

# **Nano Imprint Lithography, a green technology**

***S. Tanzi, A. B. Fønss, M. B. Laursen, M. U. Grønbech***

DTU Nanotech, Technical University of Denmark  
simt@nanotech.dtu.dk, s082621@student.dtu.dk, s052291@student.dtu.dk,  
s052859@student.dtu.dk

In the 3-week term June 2010 we have worked with Nano Imprint Lithography (NIL) in the course 33422. NIL is a non conventional lithographic technique for high-throughput patterning of polymer nano structures at great precision and at low cost. NIL relies on direct mechanical deformation of the resist material and can therefore achieve resolutions beyond the limitations set by light diffraction or beam scattering that are encountered in conventional techniques.

In this presentation we will present NIL as an energy efficient and environmentally friendly technology compared to traditional micro and nano fabrication approaches. We will introduce NIL and describe why it can be considered a green technology.