Dipole Moments and Quantum Chemical Study of the Structure of Furan-Containing *gem*-Bromonitroethenes

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Abstract—As shown by the dipole moment method and quantum chemical calculations, 1-(furan-2-yl)-2-nitroethene and 1-nitro-2-(5-nitrofuran-2-yl)ethenes exist in solution as *E-s-trans* isomers while 1-bromo-2-(5-bromofuran-2-yl)-1-nitroethene and 1-bromo-1-nitro-2-(5-nitrofuran-2-yl)ethene have *Z-s-cis* configuration.

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