



Thesis Project Form

Title (tentative): Measurement of the rheological properties of the vitreous humour

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Description

Motivation and application domain

The vitreous body is the substance that fills the vitreous chamber of the eye and it is delimited anteriorly by the lens and posteriorly by the retina. In healthy young subjects it has viscoelastic properties. Aim of the work is to measure vitreous rheological properties, which are important for the physiology of the eye and are connected to various ocular pathological conditions.

General objectives and main activities

Aim of the work is to measure vitreous rheological properties, which are important for the physiology of the eye and are connected to various ocular pathological conditions.

The work is mainly experimental. Various experimental approaches will be adopted, from classical rheological measurements on a rheometer to the use of speckle rheology.

Training Objectives (technical/analytical tools, experimental methodologies)

The student will learn various experimental techniques used to characterise the properties of soft solids and fluids.

Place(s) where the thesis work will be carried out: UAB, University of Alabama at Birmingham, Birmingham
Alabama, USA

Additional information

Maximum number of students: 1