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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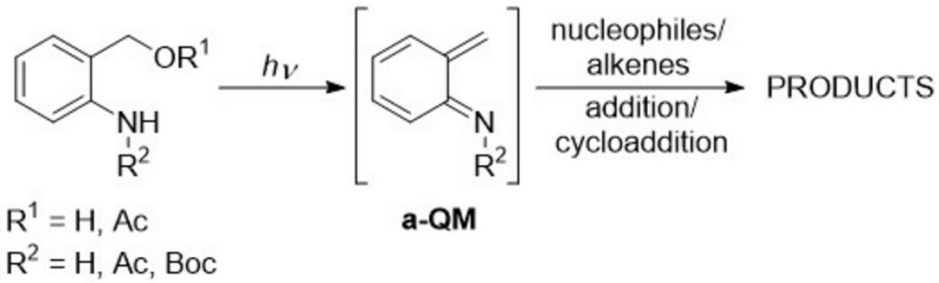
Author:
Josip Draženović
Ruđer Bošković Institute

Co-author(s)
Nikola Basarić
Ruđer Bošković Institute

Photochemical generation of aza-o-quinone methides

Aza-quinone methides (a-QM) are reactive intermediates, reacting with nucleophiles and various types of dienophiles, applicable in the synthesis of biologically important heterocycles. Due to their importance in synthesis, several methods to generate a-QM have been reported, including photogeneration from o-aminobenzyl alcohol. Although a-QM has been detected by laser flash photolysis (LFP), its trapping by alkenes in [4 + 2] cycloaddition in the acidic solution was hampered, and the composition of the irradiated mixture strongly depended on the solution pH.
We conducted a systematic mofication of the structure of a-QM precursors in order to optimize the conditions for their photogeneration and enable trapping by alkenes. The amino group was functionalized by EWG, whereas the alcohol was converted to a better leaving group. The photoreactivity was investigated by irradiation experiments, and the products were isolated and fully characterized. To unravel details about the reaction mechanism, steady-state and time-resolved fluorescence and LFP measurements were conducted.



Photochemical generation of aza-o-QM.

[1] https://doi.org/10.1039/c8cs00274f
[2] https://doi.org/10.1016/1010-6030(94)85005-4
[3] https://doi.org/10.1002/cphc.201901133