

## Iraqi Polymer Society & College of Material Engineering



## th Conference on Synthesis and Applications of Polymeric materials

University of Babylon, Iraq 21-22/December/2011

## Optical Properties of (PVA-CrCl<sub>2</sub>) Composites

<sup>(1)</sup>Ahmed Hashim, <sup>(2)</sup> Amjed Mirza Oda, <sup>(3)</sup>Bahaa H. Rabee, <sup>(4)</sup> Majeed Ali Habeeb, <sup>(5)</sup>Nahida Abd-alkadhim, <sup>(6)</sup>Athraa Saad,

 $^{(1,3,4)}$ Babylon University, College of Education , Department of physics, Iraq.

(2,6)Babylon University, College of Science, Department of chemistry, Iraq.

<sup>(5)</sup>Babylon University, Engineering Affairs, Iraq.

E-Mail: ahmed\_taay@yahoo.com

## Abstract

The purpose of this paper, study the effect of addition Chromium (II) chloride on optical properties of polyvinyl-alcohol. The composites prepare by casting technique with different weight percentages of CrCl<sub>2</sub> are (0,1,2,3). Results showed that the absorbance increases with increase the concentration of CrCl<sub>2</sub>, absorption coefficient, extinction coefficient, refractive index and real and imaginary parts of dielectric constants are increasing with increase CrCl<sub>2</sub> concentration.