

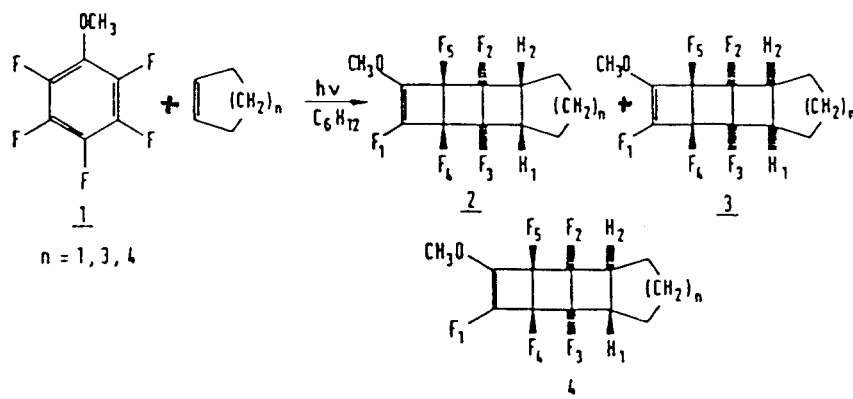
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THE EFFECT OF ALKOXY GROUP AND THE STRUCTURE OF
CYCLOALKENE ON THE 2+2 PHOTOCYCLOADDITION TO ALKOXY
SUBSTITUTED PENTAFLUOROBENZENE

Boris Šket and Marko Zupan

Department of Chemistry and 'J. Stefan' Institute, 'Edvard Kardelj'
University of Ljubljana, 61000 Ljubljana (Yugoslavia)

The photoreaction of alkoxy substituted pentafluorobenzene with cycloalkenes in cyclohexane solution resulted in regioselective 2+2 cycloaddition to the 3,4 position of the arene. The stereochemistry of the products formed depended on the structure of cycloalkene: only anti 2+2 adduct was observed with cyclopentene, syn 2+2 adduct with norbornene, while both syn and anti 2+2 cycloaddition took place with cycloheptene and cyclooctene. The magnitude of the alkoxy group had no influence on the course of the photochemical reaction.



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	<u>2</u>	<u>3</u>	<u>4</u>
1	100	/	/
3	64	16	20
4	34	38	28