

International Webinar Report on

**SUPER CONTINUUM LASERS: AN INGENUOUS TOOLBOX FOR MULTI-SPECTRAL
BIOMEDICAL APPLICATIONS**

1ST JULY 2020

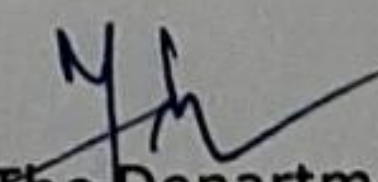
Resource Person: **Dr. MANOJ DASA**

Scientific Researcher
SHUT SENSING SOLUTIONS
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Dasa is a scientific researcher with over 5 years of experience in working with projects geared towards state-of-the-art photonic/optoelectronic systems and their multidisciplinary applications ranging from biomedical imaging to gas sensing. Dr. Dasa received his Ph.D. in Photonics Engineering from the Technical University of Denmark as a part of the Marie Skłodowska - Curie Actions grant funded by the European Commission. His project SUPUVIR(2017-2020) was an attempt to develop novel super continuum laser sources for a wide range of applications working in close collaboration with 10 academic and industrial partners from six European countries - Denmark, Finland, Poland, France, Austria, and the UK. Currently, Dr. Dasa is working as a Development Engineer at SHUTE Sensing Solutions, in Kvistgard, Denmark.

In his lecture, Speaker Dr. Dasa Manoj, covered aspects with regard to on the contrary, super continuum lasers also called white light lasers, make use of a plethora of nonlinear optical effects inside a low-loss media like optical fibers to generate laser pulses with multiple wavelengths (broadband optical emission). He has discussed about state-of-the-art super continuum lasers followed by our novel approach of devising low-cost super continuum lasers based on readily available telecommunication range optical components. Subsequently, I will show how we used the developed super continuum lasers for real-time, multi-spectral whole-body small animal imaging (using a novel photo acoustic microscopy system) and high-accuracy glucose monitoring applications.


Head Of The Department

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