

Professor Name

RAJAGOPALAN UMAMAHESWARI (Ms.)

Laboratory name

Biophotonics Laboratory

Laboratory Website

[To be Updated](#)

Keyword

Light Scattering, Optical Coherence Tomography (OCT), Photoacoustic Tomography (PAT), Optical Technology for Biology, Optical Technology for Environmental assessment in agriculture, lasers speckles in life science, effect of microplastics on plants and microorganisms.

Tasks in the laboratory

Development of a combined OCT and PAT system first with phantoms and then switch to in vitro life samples, possibly in vivo samples; development of LED based PAT systems (OCT: Optical coherence tomography; PAT: Photoacoustic tomography)

Program period

More than 2 months

Required skills

Programming skills and some basic knowledge of optics are welcomed

Desired skills (Preferred skills)

Interest in biology and development of technology for investigating biological samples

Eligibility-school year

- Bachelor 3rd
- Bachelor 4th or higher
- Master 1st
- Master 2nd
- PhD 1st
- PhD 2nd
- PhD 3rd

Eligibility-student's major/fields

- Mechanical
- Chemistry
- Material
- Electrical
- Electronic
- Computer Science
- Life Science
- Mathematical
- Civil Engineering
- Architecture
- Engineering and design
- Other