

# 10<sup>th</sup> World Congress on Green Chemistry and Technology

July 10-11, 2019 | Paris, France

## Green synthesis of bioactive organic peroxides

In the last decade, the progress in the chemistry of organic peroxides was prompted by numerous works of their antimalarial, anthelmintic, antitumor, growth regulating and antitubercular activity. The importance of these studies is illustrated by the 2015 Nobel Prize in Medicine awarded to Youyou Tu for the discovery and development of artemisinin. Our work develops methods for the synthesis of various types of cyclic and linear peroxides using of H<sub>2</sub>O<sub>2</sub> and carbonyl compounds with high selectivity. An important feature of these methods is high atom efficiency and wastelessness of the synthesis.



**Alexander O Terent'ev**

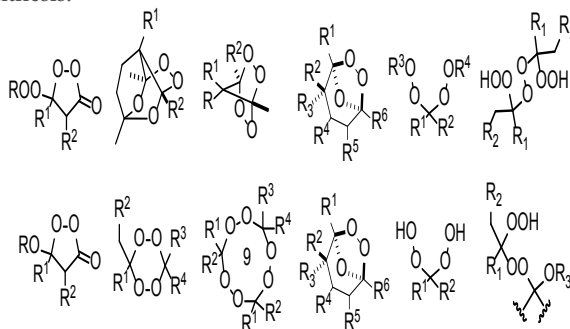
N. D. Zelinsky Institute of Organic Chemistry,  
Russian Academy of Sciences, Russia

Co-Authors

**Peter S Radulov<sup>1</sup>, Ivan A Yaremenko<sup>1</sup> and Fabrice Fleury<sup>2</sup>**

<sup>1</sup>N. D. Zelinsky Institute of Organic  
Chemistry, Russia

<sup>2</sup>Université de Nantes, France



**Figure:** Cyclic peroxides: Ozonides, tetraoxanes, and tricyclic monoperoxides demonstrate prospective anticancer and antiparasitic properties.

### Biography

Alexander O Terent'ev has obtained his PhD in 2000 and DSC degree in 2009. At this time, he is a Professor in D. Mendeleev University of Chemical Technology of Russia, Head of the laboratory in N.D. Zelinsky Institute of Organic Chemistry RAS, and Head of the laboratory in All-Russian Research Institute of Phytopathology. His research interests are Organic Chemistry, Medical and Agricultural Chemistry and Chemical Technology. He has published 120 research papers and 30 patents.

alterex@yandex.ru