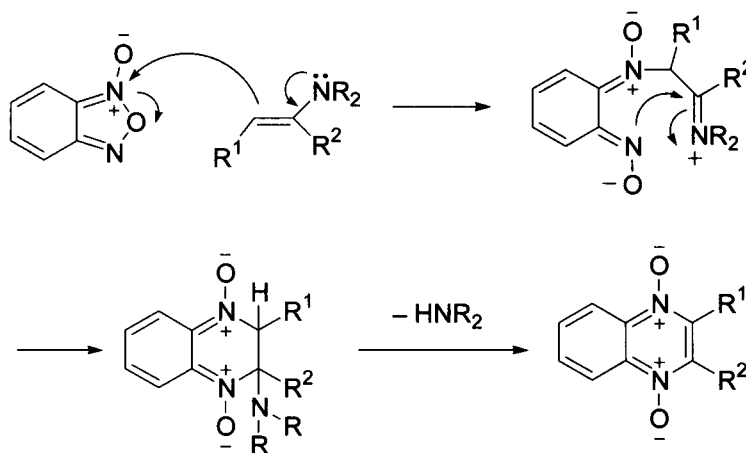


the imino-oxide onto the iminium functionality to provide the heterocycle. Finally, elimination of the amine provides the quinoxaline-1,4-dioxide.<sup>28</sup>



This reaction has been expanded to include not only enamines but also 1,3-dicarbonyls. The conditions used generally employ a drying agent to remove the water generated in the final step of the reaction. The variation has been used as the key step to synthesize numerous compounds, some of which have been used in clinical trials. Due to the poor effectiveness of many of the current drugs on the market, new medications to treat tuberculosis are needed. In the course of that study the benzofurazan oxide was treated with 1,3-dicarbonyl to provide possible candidates for screening.<sup>29</sup>

