BOOK OF ABSTRACTS

Dear photochemists,

It is a great pleasure to welcome you to Amsterdam for the 28th IUPAC Symposium on Photochemistry. The COVID-19 pandemic has prevented us from getting together in 2020, and it still limits our freedom to move. Nonetheless, we will meet with some 450 participants from July 17 to 22, 2022, and have an opportunity to discuss the progress in our field via presentations and informal discussions.

With the help of the International Scientific Committee we have composed an attractive program of Plenary and Invited lectures, and participants contribute with Oral Communications (20 minutes including discussion) and Junior Talks (15 minutes including discussion), and with posters. In addition the program features two award lectures from the European Photochemistry Association, and the Porter Medal Award.

We are pleased with the large interest from exhibitors and sponsors, who are a part of our scientific ecosystem, and with their support help to keep the cost of participation low. The University of Amsterdam contributed by providing the conference venue.

We look forward to a great conference.

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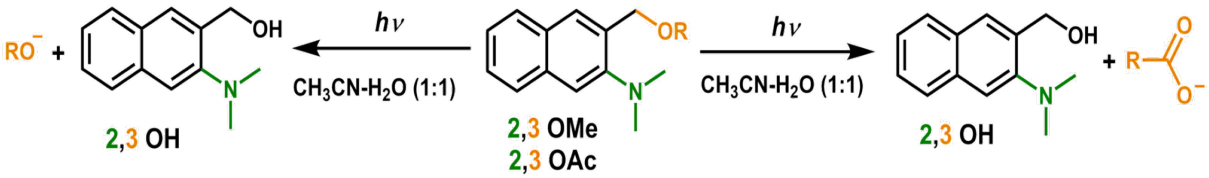
Photochemistry of 2,3-substituted Aminonaphthalene Photocages

Over two decades, various photocages (PPG) have been developed for important functional groups. Thus, derivatives of hydroxymethyl anilines proved to be good PPGs for carboxylic acids and alcohols, but their ability to absorb light of wavelength < 300 nm makes them less applicable in biology and medicine. Furthermore, we have studied derivatives of aminonaphthalenes as potential photocages. 1,2- and 1,2,4-substituted aminonaphthalenes showed good performance as photocages for carboxylic acids, but not for alcohols, while 2,3-substituted aminonaphthalene photocages are good for carboxylic acids and alcohols. The photodeprotecion of 2,3-supstitutied aminonaphthalene photocages takes place more efficiently (acetate elimination, Φ=0.11), than for 1,2-substituted photocages (acetate elimination, Φ=0.01). The mechanism for decaging was studied by irradiation experiments and spectroscopic methods.



Photochemistry of 2,3-substituted aminonaphthalene photocages.

[1] https://doi.org/10.1021/acs.chemrev.0c00663
[2] https://doi.org/10.1021/acs.joc.7b02314
[3] https://doi.org/10.1021/acs.joc.1c02407