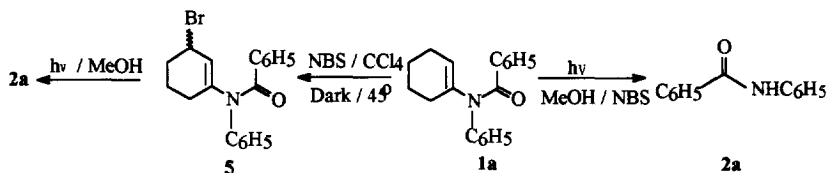


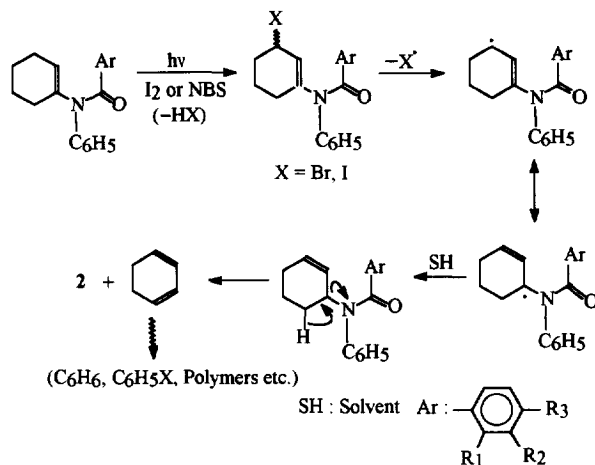
Table

Substrate (1)	Time in hr.	Yield (%) of Anilide (2)	IR (Nujol) ν_{\max} cm^{-1}
a : 3.61 mmol	8	52	3350 , 1660
b : 3.26 mmol	14.5	68	3335 , 1645
c : 2.97 mmol	20	83	3310 , 1640
d : 3.11 mmol	18	43	3250 , 1660

SCHEME - 2



SCHEME - 3



on irradiation in methanol for 3 hr. yielded 73% of 2a, showing it to be a true intermediate in the reaction profile (Scheme - 3).

The synthesis of anilides was not our objective but, we became interested in the mechanism of this novel and unknown reaction pathway for oxidative enamide photolysis. We conclude that the present study shows a remarkable effect of the presence of EWG⁴ on the nitrogen atom of enamides on the course of their photochemical reactions under oxidative conditions.

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References and Notes

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2. Reviews: a) Sharma, R.K.; Kharasch, N. *Angew. Chem. Int. Ed. Engl.* **1968**, 7, 36; b) Lenz, G.R. *Synthesis*, **1978**, 489; c) Mallory, F.B.; Mallory, C.W. *Org. React.* **1984**, 30, 1.
3. Irradiation experiments were performed at room temperature using a low pressure mercury lamp (16 W, > 90% 254 nm, Applied Photophysics Ltd., England) in a quartz vessel (immersion type).
4. The presence of an EWG such as carbonyl^{2b} or a phenyl/aryl^{2b} on the nitrogen atom of enamides is known to afford rearranged products (1,3 - or 1,5 -) on non-oxidative photolysis.

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