

## عنوان مقاله:

Synthesis of ۸-Aryl(alkyl)-۶-selenoxo-۶H-۱,۹-dioxo-۷-aza-cyclopenta[a]naphthalen-۳-ones Under Solvent-free Conditions at Ambient Temperature

## محل انتشار:

پنجمین کنگره ملی شیمی و نانو شیمی از پژوهش تا توسعه ملی (سال: 1401)

تعداد صفحات اصل مقاله: 10

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## خلاصه مقاله:

Oxazine derivatives have found versatile applications as anti-bacterial and cancer-screening agents.<sup>۱,۳</sup> They have antifungal action and are used as herbicides.<sup>۲,۳</sup> The thio derivatives of pyrano-۱,۳-benzoxazine have shown anti-inflammatory and antipyretic properties.<sup>۴</sup> Multi-component reactions (MCRs) are now frequently used by synthetic organic chemists as a facile means to generate molecular diversity from bifunctional substrates that react sequentially in an intramolecular fashion,<sup>۵</sup> and this approach may be used for the preparation of oxazines. There are several useful syntheses of oxazines,<sup>۶-۱۷</sup> some of which were informed by a procedure first described by Khalilzadeh and co-workers<sup>۱۸</sup> who prepared a series of arylated bi- and tri-cyclic thioheterocycles via the N-methylimidazole-catalyzed reaction of phenol and ۱- and ۲-naphthols with acid chlorides and ammonium thiocyanate. This kindled our curiosity about the cognate preparation of related selenium compounds. The current interest in selenium-containing organic compounds stems from their remarkable synthetic and biological functions.<sup>۱۹-۲۳</sup> The first synthesis of acyl isoselenocyanates, generated by the reaction of acyl chlorides and potassium selenocyanate, was described by Douglas.<sup>۲۴</sup> More recently, several preparations of heterocycles from acyl <http://chemistry.bcnf.ir> Page ۲ isoselenocyanates were reported.<sup>۲۵-۲۷</sup> In this context, we now describe a synthesis of novel ۸-aryl(alkyl)-۶-selenoxo-۶H-۱,۹-dioxo-۷-aza-cyclopenta[a]naphthalen-۳-ones using the method of Khalilzadeh

## کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

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