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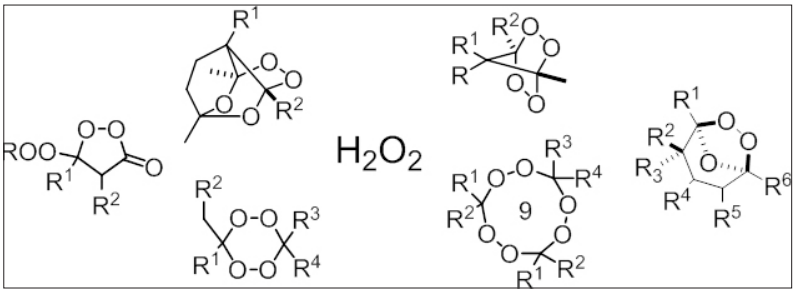
CYCLIC SYNTHETIC PEROXIDES AS A BASE FOR ANTIPARASITIC AND ANTICANCER DRUGS

Alexander O Terent'ev[1], Peter S Radulov[2], Anatoliy E Vilikotskiy[3], Yulia Yu Belyakova[3]

N D Zelinsky Institute of Organic Chemistry, Russian Academy of Sciences, Moscow, Russia
D Mendeleev University of Chemical Technology of Russia Moscow, Russia

In the last decades, organic peroxides 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 helminth 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 and green methods for synthesis of various types of peroxides using hydrogen peroxide and carbonyl compounds.

Image



Some of prepared cyclic peroxides demonstrate good anticancer and antiparasitic activities

Biography

Alexander O Terent'ev has completed his MS in Chemistry of Biologically Active Compounds from D Mendeleev University of Chemical Technology of Russia, Moscow, PhD degree in 2000 and DSc degree in Organic Chemistry in N D Zelinsky Institute of Organic Chemistry RAS 2009. He worked as Professor in D Mendeleev University of Chemical Technology of Russia 2011. From 2016, he is working as Professor and Head of laboratory in N D Zelinsky Institute of Organic Chemistry RAS, Head of laboratory in All-Russian Research Institute of Phytopathology. His interests are Organic Chemistry, Medical and Agricultural Chemistry, Chemical Technology. He has published three chapters in books, 100 research papers, and 25 patents.

alterex@yandex.ru