Contribution ID: **224** Contribution code: **S13-BMP-205** Type: **Poster presentation**

Polarimetric characterization of collagenosis tissue samples

Tuesday, 30 August 2022 18:00 (1h 30m)

Polarimetry is one of the emerging optical modalities for implementation in diagnostic. Polarimetric measurements are mostly informative about structural changes in the tissue. Collagenosis diseases affect connective tissue and arise from changes in collagen structure or metabolism. Their diagnosis is quite challenging, since the symptoms are not unambiguous.Considering that collagen is responsible for most of the skin structure, we investigated the feasibility of polarimetry for assessing tissue samples for different collagen degenerative diseases.

We will present the result of histology tissue slides evaluated through Stokes polarimetry in transmission geometry.

Acknowledgments: The investigations were supported by the Bulgarian National Science Fund under grants #KP06-N28/11/14.12.18 and KP-06-Rila/3.

Primary authors: ILYOV, Stoyan (Institute of Electronics, Bulgarian Academy of Sciences, Bulgaria); GENOVA, Tsanislava (Institute of Electronics, Bulgarian Academy of Sciences, Bulgaria); GIZBRECHT, Alexander (Institute of Electronics, Bulgarian Academy of Sciences, Bulgaria); TROYANOVA, Petranka (University Hospital "Tzaritza-Yoanna – ISUL", Bulgaria)

Presenter: ILYOV, Stoyan (Institute of Electronics, Bulgarian Academy of Sciences, Bulgaria)

Session Classification: Poster session

Track Classification: Scientific Sections: S13 Biophysics and Medical Physics