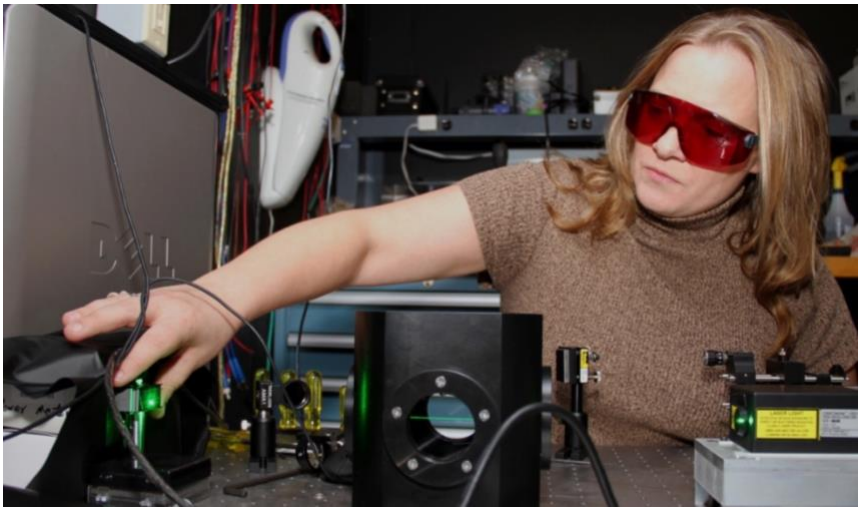
Patented Innovation to Aid Oceanographic Applications

Boca Raton, Fla. (Dec. 12, 2018) – A new patent has been issued for an underwater light detection and ranging (LiDAR) system that combines multiple transmitters and receivers to help fine tune the resolution of the resulting image.

This novel technology, invented by Anni Vuorenkoski-Dalgleish, Ph.D., (pictured below) and Bing Ouyang, Ph.D., of FAU Harbor Branch's ocean engineering and technology team, includes an algorithm that inverts and corrects the recorded arrays into more accurate beam attenuation coefficients and properties at each of the specified wavelength.

This allows for clear imaging – even when optical densities are significantly lower –while simultaneously allowing the imaging processing to occur in the imaging system.



This technology would be most relevant to oceanographic applications, such as underwater imaging, optical communications, underwater object detection and tracking, sensing and domain awareness, environmental monitoring and ecological health assessment.

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