NANO INNOVATION AWARD 2017

PRESS RELEASE
Munich, 21.07.2017

From fundamental research to applications - Nano Innovation Award 2017 for junior nanoscientists

The LMU Center for NanoScience and four LMU spin-off companies jointly award innovative theses

On July 21, the Nano Innovation Awards were awarded at the Center for NanoScience (LMU Munich). For the first time, candidates from all over Bavaria were invited to apply for the awards worth € 9.000. Three PhD students and one Master student from Würzburg and Munich won prizes for their innovative work in application-oriented nanoscience. The awardees were selected by an expert jury from industry, LMU, TUM and the Fraunhofer Institut EMFT.

While most scientific prices emphasize on findings and results in fundamental research only, the Nano Innovation Award decidedly attaches importance to future applicability. The prize money is donated by four successful spin-offs of CeNS, all with their own company history directly connected to the idea of the award. The companies **attocube systems AG, ibidi GmbH, Nanion Technologies GmbH und NanoTemper Technologies GmbH** together with CeNS honor gifted and creative junior researchers, whose results are not only interesting for fundamental research but also promising for technological applications.

Florian Schüder from the group of Professor Ralf Jungmann (MPI of Biochemistry/LMU München) received an award worth € 3.000 in the category "Master's thesis". Florian Schüder implemented the recently developed DNA-PAINT super-resolution technique using a minimally modified spinning-disk confocal microscope to extend imaging to whole cells and potentially tissues. Due to the wide availability of spinning-disk microscopes in standard biology labs and imaging facilities, researchers can now answer questions that require super-resolution in whole cells and beyond.

In the category “PhD thesis“, the jury split the prize worth 6.000 EUR among three awardees:

In the thesis work of **Dr. Patrick Vogel (group of Professor Peter Jakob, Julius-Maximilians-Universität Würzburg)** a novel scanner concept, the traveling wave MPI (TWMPI) system, was developed and built, which allows the rapid and highly sensitive visualization of SPIONs. TWMPI is a promising non-invasive imaging modality that could already prove its high potential for medicine, biology and geology in preliminary experiments.

The thesis of the second awardee, **Stefan Datz (group of Professor Thomas Bein, LMU München),** focused on the synthesis and modification of nanomaterials for drug delivery applications to specifically target cancerous tissue without harming healthy tissue.

A novel micropatterning technique was developed in the scope **of Dr. Peter Röttgermann**'s PhD thesis **(group of Professor Joachim Rädler, LMU München)**. These micropatterns allow to screen thousands of single cells in parallel for different cell death markers in a time-resolved way and are thus a promising tool for biomedical applications, e.g. in personalized medicine.

The Center for NanoScience (CeNS) stimulates and coordinates research in nanoscience in the Munich area. Since its foundation in 1998 at LMU Munich, CeNS has developed into a broad network of researchers from the LMU faculties of physics, chemistry, pharmacy, biology and medicine, including groups from TU Munich, the University of Augsburg, the Max Planck Institute of Biochemistry and other institutions in the Munich area.

Contact:

Dr. Susanne Hennig
Geschäftsführerin Center for NanoScience (CeNS)
LMU München
Geschwister-Scholl-Platz 1
80539 München
Tel.: +49-89-2180-5791
Fax: +49-89-2180-5649
www.cens.de, hennig@cens.de

CeNS
Center for NanoScience | LMU