

Photocurrent and photopotential generation in the system modeling thylakoid membrane

Danuta Frąckowiak, Arkadiusz Ptak

The authors results concerning the photoelectrical effects occurring in the solutions of photo-synthetic pigments in nematic liquid crystal are reviewed and compared with the literature data concerning chloroplasts. Three methods of investigations, different in a type of acting light (continuous light with a shutter, laser pulses or a lamp with a light modulator) were used. Each method delivered different information about photoelectrical processes occurring in investigated systems. The influence of space charge in the model membrane on the kinetics of photocurrent is shown and discussed.