NNT 2025 Program Schedule

As 10/08/2025

Sunday, October 12

10:00 - 19:00	Conference Registration
15:00 - 17:20	**Exhibit**
17:00 - 19:00	**Wine and Cheese Welcome Reception**

Monday, October 13

07:00 – 09:00	Coffee, Tea, Other Beverages, & Pastries
08:00 - 08:15	**Opening Remarks**
8:15-10:15	**Session 1-A, Plenary-1**
08:15-08:50	**1A-1.** Plenary. **Stephen Y. Chou** (Princeton University, USA), *Birth of Nanoimprint: From Discovery and Invention, Through Rejection, to Transformative Impact* and Beyond
08:50-09:15	**1A-2.** Plenary. **R. Fabian Pease** (Stanford University, USA), *Nanomprint Lithography-An Under-Appreciated Technology*
09:15-9:45	**1A-3.** Plenary. **Grant Willson** (The University of Texas, Austin), *Step and Flash Imprint Lithography: In the Beginning …*
09:45-10:15	**1A-4.** Plenary. **Mike Miller** (Magic Leap, Inc. USA), *From NIL to AR: Magic Leap's Vertically Integrated Path to Scalable Eyepiece Innovation*
10:15-10:45	Coffee Break: Exhibit and Poster Inspection
10:45-12:25	**Session 1-B**
10:45-11:10	**1B-1.** Invited. **Michael Mühlberge (**PROFACTOR GmbH, Austria) *Nanoimprint in Europe: Status and Outlook*
11:10-11:35	**1B-2.** Invited. **Shinji Matsui** (University of Hyogo, Japan) and **Dr. Suzuki** (AIST, Japan), *NEDO's nanoimprint lithography Initiative (Canon, TEL, DNP, Koxia, etc.)*
11:35-12:00	**1B-3** Invited. **Gabi Gruetzner** and **Arne Schleunitz** (MicroResist Technology, GmbH, Germany), *NIL materials – an evolution from lab to fab and from fab to lab*
12:00-12:25	**1B-4.** Invited. **Qiangfei Xia** (The University of Massachusetts, USA), *Nanoimprint Lithography-Enabled Memristor/CMOS Hybrid Integrated Circuits: Implications for Emerging AI Hardware*
12:25 - 13:25	Buffet Lunch at Lawn Provided by Conference

13:25 - 16:00	**Session 1-C**
13:25-13:50	**1C-1.** Invited**.** **L. Jay Guo** University of Michigan University, USA) *The first transistors fabricated by Nanoimprint and beyond, particular structure colors*
13:50-14:15	**1C-2.** Invited. **Matt Colburn** (Former Meta Platforms, Inc. USA), *Nanoimprint tools, process, and tools for AR, meta-optica, and photonics.*
14:15-14:40	**1C-3** Invited. **Xiao-gang Liang** (University of Michigan , USA) *The first Electric Nanoimprint and First Study/Theory of Nanofluidic-Driven Air Bubble Disappearance in Nanoimprint,*
14:40-15:05	**1C-4.** Invirted. **Kehan Tian** (Goeroptics & VP of Alpha Labs, Goertek, China), *Applications of Nano-imprint Lithography in Micro-Nano-Photonics*
15:05-15:30	**1C-5.** Invited. **James J. Watkins (**The University of Massachusetts, USA**)**, *Additive Full wafer Fabrication of All inorganic Metaoptics and AR Waveguides via Hybrid Processing*
15:30-15:55	**1C-6.** Invited. **Mark Thng** (MetaOptics Technologies Pte. Ltd. Singapore), *Meta-Optis and Its Broad Applications,*
15:55-16:20	**1C-7.** Invited**.** **Junsuk Rho** (Pohang University of Science and Technology (POSTECH), Korea), *Optical metasurfaces for imaging, sensing, and display*
16:20-18:20	Coffee Break: Exhibit and Poster Inspection
16:20-18:20	**Session 1-D** **Posters and Exhibition**
18:00	Adjourn for the Day

