

## INVESTIGATION OF HYDRATES AND HEMIACETALS FORMS OF QUINOLINEQUINONE DERIVATIVES BY NMR SPECTROSCOPY

Raşit Çalışkan<sup>1\*+</sup>

Süleyman Demirel University Department of Chemistry, 32260, Isparta, Turkey

\*Corresponding author: rasilcaliskan@sdu.edu.tr

+Speaker: rasilcaliskan@sdu.edu.tr

Presentation/Paper Type: Oral / Abstract

**Abstract-** Reversible hydration and hemiacetal formation in alcohol of aldehydes and ketones are the simplest addition reactions to carbonyl group and it is one of the basic research subjects in organic chemistry.<sup>1</sup> On the other hand, quinoline skeletons are available widespread in nature (such as antidesmone and Lavendamycin) and exhibit antitumor, antimalarial, antimicrobial and anti-inflammatory biologic activities. Moreover, it is already known that hydration plays an important role in the solubility and stability of drugs.<sup>2</sup>

The equilibrium of between hydrates and hemiacetals of heteroaromatic quinones derivatives were investigated, in aqueous and alcoholic solutions determined by NMR spectroscopy. The formation mechanism of the hydration and hemiacetal forms are discussed.



### Acknowledgements:

The author is indebted to TUBITAK 109T910 (Scientific and Technological Research Council of Turkey) for financial support of this work.

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**Keywords-** Quinoline, Hydration, Hemiacetal