

## **Determination of fat-soluble antioxidants by galvanostatic coulometry using electrogenerated oxidants**

Abdullin I., Turova E., Ziyatdinova G., Budnikov G.  
*Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia*

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### **Abstract**

It was found that vitamin E reacts with electrogenerated chlorine and bromine, as well as with silver (I) and vanadium(V) in the ratio 1:1 to form  $\alpha$ -tocopherylquinone. Vitamin A reacts with electrogenerated halogens in the ratio 1:3. Individual fat-soluble antioxidants were determined in model solutions at the milligram level with RSD between 1 and 4%. The bromine-scavenging antioxidant capacity of some vegetable oils and animal fats was evaluated.

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