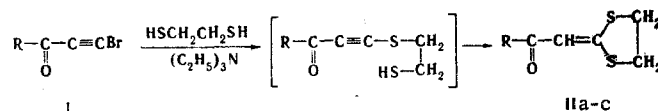


NEW SYNTHESIS OF 2-(ACYLMETHYLENE)-1,3-DITHIOLANES

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We have found that closing of a 1,3-dithiolane ring, evidently through a step involving an acetylenic mercapto sulfide, occurs during the reaction of bromoethynyl ketones (I) with 1,2-ethanedithiol in alcohol at 20°C in the presence of triethylamine. The following compounds were obtained in this way: 2-(benzoylmethylene)-1,3-dithiolane (IIa), with mp 79-80°C (from methanol), in 65% yield; 2-(thenoylmethylene)-1,3-dithiolane (IIb), with mp 126-128°C (from methanol), in 51% yield; 2-(5-ethylthenoylmethylene)-1,3-dithiolane (IIc), with mp 89-90°C (from methanol), in 66% yield.



II a R=C₆H₅, b R=2-thienyl c R=5-ethyl-2-thienyl

IR spectrum (KBr pellets): 1620-1635 (C=O) and 680-750 cm⁻¹ (C-S bond in dithiolane and thiophene rings). PMR spectrum (in carbon tetrachloride with tetramethylsilane as the standard): 7.00, 6.97, and 7.23 (CH=, respectively, for IIa, IIb, and IIc); 3.35 ppm (S-CH₂ for IIa-c). The results of elementary analysis for IIa-c for C, H, and S were in agreement with the calculated values.

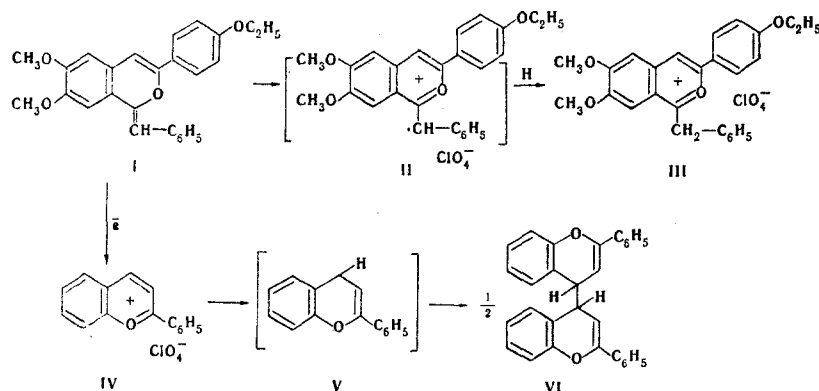
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UTILIZATION OF METHYLENE DERIVATIVES OF PYRAN AS REDUCING AGENTS FOR FLAVYLIUM SALTS

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We have shown that 1-benzylidene-3-(4-ethoxyphenyl)-6,7-dimethoxyisochromene (I) may act as an efficient one-electron reducing agent for a flavylium salt (IV).



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