Werk

Label: Abstract

Jahr: 1961

PURL: https://resolver.sub.uni-goettingen.de/purl?311570321_0013|log18

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INHIBITION OF THE FLUORESCENCE INTENSITY OF QUINOLINE AND SOME OF HIS DERIVATIVES WITH INORGANIC SALTS

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Summary

By examination of above mentioned results and their analyse the following conclusions may be said.

1. Halogen ions have a remarkable extinguishing effect upon the fluorescence of quinoline and derivatives being investigated. The greatest fluorescence extinguishing power first has got iodine, than bromine, chlorine and fluvrine ($J > Br > Cl > F$).

2. A fluorescent yield decrease is given by a hyperblic formula, used also by other authors.

3. There do not occur any chemical reactions between the extinguishing ion and the fluorescent material, nor are the basic properties of the fluorescent material changed, there is only a fluorescent yield decrease. The process is theorefore reversible.

4. The extinguishing constants by diverse extinguishers depend upon the solvent in which the fluorescent material is placed. Thence these constants differe each other for a same extinguishing ion if quinoline is put into various acids.

5. No regularity is found in fluorescence intensity extinguishing in substances in which the anion was the same and the cation was being changed, ad the decrease of a fluorescent yield depends upon a specific action of cations.