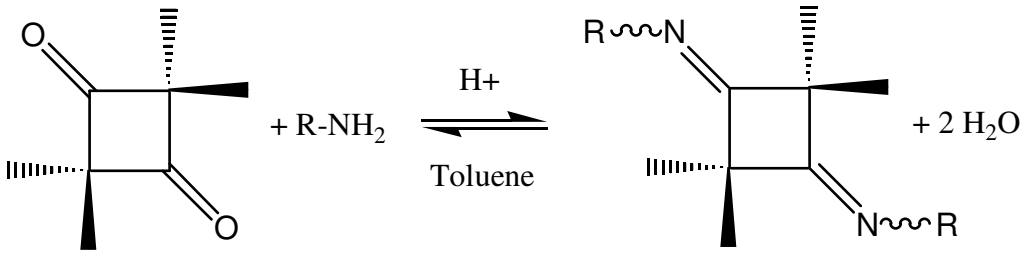
SYNTHESIS AND SPECTRAL PROPERTIES OF POTENTIALLY NEW CONDUCTING ORGANIC MATERIALS. ***M. Roberts and R. Wilson****, Bioscience and Health Careers at Franklin Educational Campus; L. Rubenstein*, Hamilton College, Department of Chemistry; J. Worman†, Department of Chemistry, Rochester Institute of Technology, jjwsch@rit.edu*

Several new compounds were prepared by the reaction of specific amines with 2,2,4,4-tetramethyl-1,3-cyclobutanedione in toluene in the presence of an acid catalyst.



(Syn and Anti)

R = o-fluoroaniline
or
R = p-fluoroaniline

Water was azeotroped from the reaction mixture using a Dean Stark Trap. Samples evaporated in vacuo, cooled, collected by vacuum filtration and purified by sublimation. The chemical structures were determined by IR, NMR, GC/MS and elemental analysis. All data were consistent with the proposed structures. Interpretation of spectra in relation to the unusual orbital interactions in the prepared compounds is described.

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