

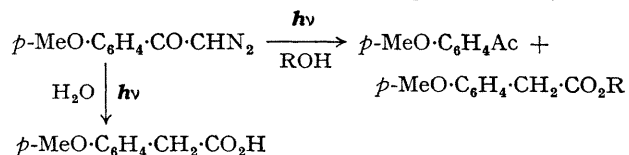
Photolysis of α -Diazo-*p*-methoxyacetophenone

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THE principal products¹ from the direct photolysis of α -diazoacetophenone in isopropyl alcohol are isopropyl phenylacetate (57%) and acetophenone (23%); the details of the procedure were not given. We have carried out direct photolysis of α -diazo-*p*-methoxyacetophenone in dry isopropyl alcohol, without photosensitizer, and have obtained *p*-methoxyacetophenone (91%).

Recrystallized α -diazo-*p*-methoxyacetophenone (m.p. 86–88°) was dissolved in sodium-dried isopropyl alcohol in a quartz test tube with a reflux condenser, and placed between two medium pressure u.v. (Hg) lamps (15 hr.). Removal of isopropyl alcohol and chromatography (alumina, light petroleum–benzene, 9:1) gave isopropyl

p-methoxyphenylacetate (6%) and *p*-methoxyacetophenone (91%, m.p. 37–38°, semicarbazone, m.p. 194–195°).



Irradiation in anhydrous ethanol gave ethyl *p*-methoxyphenylacetate (63%) and *p*-methoxyacetophenone (13%). In a mixture of tetrahydrofuran and water, *p*-methoxyphenylacetic acid was obtained (66%).

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¹ A. Padwa and R. Layton, *Tetrahedron Letters*, 1965, 2167.