



Ellipsometry Devices

Inventors: Mathias Schubert & Stephen Ducharme

Seeking a company qualified in the field of ellipsometry, with hopes of collaboration and developmental funding, to further develop these technologies.



Professor Schubert has developed an ellipsometry technology (patent pending) for rapidly determining properties of a specified material through optical measurements. It utilizes computer aided techniques to illustrate the symmetrical relationships between various element distributions.

- Identification of materials which differ in their chirality properties, such as:
 - DNA
 - Stereoisomers
 - Chiral liquid crystals
 - Chiral nanostructure materials
- Non-destructive DNA analysis for testing quantities of small amounts
- Identification of two and three dimensional geometry patterns
- Rapid evaluation of chirality properties of specimen, such as biological samples, blood, DNA and chemical isomers.

Professor Ducharme has developed two devices (both patent pending) that allow for measurement of samples without external calibration or elaborate alignment procedures.

- Ability to analyze samples in a changing environment in a shorter amount of time
- No calibration required due to small modulation parameters
- Calibration errors are insignificant
- Employs use of small modulation amplitudes which permits continuous measurement
- Contains no moving parts

