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دراسات على بعض مركبات ثنائي الاميدازولو الانل الفوتوكروميه
- Document Language** : Arabic
- Abstract** : In this two kinds of families of organic photochromic compounds have been prepared, bisimidazole compounds and anils compounds. A spectral study has been carried out to investigate the properties of photochromic compounds that can be useful in the many industry CD, floppy disk, sunglasses, lenses, clothes, screen of mobile and other fields. Bisimidazole compounds is usually prepared from oxidization of imidazole derivatives by using potassium ferricyanide. Spectral study has been carried out which was facing on UV-Visible absorption spectroscopy using photochromic and thermochromic properties and thermo stability, which revealed that the best compounds that contain two groups of (4-methoxy-phenyl) in positions 3 / 4 also compound that has carbazole. Also study was conducted on the solvent effect (solvatochromism) to define the influence of the solvent polarity on the value of  $\lambda_{max}$  also studying the kinetic to determine the  $t_{1/2}$ . Anils compounds was prepared from condensation of aldehyde and amin. And studding the solvent effect (solvatochromism) to determine the influence of the solvent polarity on the value of  $\lambda_{max}$  and molar coefficients, also it was reveled by this study that these compounds have non-photochromic properties at room temperature in the solvents of toluene and acetonitrile
- Supervisor** : أ.د. عبدالله بن محمد عسيري ، د. خديجة بنت عمر بادحدح
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