

Scuola di Dottorato in ICT

Doctoral School in ICT

Research project for a PhD curriculum in ICT – Curriculum: **Electronics and Telecommunications**

Tutor: ROVATI LUIGI

Co-Tutor: to be determined

Proposed Title of the research:

Dynamic light scattering for ocular tissue

Keywords: (3)

Dynamic light scattering, ocular tissue, blood flow

Research objectives: --(max 10 rows)

The main purpose is to realize a system able to detect particular ocular pathologies by using the Dynamic Light Scattering technique.

Proposed research activity --(max 10 rows)

The project will start with a state of the art analysis. It'll be followed by a technology foresight and a prototype will be realized.

Many different tests (both in vitro and in vivo) will be executed.

Supporting research projects (and Department)

This project will be carried on at OptoLab, within the following three areas:

- Education (laboratory courses and thesis projects)
- Automotive (project: ModeLab)
- Electronic sensors

Possible connections with research groups, companies, universities..

Possible collaborations with the HES-SO (Sion, CH), collaborations with Ferrari S.p.A.