

# POLARIMETRIC METHOD FOR DETERMINATION THE AIRCRAFT'S PILOTING AND NAVIGATION PARAMETERS

## Contact Phone

## Abstract

The paper considers a polarimetric measurement method that allows simultaneous determination the aircraft's piloting and navigation parameters with high accuracy and sensitivity. High sensitivity is achieved by means of use the compensative measurement principle, and high accuracy is achieved by means of measuring the polarizations parameters of radiation. The paper describe a simplified measurement scheme that implements the proposed method and formulas for calculating piloting and navigation parameters from polarimetric parameters, which are measured. The proposed method can be used to determine the relative attitude of moving objects in order to automatically control them and improve the safety of their movement. This is especially important for the aviation industry to avoid a aircraft collision in a locally restricted area with high aircraft density.

## Type of Book of Abstracts

**Primary author:** KLOCHAN, Arsen

**Co-authors:** Mr VASILIEV, Dmitro; Dr TRONKO, Vladimir; Dr AL-AMMOURI, Ali

**Presenter:** KLOCHAN, Arsen

**Session Classification:** Polarimetry: Theory and Applications

**Track Classification:** Polarimetry: Theory and Applications