Kaanumalle, L. S.; Ramesh, R.; Murthy Maddipatla, V. S. N.; Nithyanandhan, J.; Jayaraman, N.; Ramamurthy, V., 2005, "Dendrimers as photochemical reaction media. Photochemical behavior of unimolecular and bimolecular reactions in water-soluble dendrimers", *J. Org. Chem*., *70*, 5062 – 5069.

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Photochemical reactions in aqueous media- following photophysical and photochemical reactions were carried out in dendrimers.

- Photophysical studies of pyrene to understand the medium polarity

- Unimolecular reactions:

(a) Cage effect during the photolysis of 1-phenyl-3-p-tolyl-propan-2-one (4-methyl dibenzyl ketone)

(b) Product selectivity between Type-I products and Type-II products on photolysis of benzoin ethyl ether

- Bimolecular reactions:

(a) Acenaphthylene photodimerization in acid dendrimers

(b) Acenaphthylene photodimerization in phenolic dendrimers

(c) Cross dimerization between acenaphthylene and N-benzylmaleimide in phenolic dendrimers.