

XIX. GTFCh-Symposiumsbeiträge im internationalen Schrifttum

V01 An albumin adduct with the chemical warfare agent sulfur mustard detected by LC-ESI MS/MS: a novel method for verification of poisoning

Harald John, Felix Gandor, Michael Gawlik, Andreas Kranawetvogl, Horst Thiermann

The method was recently published: Gandor F., Gawlik M., Thiermann H., John H. Evidence of sulfur mustard exposure in human plasma by LC-ESI MS/MS detection of the albumin-derived alkylated HETE-CP dipeptide and chromatographic investigation of its cis/trans isomerism. *J Anal Toxicol* 2015;39:270-279.

Application to forensic samples is presented in: Steinritz D., Striepling E., Rudolf K.D., Schröder-Kraft C., Püschel K., Hullard-Pulstinger A., Koller M., Thiermann H., Gandor F., Gawlik M., John H. Medical documentation, bioanalytical evidence of an accidental human exposure to sulfur mustard and general therapy recommendations. *Toxicol Lett* (submitted June 2015).

Application to samples sent by the OPCW is presented in this Special Issue of *Toxichem Krimtech*.

V10 Characterisation and *in-vitro* metabolite identification of the four new designer benzodiazepines clonazolam, deschloroetizolam, flubromazolam and meclonazepam

Laura M. Huppertz, Philippe Bisel, Folker Westphal, Florian Franz, Volker Auwärter, Bjoern Moosmann

This work was recently published: Huppertz LM, Bisel P, Westphal F, Franz F, Auwärter V, Moosmann B. Characterization of the four designer benzodiazepines clonazolam, deschloroetizolam, flubromazolam, and meclonazepam, and identification of their *in vitro* metabolites, *Forensic Toxicol* 2015, DOI 10.1007/s11419-015-0277-6.

V11 *N,N*-Diallyltryptamine (DALT) designer drugs: Metabolism, CYP inhibition potential, and urinary detectability of five typical representatives using GC-MS, LC-MSⁿ, and LC-HR-MS/MS Techniques

Julian A. Michely, Julia Dinger, Simon D. Brandt, Markus R. Meyer, Hans H. Maurer

Results will be published soon.

V12 25I-NBOMe: Metabolism and Detectability of a novel synthetic hallucinogen - studied by GC-MS, LC-MSⁿ, and LC-HR-MS/MS

Achim T. Caspar, Andreas G. Helfer, Volker Auwärter, Simon D. Brandt, Markus R. Meyer, Hans H. Maurer

Original report published in: Achim T. Caspar, Andreas G. Helfer, Julian A. Michely, Volker Auwärter, Simon D. Brandt, Markus R. Meyer, Hans H. Maurer. Studies on the metabolism and toxicological detection of the new psychoactive designer drug 2-(4-iodo-2,5-dimethoxyphenyl)-N-[(2-methoxyphenyl)methyl]ethanamine (25I-NBOMe) in human and rat urine using GC-MS, LC-MSⁿ, and LC-HR-MS/MS. *Anal Bioanal Chem*, DOI 10.1007/s00216-015-8828-6.

V13 LC-HR-MS/MS standard urine screening approach: Comparison of urine dilution, precipitation, or TurboFlow online extraction exemplified for 20 cardiovascular drugs

Andreas G. Helfer, Julian A. Michely, Armin A. Weber, Markus R. Meyer, Hans H. Maurer

Results will be published soon.

V15 Disposition of JWH-210, RCS-4, THC, and their main metabolites in pig serum and whole blood following intravenous administration - a pilot study

Nadine Schaefer, Mattias Kettner, Matthias W. Laschke, Julia Schlote, Benjamin Peters, Dietmar Bregel, Michael D. Menger, Hans H. Maurer, Andreas H. Ewald, Peter H. Schmidt

Original publication in preparation.

V17 In vitro cytochrome P450 (CYP) inhibition potential of 12 tryptamine-derived designer drugs elucidated by a novel cocktail inhibition assay

Julia Dinger, Julian A. Michely, Markus R. Meyer, Hans H. Maurer

Original publication in preparation.

