Norwegian NanoSymposium 2023 - Preliminary Program, vs2

November 28 – 29, Trondheim, Campus Akrinn

Tuesday November 28

08:45 ***Registration and Coffee***

Session 1

09:00 *Welcome*
John de Mello, NTNU Nano

09:05 *Nanoscale imaging with coherent X-rays*
Yuriy Chushkin, ESRF, Grenoble, France

09:50 *Flexible transparent electrodes formed via a maskless evaporation process*
Sihai Luo, Dept. of Chemistry, NTNU

10:05 *Controlled Domain Dynamics in a Magnetic Metamaterial*
Ida Breivik, Dept. of Electronic Systems, NTNU

10:20 ***Coffee***

Session 2

10:40 *Equilibrium thermodynamics and phase transitions: Bridging theory and experiments in chemical engineering and atmospheric physics*
Nadia Shardt, Dept of Chemical Engineering, NTNU

11:10 *Ice Lens Dynamics in Soil Unveiled by Neutron Tomography*
Fazel Mirzaei, Dept. of Physics, NTNU

11:25 *Quantifying light-responsive polymer deformations with micropillars.*
David Urban, Dept. of Electronic Systems, NTNU

11:40 *Conductive Atomic Force Microscopy and Scanning Moiré Fringes*
Leonie Richarz, Dept. of Materials Science and Engineering, NTNU

12:00 ***LUNCH***

Session 3

13:00 *Anti-icing materials and nanoscale ice adhesion*
Senbo Xiao, NTNU

13:30 *Novel Domain Engineering Concepts enabled by Topological Defects*
Jan Schultheiß, Dept. of Materials Science and Engineering, NTNU

13:45 *In situ generated PANI-graphene hybrids*
Maria Psarrou, Dept. of Chemistry

14:00 *Liquid Crystal and Meta-Surface Devices for Enhancing Light Manipulation from Visible to THz Regime*
Elena Perivolari, Dept. of Chemistry, NTNU

14:15 *Plasmonics effects in the Vacuum Ultra-Violet range using semiconductors?*
Morten Kildemo, Dept. of Physics, NTNU

14:45 ***Coffee***

Session 4:

15:00 *Stepping and turning the electron beam and getting more out of the TEM data*
Randi Holmestad, Dept. of Physics, NTNU

15:30 *Coupled transport in lithium-ion battery electrolytes*
Øystein Gullbrekken, Dept. of Materials Science and Engineering, NTNU

15:45 TiO_2-poloxamer stabilized emulsions for photocatalysis in wastewater treatment
Cippora Magagnin, Dept. of Chemical Engineering, NTNU

16:00 *I'm a scientist – Why bother with innovation?*
Andreas Norberg, TTO

16:15 *The Openflexure microscope and open science: putting hardware in the hands of users who need it*
Joe Knapper, University of Glasgow, Scotland

17:00 ***Poster Session***

19:00 **Conference dinner**

Wednesday November 29

Session 5

09:00 *Microfluidics for investigating colloids and mimetic systems*
Ali Abou-Hassan, Sorbonne University, France

09:45 *Depth Resolved Antiferromagnetic Spin Transition by Resonant X-ray Reflecivity*
Yu Liu, Dept. of Materials Science and Engineering, NTNU

10:00 *Nanomedicine and ultrasound for targeted treatment of cancer and brain diseases - from lab to clinic*
Sofie Snipstad, Dept. of Physics, NTNU

10:30 ***Coffee***

10:45 *Large-scale Periodic Nanostructure via Inexpensive Laser Interference Lithography*
Enkui Lian, Dept. of Chemistry, NTNU

11:30 *Characterization of the Quasi-Liquid layer on Gas Hydrates with Molecular Dynamics Simulations*
Yifan Zhang, Dept. of Structural Engineering, NTNU

11:45 *Auto slice and view and Tof-SIMS in Plasma FIB*
Hamid Khanmohammadi, Dept. of Mechanical and Industrial Engineering, NTNU

12:00 ***LUNCH***

Session 6

13:00 *Do-it-yourself (DIY) Hardware and Automation in Chemistry and Beyond*
Andrew Harvie, University of Leeds

13:45 *Encapsulation of Hydrophilic Magnetic Nanoclusters through Flash Nanoprecipitation*
Nesrine Bali, Dept. of Chemical Engineering, NTNU

14:00 *Highly Parallelizable Nearly Rejection-Free Path Sampling with Asynchronous Replica Exchange and Infinite Swaps*
Titus van Erp, Dept. of Chemistry, NTNU

14:30 *Diffractive order Mueller matrix ellipsometry for the design and manufacture of polarization beam splitting metasurfaces*
Victoria Bjelland, Dept. of Physics, NTNU

14:45 ***Coffee***

Session 7

15:00 *Spectroscopies of tiny things: Single-molecule sensors and detectors*
Angelos Xomalis, NTNU

15:30 *Observation and control of charged twin domain walls in antiferroelectric-like K3[Nb3O6(BO3)2]*
Ivan Ushakov, Dept. of Materials Science and Engineering, NTNU

15:45 *X-Ray & Electron Nanoscopy to reveal insights on Fetuin-A additive growth of Calcium Carbonate*
Daniyal Younas, Dept. of Physics, NTNU

16:00 *Closing*
John de Mello, NTNU Nano