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**Perpetration of (PS-PMMA-ZnCl<sub>2</sub>) composites and study it electrical and optical properties**

**Bahaa H. Rabee, Majeed Ali Habeeb , Ahmad Hashim**

**بهاء حسين صالح، مجيد علي حبيب، احمد هاشم**

*Department of Physics, College of Education for Pure Science, Babylon University, Iraq*

E-mail: ahmed\_taay@yahoo.com

E-mail: Majeed\_ali74@yahoo.com

In this paper, effect of zinc chloride on optical and electrical properties of (PS-PMMA) copolymer has been investigated. The samples of composites have been prepared by using casting technique. The optical properties measured in the wavelength range from 200 nm to 800 nm. The experimental results showed that the absorbance, absorption coefficient, energy band gap, extinction coefficient, refractive index and real and imaginary parts of dielectric constants are increasing with the increase of the Zinc chloride concentration. The electrical properties measured in temperature range from 30<sup>o</sup>C to 80<sup>o</sup>C. The results showed that the D.C electrical conductivity (PS-PMMA) copolymer is increased with the increasing of the weight percentages of Zinc chloride and temperature. The activation energy of composites decreases with increase of Zinc chloride concentration.

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كلية العلوم الصرفة - جامعة بابل

الحلة

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ncpiraq2012@gmail.com