

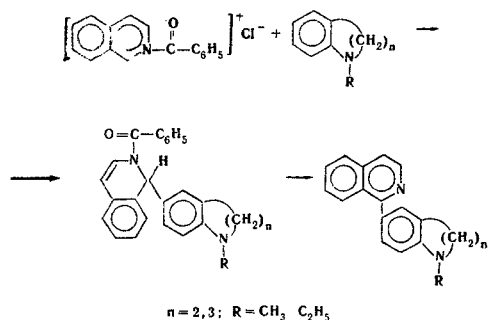
INTRODUCTION OF ISOQUINOLINE RESIDUES INTO THE AROMATIC NUCLEI OF 1-ALKYL-1,2,3,4-TETRAHYDROQUINOLINES AND 1-ALKYLINDOLINES

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We have obtained 1-substituted 2-acyl-1,2-dihydroisoquinolines (see table) by the reaction of N-acylisoquinolinium salts with 1-alkyl-1,2,3,4-tetrahydroquinolines and 1-alkyl-2,3-dihydroindoles, the isoquinoline residue apparently entering the para position of the aromatic ring relative to the amino group, as is the case in the reaction of N-acylpyridinium salts [1, 2]:



The reactions of N-benzoyl-, N-acetyl-, N-furoyl-, and N-isonicotinoylisoquinolinium salts with N,N-dialkylanilines take place similarly. The 2-acyl-1-aryl-1,2-dihydroisoquinolines obtained can be converted by acid or alkaline hydrolysis into 1-arylisoquinolines; for example, all the 2-acyl-1-p-dimethylaminophenyl-1,2-dihydroisoquinolines are converted into 1-p-dimethylaminophenylisoquinoline, identical with that described by Gilman and Gainer.

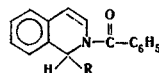
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2. A. N. Kost, A. K. Sheinkman, and A. N. Prilepskaya, KhGS [Chemistry of Heterocyclic Compounds], collection 1, 248, 1967.
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1-Aryl-2-benzoyl-1,2-dihydroisoquinolines



R	Mp, °C	Empirical formula	Found, %			Calculated, %			Yield, %
			C	H	N	C	H	N	
	98-99	C ₂₆ H ₂₄ N ₂ O	82.37 82.21	6.83 6.57	7.31 7.26	82.08	6.35	7.37	57
	112-113	C ₂₇ H ₂₆ N ₂ O	82.15 82.28	6.75 6.57	7.34 7.24	82.21	6.64	7.10	43
	87-88	C ₂₈ H ₂₈ N ₂ O	82.56 82.47	6.98 6.83	6.79 6.81	82.34	6.90	6.85	85
	85-86	C ₂₈ H ₂₈ N ₂ O	82.07 81.91	6.17 6.21	7.84 7.76	81.95	6.05	7.64	66
	72-73	C ₂₆ H ₂₄ N ₂ O	81.82 82.04	6.03 6.17	7.50 7.41	82.09	6.35	7.36	84
	113-114	C ₂₄ H ₂₂ N ₂ O	81.17 81.21	6.61 6.34	7.87 7.91	81.35	6.25	7.90	77