Tuesday, October 14

07:00 – 09:00	Coffee, Tea, Other Beverages, & Pastries
08:00 – 10:20	**Session 2-A, Plenary Session 2**
08:00-08:30	**2A-1.** Plenery. **Lars Montelius** (Lund University, Sweden), *Early Adoption and Development of Nanoimprint Lithography: From R&D and Applications to Commercialization*
08:30-09:00	**2A-2.** Plenery. **Thomas Glinsner** (EV Group, GmbH, Austria), *From Experimental to Essential: NIL's Evolution in Industry*
09:00-09:30	**2A-3.** Plenery. **Doug Resnick** (Canon, USA and Japan), *Drop-on-Demand NIL for Advanced Semiconductor ICs*
09:30-09:55	**2A-4.** Invited. **S.V. Sreenivasan** (TIE, The University of Taxes at Austin, USA), *TIE (Texas Institute of Electronics) Consortium (UT, Intel, Applied, AMD. etc.) on Nanoimprint and 3D heterogeneous integration (3DHI),*
09:55-10:20	**2A-5.** Invited. **Dr. Céline Chevalier**, (INSA-CNSR, France) and **Dr. Cécile Gourgon** (CNRS-LTM, France), *French Research in Nanoimprint: processes, applications, players*
10:20 - 10:40	Coffee Break: Exhibit and Poster Inspection

10:40 - 12:20	**Session 2-B,**
10:40-11:05	**2B-1.** Invited. **Jun Taniguchi** (Tokyo University of Science, Japan), *Nanoimprint Industrial Applications in Japan*
11:05-11:30	**2B-2.** Invited. **Yifang Chen** (Fudan University, China), *Nanoimprint in China*
11:30-11:55	**2B-3.** Invited. **Theodor Nielsen** and **Kristian Smistrup** (NIL Technology ApS, Denmark) *Nanoimprint Technologies and Applications*
11:55-12:20	**2B-4.** Invited. **Jin Choi** (TIE, The University of Taxes at Austin, USA), *High accuracy overlay for NIL: Development timetable and schemes*
12:20-12:45	**2B-5.** Invited. **David Crosby**, (WaveOptics (Snap Inc.) USA/UK) *Spectacles - Nanoimprinted standalone augmented reality glasses and Snap's vision*
12:45 - 13:20	Buffet Lunch at Lawn, Provided by Conference
13:20 - 15:10	**Session 2-C**
13:20-13:45	**2C-1.** Invited. **Peter R. Krauss** (Seagate,Usa and **Hua Tan** (Nanonex Corp.), *The First Planar and Roller Nanoimprint: Scientific Discovery, Development, and Beyond*
13:45-14:10	**2C-2.** Invited. **Grant Willson, S.V. Sreenivasan, Jin Choi** (The University of Texas at Austin, USA) and **Matt Colburn** (Former Meta Inc., USA,) *Step-and-Flash, Jet-and-Flash, and Molecular Imprints Inc.: Beginnings and Growth*
14:10-14:35	**2C-3.** Invited. **Lundström Patrik** (Obducat, Swenden), *Past, Present and Future - a 30 Year Perspective on NIL*
14:35-15:00	**2C-3.** Invited. **Yong Chen** (Ecole Normale Superieure, France), *The early days of nanoimprint in France*
15:00-15;:25	**2C-4.** Invited. **Helmut Schift** (Paul Scherrer Institute, Switzerland), *The Switz's Early Efforts in Nanoimprint*
15:25-15:50	2C-5. Invited. **Shinji Matsui** (Univ. of Hyogo, Japan), The early days of nanoimprint research in Japan,
15:50 - 16:00	**Conference Photo**
16:00 - 16:20	Coffee Break: Exhibit and Poster Inspection
16:20- 17:10	**30 Years Nanoimprint Awards**
17:10- 18:20	**Expert Panel Discussions:** What's Next
18:30 - 21:30	**Banquet at Marriott**

