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### SUBSTITUENT EFFECTS ON CONFORMATIONAL EQUILIBRIA IN THIANE-1-N-ARYL-SULFIMIDES

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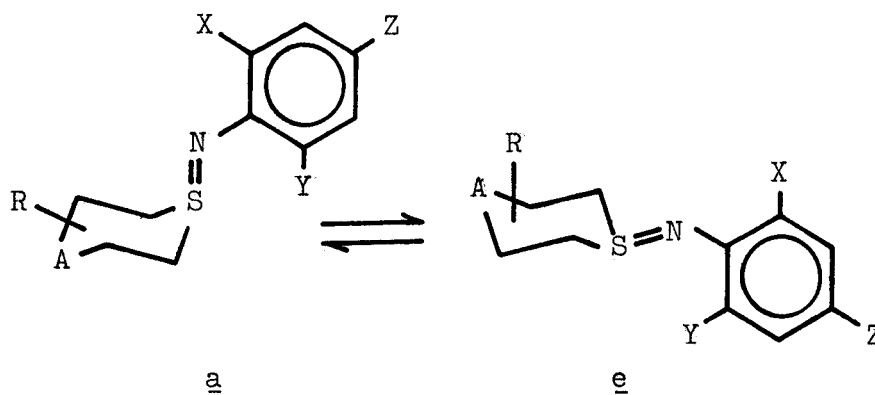
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# SUBSTITUENT EFFECTS ON CONFORMATIONAL EQUILIBRIA IN THIANE-1-N-ARYL-SULFIMIDES

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Compounds of the general type shown have been synthesized and their conformational equilibria have been established by low temperature  $^{13}\text{C}$  nmr spectroscopy.



In compounds with  $\text{A} = \text{CH}_2$ ,  $\text{R} = \text{H}$  the equatorial form e is generally strongly preferred, however, electron withdrawing substituents Z ( e.g.  $\text{Z} = \text{NO}_2$  ) show a diminished preference compared to electron donating substituents ( e.g.  $\text{Z} = \text{OCH}_3$  ). In case of  $\text{A} = \text{CHCl}$  ( Cl trans ) the form a predominates by 0.7 kcal/mol. The influence of the solvent on the conformational equilibrium has been studied.