

Scientific article will be published in Nature Protocols

Ph.D. Matthias Mickert, Senior Chemical Engineer at Lumito, was part of the Gorris group at Regensburg University that recently moved to Masaryk University in Brno. The group was recently notified that their scientific paper entitled "Bioconjugation of photon-upconversion nanoparticles for cancer biomarker detection and imaging" has now been accepted in the scientific journal Nature Protocols. The article summarises the group's research and describes methods for the synthesis and conjugation of UCNPs (upconversion nanoparticles) previously established by the group. The article is expected to be published in January 2022.

"Matthias Mickert joined Lumito in spring 2020 and is responsible for reagent development at Lumito. He works closely with the CRO company Imagene-iT for the development and quality assurance of our UCNP-based reagent liquids that are used together with our scanner to take precise digital images of tissue. I congratulate Matthias Mickert and his colleagues on the upcoming publication of their scientific paper", says Mattias Lundin, CEO of Lumito.



Matthias Mickert received his Ph.D. in natural sciences under the supervision of Hans Gorris from the University of Regensburg in April 2020. The title of his thesis in bioanalytical chemistry was "Photon-Upconversion Nanoparticles as Background-Free Luminescent Labels for Immunoanalytical Applications".

"The detection of UCNPs without optical background interference enables highly sensitive immunodiagnostic assays as well as high-contrast imaging applications. From 2016 to 2019, Matthias led the laboratory work on several UCNP-related projects in our international group, which resulted in more than 15 publications. Matthias was a very cooperative, creative, and dedicated Ph.D. student and graduated with distinction (summa cum laude). It has been my great pleasure to work with Matthias and to see him continuing his fruitful work with Lumito", comments Dr. Hans Gorris.

Nature Protocols in brief

Nature Protocols is a well-known scientific journal with a good reputation and a high two-year impact factor of 13.49. The main purpose of the journal is to publish the best protocols from leading experts in chemistry, biology, and clinical science. It is required that the feasibility of the submitted protocol has already been proven in previously published papers. All submitted protocols must add value to the existing literature and are validated by expert reviewers.

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Lumito specializes in medical technology for digital pathology. Through its proprietary and patented technology, Lumito aims to provide healthcare providers with a powerful tool to meet the demands for fast and safe tissue diagnostics in personalized healthcare. The technology enables higher contrast images where unimportant background information is sorted out, making it easier for pathologists to find cancer indications. The technology, based on Up Converting Nano Particles (UCNP), has the potential to significantly improve the diagnosis of tissue samples through higher quality analyses and shorter analysis times. The method has several potential applications, but Lumito has chosen to focus primarily on digital pathology. The company is a spin-off from a research group at Lund University's Department of Atomic Physics and Laser Centre. www.lumito.se.

The share is traded on NGM Nordic SME, under the name LUMITO and Mentor is Mangold Fondkommission, phone: +46 (8) 5030 1550 and email, ca@mangold.se.