

Design and investigation an optical modulator based on olive oil as a liquid crystal

^{a)} *and* Ayad Z. Mohammad S. Al-Ithawi

Department of Laser and Optoelectronics Engineering, University of Technology, Baghdad-Iraq
^{a)}140029@uotechnology.edu.iq

ABSTRACT

In this work, we report the main conclusions to provide a study of Olive Oil as Liquid Crystals used in instrumentation of the optical regime geared towards a wide range of applications as an optical modulator device. The optical modulator has been implemented in this project consist of two parallel plates covered of housing glass window filled by oil olive. The results have been showed a variation of the output intensity when applied high tension voltage at room temperature. Also, changing of transmittance ratio with different temperature effect. This result indicates that can be modulate the light by olive oil.