

19th International Conference on

Medicinal Chemistry & Multi Targeted Drug Delivery &

International Conference on **Catalysis and Pyrolysis**

November 05-06, 2018 | San Francisco, USA

Catalysis in reactions of carbonyl compounds with hydrogen peroxide (H₂O₂)

Alexander O Terent'ev^{1,2}, Peter S Radulov, Anatoly E Vilikotsky, Yuliya Yu Belyakova and Fabrice Fleury³

¹ND Zelinsky Institute of Organic Chemistry, Russian Academy of Sciences, Russia

²D.Mendeleev University of Chemical Technology of Russia, Russia

³University of Nantes, France

Organic peroxides in the last decades have received considerable attention from chemists and drug design experts, which is associated with a need in the search for drugs for the treatment of parasitic diseases, such as malaria and helminths infections. Peroxides having antitumor or growth regulatory activity were also documented. Traditionally organic peroxides are applied in industry as initiators of free radical polymerization and oxidants. In our work we developed new methods for synthesis of various types of peroxides using hydrogen peroxide and carbonyl compounds. In these reactions nature of a catalyst plays the decisive role on the selective peroxide preparation. In many cases BF₃, Et₂O is the best catalyst.

alterex@yandex.ru