Thematic Section: Biochemical Research. **Full Paper**
Subsection: Analytical Chemistry. *Registration Code of Publication:* 13-36-12-27
Publication is available for discussion in the framework of the on-line Internet conference "*Butlerov readings*".
http://butlerov.com/readings/
Contributed: December 11, 2013.

Identification of AB-FUBINACA markers in urine by GC-MS method

© **Sergey S. Kataev**,[1+] and **Oksana N. Dvorskaya**[2]*
[1] *Forensic-Chemical Department. State Healthcare Establishment of Special type "Perm Regional Bureau of Forensic-Medical Expertise". Startsev St., 61. Perm, 614077. Perm region. Russia.*
Phone: +7 (342) 210-67-83. E-mail: forenschemist@narod.ru
[2] *Department of Toxicological Chemistry. Perm State Pharmaceutical Academy of the Ministry of Health of the Russian Federation. Polevaya St., 2. Perm, 614990. Perm region. Russia.*
Phone: +7 (342) 282-58-64. E-mail: kaftox@mail.ru

*Supervising author; [+]Corresponding author

Keywords: *AB-FUBINACA, cannabimimetics, metabolism, enzymic hydrolysis, solid-phase extraction, gas chromatography – mass spectrometry.*

Abstract

The markers are described, allowing to establish the fact ща uштп cannabimimetic AB-FUBINACA in the procedure of urine screening on narcotic and medicinal substances with application of methods of solid-phase extraction and a gas chromatography with mass spectrometry. Identification of the main metabolites of AB-FUBINACA in urine of consumers of smoking mixes was performed. It is established that the metabolism of AB-FUBINACA passes, generally, through hydrolysis of amide bonds, the main metabolites are removed with urine in the conjugated form. Gas chromatographic and mass-spectrometric characteristics of main metabolite derivative which can be useful in practice of the forensic-chemical and chemical-toxicological analysis are obtained.