Wednesday, October 15

07:00 – 09:00	Coffee, Tea, Other Beverages, & Pastries

8:00 - 10:00	**Session 3-A**
08:00-08:25	**3A-1.** Invited. **Yoshihiko Hirai** (Osaka Prefecture University, Japan), *Mechanism of nanoimprinting; from macro scale to molecular scale*
08:25-08:50	**3A-2.** Invited. **Jun Taniguchi and Hiroyuki Sugawara (**Tokyo University of Science, Japan), *Mass-production of anti-reflection film via RTR UV-NIL and various applications*
08:50-09:15	**3A-3.** Invited. **Jim Wang** (NanoNuvo Corporation and former NanoOpto Corp, USA), The *First Nanoimprint Fabrication and Manufacturing of Subwavelength (Meta) Optics and NanoOpto Corp*
09:15-09:40	**3A-4.** Invited. **Prof. Moon Kyu Kwak** (Kyungpook National University, Korea), *Nanoimprint-Enabled Biomimetic Dry Adhesives*
09:40-10:00	**3A-5. Helmut Schift** and **Michael Muehlberger**, *Sustainability Aspects of Nanoimprinting (Paul Scherrer Institute, Switzerland and PROFACTOR GmbH, Austria)*
10:00 - 10:20	Coffee Break
10:20 - 12:10	**Session 3-B**
10:20-10:45	**3B-1.** Invited. **Stella Pang** (City University of Hong Kong, Hong Kong, China), *Three-Dimensional Nanoimprint for Meta Devices, Terahertz Devices, and Biosensors*
10:45-11:10	**3B-2.** Invited. **Han Cao** and **Mike Austin** (Nuco, USA), and **Paru Deshpande (**Life Science Technologies, IMEC, EU) (all former BioNano Genomics, Inc USA), *From first nanoimprint in nanobio devices to IPO,*
11:10-11:35	**3B-3.** Invited. **Keith J. Morton** (Life Sciences Division of the National Research Council Canada (NRC), Canada), *Nanoimprint: Sculpting Plastic for Manufacturing Microfluidic Biosensing Devices,*
11:35-12:00	**3B-4.** Invited. **Doug Resnick** and **J. Alexander Liddle** (Canon, USA and Japan), *An Inkjet-enabled Adaptive Planarization Process*
12:00-12:20	**3B-5. Marc Verschuuren, Ties de Jong, Gert-Jan Hurxkens, Brad Williams, Brid Connolly and Erik Peters,**(SCIL Nanoimprint, Holland), *Direct patterning of inorganic light and temperature stable NIL resist for optical applications*
12:20 - 12:30	**NNT 2026 Announcement**
12:30 - 13:20	Buffet Lunch at Lawn, Provided by Conference
13:20 - 15:30	**Session 3-C**
13:20-13:45	**3C-1.** Invited. **Julien Wu** (EMD Electronics, Merck KGaA), *Winning the Race for Reality: Materials Innovation in AR Waveguides,*
13:45-14:10	**3C-2. Christoph Jurissek, Alexander Plucinski, Mirko Lohse, Martin Messerschmidt, Arne Schleunitz and Gabi Grützner** (MicroResist, Germany), *Recent Advancements in NIL Material Development for Etch Pattern Transfer*
14:10-14:30	**3C-3. Junqiao Wu** and **Jiachen Li** (University of California, Berkeley, USA), *Nanoimprinted Temperature Adaptive Thermal Radiative Coating*

14:30-14:50	**3C-4. Zijie Jiang, Zhao Sun, Zhuofei Gan and Wen-Di Li** (The University of Hong Kong, China)**,** *Twisted Moiré Chiral Emission Source by Nanoimprint-based Fabrication*
14:50-15:10	**3C-5. Takehiro Mitsuda, Keisuke Nagato and Masayuki Nakao** (University of Tokyo), *Effect of size of replicated microstructure on glass flow behavior during laser-assisted direct glass imprinting*
15:10-15:30	**3C-6. Jerome RECHE, Diana Stephany FERNANDEZ-RODAS and Raluca TIRON** (CEA-Leti. France), *Full chain for high-resolution 3D pattern manufacturing through the combination of g-EBL and soft-UV NIL.*
13:20 - 15:30	**Session 3-D**
13:20-13:45	**3D-1.** Invited. **Craig Bandes** (Pixelligent Technologies, LLC, USA) *Novel Imprintable Metal Oxides driving Physical AI + Virtual AI*
13:45-14:10	**3D-2.** Invited. **Dr. Bríd Connolly (**TEKSCEND PHOTOMASK, GMBH, Germany), *Advanced 3D patterning enabling future optical designs,*
14:10-14:30	**3D-3. Wei Wu** (University of Southern California), *Plasmonic Structures with Atomic Precision and Applications Fabricated Using Collapsible Nano-Fingers*
14:30-14:50	**3D-4. Kazumi Yamauchi, Shinji Hino, Ryo Kato and Yuko Kawajiri** (NTT Advanced Technology Corporation, Japan), *Evaluations of low temperature nanoimprint processes using solvent-containing high refractive index resins*
14:50-15:10	**3D-5. Keiko Munechika** (HighRI Optics, Inc.USA), *High Refractive Index Polymers for Advanced Photonics: Opportunities and Challenges*
15:10-15:30	**3C-6. Hyeonwoo Kim, Wei-Kuan Lin, Xueding Wang, Guan Xu and L. Jay Guo** (University of Michigan**),** *Nanoimprinted microring resonator arrays for photoacoustic tomography imaging*
15:30 - 16:00	Coffee Break with Ice Cream
1640 - 18:20	**Session 3-E**
16:00-16:20	**3E-1. Sonja Kopp, Abhijeet Lale, Viktorija Jonaityte, Michael J. Haslinger, Marta Bonora, Mathias Vostatek, Stjepan Perak, Sarah Linnemeier, Markus Lunzer, Marcus Granegger, Francesco Moscato, Martin Schwentenwein and Michael Muehlberger** (PROFACTOR GmbH, Austria), *Nanoimprinting to Prepare Ceramic Microstructures on 3D Printed Surfaces*
16:20-16:40	**3E-2. James H. G. Owen, Robin Santini and John Randall** (Zyvex Labs, USA)**,** *STM-based Lithography for single-nm-linewidth Nanoimprint masks, as an Energy-Efficient Alternative to EUV*
16:40-17:00	**3E-3. Sonja Kopp, Viktorija Jonaityte, Michael J. Haslinger and Michael Muehlberger** (PROFACTOR GmbH, Austria), *A combination of step and repeat and roll-to-plate nanoimprinting for the cost-efficient fabrication of nanostructured surfaces*
17:00-17:20	**3E-4. Masaru Nakagawa** (Tohoku University), *Fluorescent UV-curable liquids and UV-cured Resists and Their Usefulness for Nanoimprint Lithography*

