



Lars Montelius (Lund University, Sweden)

<https://www.nano.lu.se/lars-montelius>

<https://biography.omicsonline.org/portugal/international-iberian-nanotechnology-laboratory/lars-montelius-134123>

<https://www.scopus.com/authid/detail.uri?authorId=700640815>

Professor in Solid State Physics & The Nanometer Consortium. His +25 years of work in nanotechnology has centered around scanning probe microscopy & spectroscopy & luminescence & imaging & manipulation of low-D structures, electron & ion beam and nanoimprint lithography & processing applied to single electron tunneling, quantized conductance and various bio and NEMS-devices. Montelius and his group has made pioneering and groundbreaking work in the field of nanoimprint lithography. Montelius has been the European champion in this field and he initiated interest for NIL in Europe at large. Montelius coordinated the first European FET-projects within Nanoimprint lithography – NanoTech and Chanil. Montelius work was early on directed towards the development of NIL into an industrial viable process. His recent research interests are on exploratory nano-technology and its use in nanobiophysics, bringing nanotechnology to the life sciences. Examples of research projects are brain machine interfaces, nanochip protein traffic systems and sensor systems for detection of e.g. single protein binding events. LM has published more than 140 articles, given more than 65 invited talks and has filed more than 24 patents. During 2009-2011 he was the director for the Øresund University & Øresund Science Region, a cross-border cooperation between eleven universities, three regional authorities, two countries in the Øresund Region, one of Europes most innovative regions.

LM is also a director and founder of several companies in the nanotechnology area: nQuip AB, Compacta AB, BrainLit AB, Watersprint AB, ENI AB and Obducat AB. Obducat AB acquired early on key patents in the area of NanoImpring Lithography and now commercialize nanoimprint technology originally being developed by his group. Montelius is one of the founding fathers of SwedNanotech, an association in Sweden with an objective to strengthen Swedish nanotechnology. Lately he has put a lot of effort into the innovation system and been engaged as mentor for students to explore ideas of innovation. Presently, he is responsible for a development project with direction towards establish a working model and concept to interface academia and society. Part of this is related to the further establishment of a nano-incubator in Lund. He is also the director of Lund Lighting Initiative that is engaged with the innovation space as a consequence of the possibilities that follows by the deployment of SolidState Lighting bringing a possibility to generate intelligent light, i.e. the right light at the right time and at the right place.

From 2014 to 2022, Lars Montelius was Director General for INL, The International Iberian nanotechnology Laboratory located in Braga, Portugal.