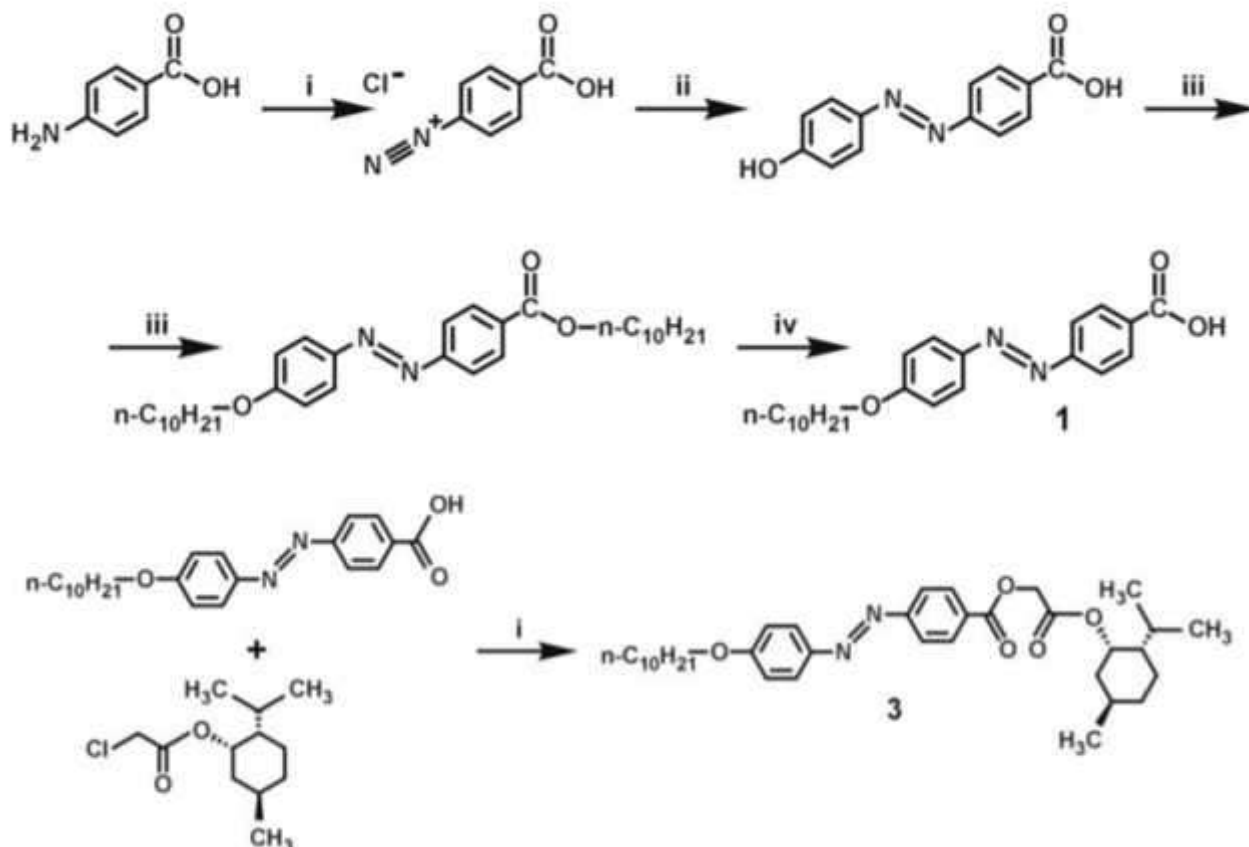


**Chornous V.O.**  
**LIGHT-CONTROLLABLE CHIRAL DOPANT BASED ON AZO-FRAGMENT:  
 SYNTHESIS AND CHARACTERIZATION**

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We present the newly synthesized chiral dopant 2-[(2-isopropyl-5-methylcyclohexyl)oxy]-2-oxoethyl 4-[(E)-[4-(decyloxy)phenyl]diazenyl]benzoate (ChD-3501), consisting of azo- and aliphatic fragments together with a chiral center based on 1-menthol as a reversible light-controllable chiral dopant. To assess the effects of UV/VIS irradiation and temperature in the isotropic and liquid crystalline (LC) states, we studied the spectral kinetics of ethanol solution of ChD3501, as well as induction of the cholesteric helix when it was dissolved in nematic LC (E7) as a chiral dopant. The concentration dependence of the helical pitch of the induced cholesterics was studied by means on Grandjean-Cano method, and the helical twisting power of ChD-3501 in the nematic host E7 was determined. The reversible trans-cis isomerization of chiral dopant ChD-3501 in E7 under UV/VIS irradiation was studied, and it has been found that the storage of the cis-isomer at certain constant temperature also leads to the reversible isomerisation, which presents a certain interest for applications



Synthesis of 2-(1R,2S,5R)-[(2-isopropyl-5-methylcyclohexyl)oxy]-2-oxoethyl 4-[(E)-[4-(decyloxy)phenyl]diazenyl]benzoate (3).

**Davydova N.V.**  
**THE TOTAL ANTIOXIDANT ACTIVITY OF BLOOD PLASMA IN CASE OF ALCOHOL  
 INTOXICATION, ITS COMBINATION WITH MODIFIED PHOTOPERIOD AND  
 MELATONIN ADMINISTRATION**

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The role of reactive oxygen species in pathogenesis of ethanol intoxication is well established. In modern life, alcohol consumption is often combined with mistimed or nearly