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ULTRASOUND PROMOTED SYNTHESIS OF PYRAZOLYL / ISOXAZOLYL OXADIAZOLES AS ANTIMICROBIALS

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Abstract. Azoles are the principal core structures present in natural products and acquired significance due to wide range of biological properties associated with them. Amongst different azoles, oxadiazole and their derivatives have gained importance as they constitute the structural features of many bioactive compounds.1,3,4-Oxadiazoles exhibit antibacterial, antifungal, antioxidant, anti-inflammatory, analgesic, anticancer and anticonvulsant properties. In fact, the combination of different heterocyclic units in a molecule may alter the biopotency which can accommodate to multiple biological targets. In continuation of our interest in the synthesis of bioactive heterocyclic compounds, we focused our attention to develop some new oxadiazoles under ultrasonication. The work related to these aspects will be presented.