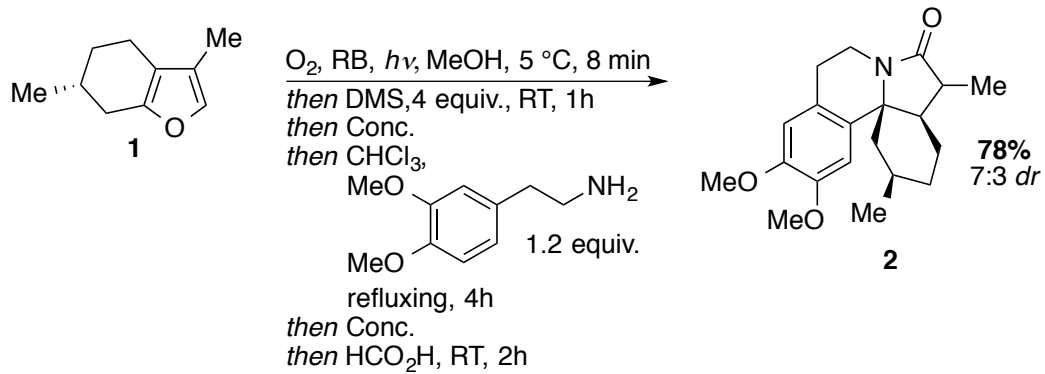


**From Simple Furans to Complex Nitrogen-Bearing Aromatic Polycycles
by Means of a Flexible and General Reaction Sequence Initiated by
Singlet Oxygen**

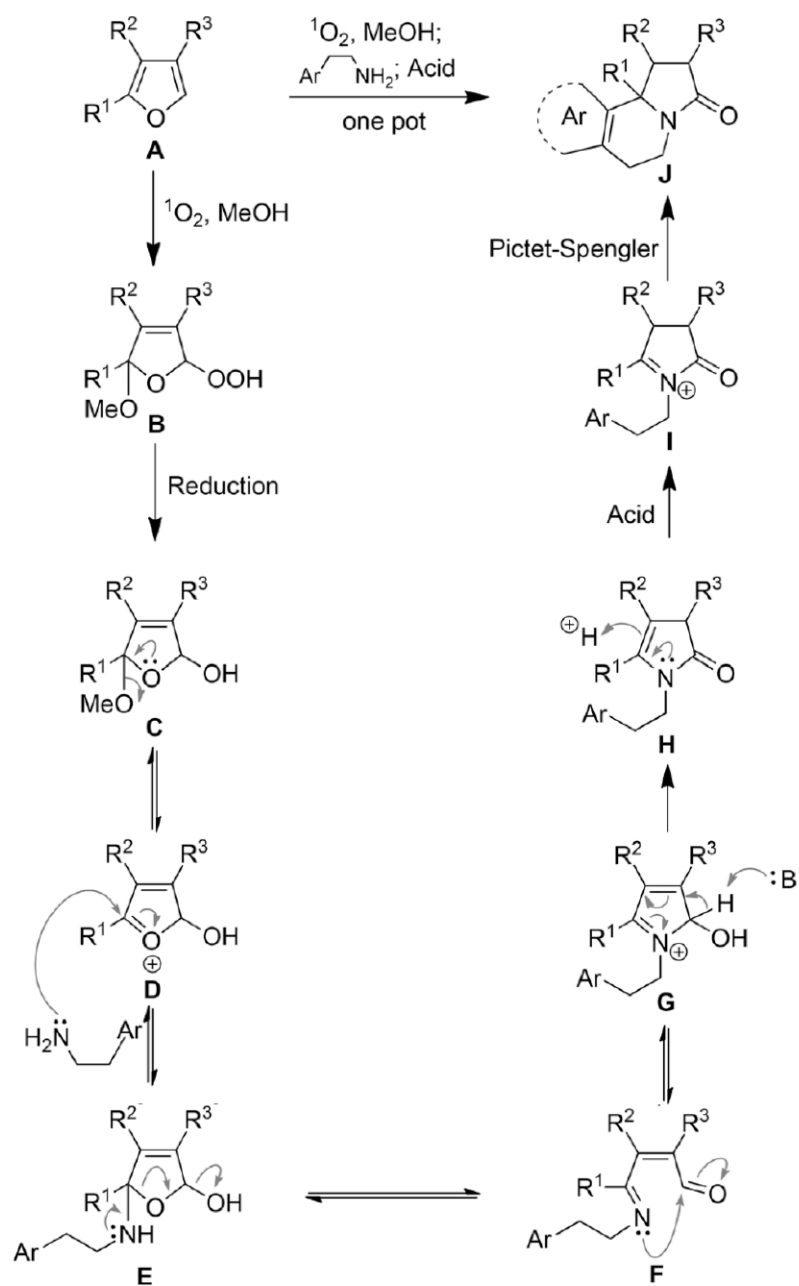
Problem:



RB = Rose Bengal

- 1) Describe the steps/intermediates leading to **2** from **1**.

Solution:



Reference:

D. Kalaitzakis, T. Montagnon, E. Antonatou, N. Bardají, G. Vassilikogiannakis, *Chem. Eur. J.* **2013**, *19*, 10119–10123.

Keywords:

Singlet Oxygen, *N*-Acyliiminium Ion, Pictet-Spengler, Cascade.