Reactions of Polyfluorochalcones with *o*- and *p*-Phenylenediamines. Synthesis and Intramolecular Transformations of Polyfluorinated 2,4-Diaryl-2,3-dihydrobenzo-1*H*-1,5-diazepines

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Abstract—Polyfluorochalcones react with *o*-phenylenediamine in ethanol and 2-propanol in the presence of triethylamine or benzyltriethylammonium chloride (TEBAC) affording polyfluorinated 2,4-diaryl-2,3-dihydrobenzo-1*H*-1,5-diazepines. Along with the latter in the presence of triethylamine Michael aza-adducts presumably formed, and at the use of TEBAC in 2-propanol products of intramolecular cyclization and rearrangement of benzo-1,5-diazepines, dihydrobenzimidazo[1,2-*a*]quinolines were obtained. The reactions of polyfluorochalcones with *p*-phenylenediamine in ethanol or DMF proceed mostly with the substitution of the *para*-fluorine atom in the perfluorophenyl rings.

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