



From quantum transport in 2D to nanostructured polymer surfaces

DTU Nanolab is pleased to invite all interested parties to welcome our Professor Dr. Techn., Rafael Taboryski.

His inaugural lecture will take place on:
Friday, 8 October 2021
from 14:00 to 15:00
Ørsted's Plads ,
Building 341, Auditorium 21
2800 Kgs. Lyngby,

The lecture is followed by a reception from 15:00

Top down nanofabrication requires precise and therefore very expensive tools, as well as an environment that is free from vibrations and electromagnetic disturbances. Temperature and humidity have to be controlled and dust has to be avoided as even small particles of dust can destroy several hundreds of nanostructures.

This kind of nanofabrication has evolved from the pursuit of Moore's law, the ever increasing miniaturization of digital electronics in integrated circuits. But the technology offers a plentitude of other applications. By nanostructuring surfaces we can alter the properties of these surfaces and influence their wetting and optical responses to a level that has not been possible only a few decades ago.

What if we could structure large surface areas made of common materials e.g. polymers in a very cost efficient way with custom designed, top down nanostructures, to provide them with properties reaching from structural color creation to anti fogging?

We are looking forward to celebrate Rafael and meet all of you.

Best
Regards

A handwritten signature in blue ink, appearing to read 'JH', is written over a circular, copper-colored background.

Jörg Hübner, Director, DTU Nanolab



Rafael Taboryski

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A fascination of micro- and nano-fabrication allowed professor Rafael Taboryski to study very diverse topics in science. In this inaugural lecture as professor, Rafael Taboryski will share highlights from his past and current research, and outline his future research directions.

Topics such as diffusive and ballistic quantum transport in 2D conductors, magnetoresistance, semiconductor-superconductor contacts, ion-channel recordings in biological cells, microfluidics, detection of neurotransmitters, surface wetting and optical properties of nanostructured polymer surfaces, will be covered.

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