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**Structural, Absorption, and Molecular Properties of *o,o'*-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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