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Room 3B, 3rd floor Building H3
University of Trieste
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NanoSYD: from new technologies to innovation

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Modern nanotechnology gains from breakthroughs in understanding surfaces, interfaces and materials in general, from new and adaptable imaging and structure formation methods on the nanoscale and from new ways to upscale well understood nanostructures to macroscopic dimensions. Especially with these upscaling efforts, nanotechnology remains to be a key enabling technology that improves modern products and production. At the nanoscience center NanoSYD of the University of Southern Denmark we focus basic and applied research on imaging and fabrication of smart materials and devices, from biological and electrical systems to organic photovoltaics.

In this talk I will give some examples of our research and development activities, with focus on both a new imaging and fabrication method - Helium ion microscopy and fabrication – and recent progress in roll-to-roll printed organic photovoltaics. I will also briefly introduce the PCAM (physics and chemistry of advanced materials) network, which offers excellent opportunities for interested students to involve multiple universities into their studies and gain a European Doctorate diploma.