, 21st January 2016

09.00	**Registration**	
09.30 – 10.50	**Session I**	*Chair: Felix Holzner*
09.30 – 09.40	**Welcome** Organizers	
09.40 – 10.10	**Nanofabrication at Age 55 – strong as ever** Dieter Kern, University of Tübingen	
10.10 – 10.30	**Single nanometer lithography in 2D and 3D using heatable scanning probes** Colin Rawlings, IBM Research Zurich	
10.30 – 10.50	**Lift-off Processes for Thermal Scanning Probe Lithography** Simon Bonanni, SwissLitho	
10.50 – 11.20	Break, coffee & snacks – Poster session	
11.20– 12.50	**Session II**	Chair: *Stefan Weber*
11.20 – 11.50	**Scanning Probe Microscope as a Lab on an Instrument for Industrial application** Hamed Sadeghian, TNO Delft	
11.50 – 12.10	**Towards the MultiTip NanoFrazor** Emine Cagin, NTB Buchs	
12.10 – 12.30	**Towards sub-10 nm nodes by EUV lithography** Tero Kulmala, Paul-Scherrer Institute	
12.30 – 12.50	**Next Generation of Maskless Lithography** Theophane Besson, Heidelberg Instruments	
12.50 – 14.00	**Lunch**	*Technopark Cafeteria*
14.00 – 15.30	**Session III**	Chair: *Philip Paul*
14.00 – 14.30	**Resistless Nanofabrication by Stencil Lithography** Jürgen Brugger, EPFL	
14.30 – 14.50	**PPA as commercial resist for advanced lithography** Felix Holzner, SwissLitho	
14.50 – 15.10	**High aspect ratio nanoscale-to-microscale 3D silicon patterns by thermal scanning probe lithography** Yuliya Lisunova, EPFL	
15.10 – 15.30	**Fabrication of ultra-thin suspended silicon nanowires** Jordi Llobet, IMB-CNM Barcelona	
15.30 – 16.00	Break, coffee & snacks – Poster session	
16.00 – 17.00	**Young Researcher Idea Competition – Award Ceremony** Jury: *Peter Vettiger, Dieter Kern, Nico de Rooij*	
16.10 – 16.20	***Finalist 1:*** **Three-dimensional phase plates for transmission electron microscopy** Simon Hettler (Karlsruhe Institute of Technology)	
16.20 – 16.30	***Finalist 2:*** **Nano security features using fluorescent supramolecular glassy materials** Diederik Balkenende (Adolphe Merkle Institute) & Samuel Zimmermann (EPFL)	
16.30 – 16.40	***Finalist 3:*** **Controlled nanometric recrystallization of amorphized and implanted semiconductors** Matteo Lorenzoni Galizia (IMB-CNM Barcelona) & Jordi Llobet (IMB-CNM Barcelona)	
17.45	**Departure to social evening event at Lindt & Sprüngli** Shuttle service leaves from the main entrance of Technopark	

Friday, 22nd January 2016

08.30	**Registration**

09.00 – 10.30	**Session IV**	Chair: *Armin Knoll*
09.00 – 09.30	**Modulating the electronic properties of 2D materials with thermal probes** Paul Sheehan, U.S. Naval Research Laboratories	
09.30 – 09.50	**Chemical patterning with thermal probes for studying charge binding interaction pertaining to DNA and particle assembly** Urs Dürig, IBM Research Zurich	
09.50 – 10.10	**Nanoparticle Brownian Motors fabricated by Thermal Scanning Probe Lithography** Stefan Fringes, IBM Research Zurich	
10.10 – 10.30	**Scanning probes for directed self-assembly of PMMA/PS based Block-Copolymers** Matteo Lorenzoni Galizia, IMB-CNM Barcelona	
10.30 – 11.00	Break, coffee & snacks – Poster session	

11.00 – 12.30	**Session V**	Chair: *Bernd Gotsmann*
11.00 – 11.30	**Imaging and Understanding Atomic-scale Adhesion and Wear: Quantitative Investigations Using In Situ Electron Microscopy** Tevis Jacobs, University of Pittsburgh	
11.30 – 11.50	**Characterization of NanoFrazor cantilevers** Martin Spieser, SwissLitho	
11.50 – 12.10	**Scanning Probe Thermometry** Fabian Menges, IBM Research Zurich	
12.10 – 12.30	**Accurate measurement of near-field thermal radiation** Roy Bijster, Delft University of Technology	

12.30 – 13.30	**Lunch**	*Technopark Cafeteria*

13.30 – 15.00	**Session VI**	Chair: *Urs Dürig*
13.30 – 14.00	**NanoFrazor in an open access University Nanofab, neuronal manipulations and other AFM applications** Peter Grütter, McGill University	
14.00 – 14.20	**Bacterial traps: simultaneous AFM and fluorescence analysis of bacteria with various shapes** Oliver Peric, EPFL	
14.20 – 14.40	**Direct fabrication and electrical response of thin layer WSe2 nanoscale transistors by oxidation scanning probe lithography** Yu Kyoung Ryu, Instituto de Ciencia de Materiales de Madrid CSIC	
14.40 – 15.00	**Closing remarks** Organizers	

15.00 – open	**Open for meetings and discussions** Self-organisation of any kind of meeting or discussion (several meeting rooms available, please use the blackboard in the conference room for scheduling) Coffee & snacks provided

Location:
Technopark, Zurich
Conference room “Pascal”

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