Concept development of a flow cell for optical measurement of whole blood samples

**Background:**

Currently, there are two projects running at the Medical Sensors- and Devices Laboratory (MSGT) that deal with the development of an optical sensor to measure different clinically relevant blood parameters. In one project light scattering and absorption of blood cells is used to investigate the general blood properties. The second project separates the blood cells from the blood plasma to measure the soluted components of blood. In both projects, the influence of the flow properties has to be considered.

**Task:**

It will be your task to investigate the flow properties of whole blood in different flow cells. Based on your research we will develop an optimized flow cell for an optical measurement setup.

We are looking for motivated students with interest in the field of biomedical engineering.

**We offer:**

* Very good equipped laboratories.
* Co-authorship in the resulting publications.
* Intensive counseling and development of common strategies.
* Participation in an exciting and innovative project in the medical technology field.
* The work is a part of the **BMBF**-funded project **OpLaSens** and is published in this framework.
* The work will be performed at the Medical Sensor and Device Laboratory (MSGT) of Lübeck University of Applied Sciences (FHL).
* Application with CV and relevant grades please send via E-Mail to:

Prof. Dr. Stefan Müller and Benjamin Redmer, M.Sc

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