

**POLARIZATION OF VARIABLE STARS OBSERVED AT  
BELGRADE ASTRONOMICAL OBSERVATORY**

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**Abstract.** The observational programme of systematical polarimetric measurements of the group of 35 stars was carried out at the Astronomical Observatory since 1974. The aim of the programme was gathering the data on long-term polarimetric variability of stellar radiation. The present work has two tasks: 1. the elaboration of observational data and presentation of the values of the polarization percentage ( $P(\%)$ ) and position angle ( $\Theta(^{\circ})$ ), and of Stokes parameters; 2. the analysis of the gathered data and establishing the connection with other parameters for stars with sufficient polarimetric and other (photometric and spectroscopic) observations. We have established the existence of the long-term polarimetric variability for all of the stars in our observational programme. This variability is connected with photometrical variations, and in the case of Be stars with the activity of the envelope. Some of the stars exhibit correlation between polarimetric, spectroscopic and photometric observations. In the case of eclipsing binary stars the polarimetric changes are connected with the eclipse phases.