

Imaging Devices for Biophotonics Applications

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As a convergence of photonics and the bioworld, biophotonics has grown as an important field with short and long term societal impact. In this talk, I shall describe some of the results of our group on imaging devices for biophotonics applications, including a handheld wireless device for fluorescence imaging in oncology, a random fiber laser based device for dental imaging and the use of optical coherence tomography (OCT) and photoacoustics devices for diagnostics by imaging in dentistry. In particular, emphasis will be given on OCT methods, employed from dental materials to clinical diagnostics of periodontal diseases.



Short Bio:

Anderson Stevens Leônidas Gomes was born in Recife, Pernambuco, Brazil. He is presently a Professor of Physics at the Physics Department of UFPE working in the areas of nano and biophotonics, non-linear optics and non-linear photonic devices. He co-authored more than 300 scientific publications, with an H-index Google Scholar: 48 and Web of Science: 36. He supervised 39 master's dissertations and 20 doctoral theses. He holds a CNPq Fellowship level 1A, is a Fellow of OPTICA (former OSA), where he was President of the International Council (2011-2012). He is a Member of the Brazilian Academy of Sciences and a member of the TWAS (The World Academy of Sciences), the Brazilian Physics Society (SBF) and Brazilian Society for Advancement of Science (SBPC). In 2010, he was awarded the National Order of Scientific Merit, Commander Class in the and Class Gran-Cruz in July 2023 area of Physical Sciences, a Presidential Award.