

Guest lecture

LIGHT from LIFE: BIOLUMINESCENCE

May 30, 2017 at 11.00
BMB Seminar room



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Biochemistry and Uses



Abstract: Bioluminescence, the emission of visible light from living organisms, has evolved separately more than 20 times in different species and the processes carried out by many different molecular mechanisms, not all of which are biochemically elucidated. Even in the most studied systems, the fast terminal photochemical/photophysical emissive steps are still subjects of some debate.

Highly sensitive and/or minimally invasive readout of important analytes have been used for many years (e.g., firefly luciferase for ATP, ADP, AMP, and live 'photobacteria' for traces of O₂), and derived applications are legion. These include monitoring of microbial contamination of surfaces in hospitals and the food industries, of drinking water, and ecological pollution. Use in fundamental laboratory studies and medical imaging include remarkable advances.

Host: Associate Professor Lars Folke Olsen, Department of Biochemistry and Molecular Biology, SDU