

Title:

USN MSTLab, a node of Norfab, the Norwegian infrastructure for Micro and nanotechnology

Abstract:

The presentation will cover the lab facilities located at MST-lab at USN, Campus Vestfold, and some of the key processes used in different applications in the educational programs, in the research projects and activities done for the industry.

Norfab is the Norwegian national infrastructure for micro and nanotechnology. The Research Council supported project started out in 2011, and has created valuable assets for students, researchers, start-up companies and larger industrial entities. Norfab infrastructure is located at NTNU nanolab Trondheim, UiO/SINTEF MinaLab, Oslo and MST-lab at USN, Horten.

USN-MST lab consist of a 550m² ISO class 5 clean room where lithography, thin film deposition, wet and dry etch microstructuring is taking place. In addition, MST lab facilitates the major packaging processes, like dicing of wafers/substrates up to 300mm, die bonding, wire bonding (ball and wedge), Flip chip bonding and different packaging techniques.

At Campus Vestfold, USN can offer sophisticated SEM, AFM, SAM, characterization tools in a close to vibration free lab.

Special rooms are also covering Biotech lab (Safety class2), microfluidics, Optical laser lab and Environmental test lab.