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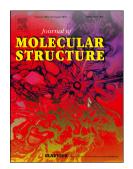
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1

Structural, Absorption, and Molecular Properties of 0,0'-Dihydroxyazo Resorcinol

Dyes Bearing an Acryloyloxy Group

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Abstract

To the best of our knowledge, this is the first study reporting the synthesis and

characterization of o,o'-dihydroxyazo dyes bearing an acryloyl group. The o,o'-

dihydroxyazo dyes were synthesized through coupling of resorcinol with the diazonium

salts of 2-amino-4-methylphenol, 2-aminophenol, 2-amino-4-chlorophenol, and 2-

amino-4-nitrophenol. Their acryloyl derivatives were synthesized using metallic sodium

and acryloyl chloride under an inert atmosphere. Characterization of the compounds

was conducted using infrared (IR), ultraviolet-visible (UV-Vis), proton nuclear

magnetic resonance (¹H NMR), and carbon nuclear magnetic resonance (¹³C NMR)

spectroscopic methods. The tautomerism of the synthesized compounds' was also

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