17:20-17:40	**3E-5. Michael Johannes Haslinger, Florian Egger, Viktorija Jonaityte, Vaclav Prajzler Prajzler, Antreas Theodosiou and Michael Muehlberger** (PROFACTOR GmbH, Austria), *Integrated Bragg Grating Polymer Waveguides for Structural Health Monitoring via Nanoimprinting*
17:40-18:00	**3E-6. Chau Ha and Martin Newcomb,** (Addison Clear Wave Coatings Inc. USA), *Preventing Sunlight Damage of High Refractive Index Nano-Imprint Lithography (NIL) Resins*
18:00-18:20	**3E-7. Stjepan Perak, Marta Bohora, Sonja Kopp, Michael Muehlberger, Francesco Moscato and Markus Lunzer** (UpNano GmbH, Germany), *Shaping The Future Of Pediatric Heart Support: High-Precision Microfluidic Platform Via Two-Photon Polymerization And Nanoimprint Lithography For Hemocompatibility Testing*
16:00 - 18:20	**Session 3-F**
16:00-16:20	**3F-1. Bernardo Realista Ferreira, Amanda Sanson Wscieklica, Sean Branagan, Patrick Schuster, Thomas Achleitner, Guido Piaszenski, Takashi Sasaki and Thang Duy Dao** (Silicon Austria Labs (SAL), Austria), *Process control on full-wafer characterization for step-and-repeat nanoimprint lithography with two-pattern transfers*
16:20-16:40	**3F-2. Astrit Shoshi, Julian Hartbaum, Stephan Martens, Amadeus Belschner, Julia Tudarinow, Mandy Göring and Andrea Schulze** (Institut für Mikroelektronik Stuttgart - IMS CHIPS, Geermany), *Mastering the Master: Surface relief grating masters for AR/MR applications*
16:40-17:00	**3F-3. Johanna Rimböck, Lisa Vsetecka and Andrea Kronawitter** (EVG Group, Austria), *From Coffee Rings to Slopes: Solid Content Effects in Inkjet Coating for NIL*
17:00-17:20	**3F-4. Sooyeon Park, Fabrizio Riminucci and Dmitriy L. Voronov** (Lawrence Berkeley National Laboratory, USA), *Blazed x-ray gratings via nanoimprint and nanoinscribing*
17:20-17:40	**3F-5. Ran Ji and Junjie Sun** (German Litho, China), *Volume production methodology for NIL manufacturing of surface relief gratings(SRG) on 300mm wafers*
17:40-18:00	**3F-6. Robin M. McDonald, Nichole Scott, Lauren Micklow, Stephen Furst and Chris Youtsey** (Smart Material Solutions, Germany), *Nanopatterned cover glass alternatives to enhance high-efficiency solar cells*
18:00-18:20	**3F-7. Young Kyu Kim and Seok-min Kim** (Chung-Ang University, Korea), *Design and fabrication of tilted nanograting for augmented reality glasses using nanoimprinting and oblique angle deposition*
18:20	**Conference Adjourns**