V19 P-glycoprotein interactions of novel psychoactive substances - stimulation of ATP consumption and transport across Caco-2 monolayers.

Markus R. Meyer, Lea Wagmann, Nicole Schneider-Daum, Brigitta Loretz, Christiane de Souza Carvalho, Claus-Michael Lehr, Hans H. Maurer

Original publication in: Biochem Pharmacol 2015;94(3):220-226.

V20 Metabolism of synthetic cannabinoids – similarities and differences between metabolic patterns of different structural subclasses

Florian Franz, Nadja Schwörer, Verena Angerer, Laura M. Huppertz, Bjoern Moosmann, Volker Auwärter

Submission of an original article is planned in the special issue of Analytical and Bio-analytical Chemistry for the 53rd TIAFT meeting 2015.

V21 Characterization of glucuronosyltransferases and sulfonylesterases catalyzing ethyl glucuronide and ethyl sulfate and potential inhibition by common ingredients in food

Nicole Stachel, Gisela Skopp

Parts of this work have been published in: Nicole Schwab, Gisela Skopp. Identification and preliminary characterization of UDP-glucuronosyltransferases catalyzing formation of ethyl glucuronide. Anal Bioanal Chem 2014;406(9-10):2325-2332 and in:

Nicole Stachel, Gisela Skopp. Identification and characterization of sulfonylesterases catalyzing ethyl sulfate formation and their inhibition by polyphenols. Int J Legal Med 2015;1-8.

V25 „Evaluation of active cannabis consumption via testing of the THC-metabolites 11-hydroxy-THC and 11-nor-carboxy-THC“

Thomas Franz, Detlef Thieme, Gerlinde Schwarz, Hans Sachs, Frank Musshoff

Original publication in preparation.

V26 Δ^9 -Tetrahydrocannabinol (THC) and 11-nor-9-carboxy-THC (THC-COOH) findings in hair samples after controlled oral intake of dronabinol

Bjoern Moosmann, Volker Auwärter

Eine ausführliche Darstellung folgt in Toxichem Krimtech Heft 3/2015.

V29 A pet's death

Sarah Hangartner, Jasmin Steiner, Franz Dussy, Regula Möckli, Kathrin Gerlach, Thomas Briellmann

This work will be published soon: A suicide involving intraperitoneal injection of pentobarbital. Int J Leg Med, in press.

V32 Development of a standardised test for the activity of phospholipase D (PLD) responsible for biosynthesis of phosphatidylethanol (PEth)

Alexandra Schröck, Peter Bütikofer, Wolfgang Weinmann

Results will be published soon.

P05 Validation of CEDIA and DRI drugs of abuse immunoassays for urine screening on a Thermo Scientific Indiko Plus analyser

Katharina M. Köhler, Rajja Hammer, Kathrin Riedy, Volker Auwärter, Merja A. Neukamm

Original publication in preparation.

P08 Rapid extraction of THC-COOH and THC-COO-glucuronide from human urine and quantitative analysis by column-switching LC-MS/MS

Marianne Hädener, Wolfgang Weinmann, Stefan König

Original publication in preparation

P10 Systematic Forensic Toxicological Analysis by GC-MS in Serum Using Automated Mass Spectral Deconvolution and Identification System

Marcel Grapp, Hans H. Maurer, Herbert Desel

Original manuscript accepted for publication in Drug Test Analysis.

P20 Fatal intoxication after consumption of a high dose of the synthetic opioid AH-7921

Helena Fels, Julia Krueger, Torsten Dame, Hans Sachs, Frank Musshoff, Jan Schaeper, Matthias Graw, Gabriele Roider, Andreas Stoever

Original publication in preparation

P21 Accidental intoxication with 25I-NBOMe

Christina Grumann, Maren Hermanns-Clausen, Josephine Kithinji, Verena Angerer, Volker Auwärter

Results will be published soon.

P30 THCCOOH concentrations in whole blood: a useful tool to discriminate occasional from heavy smokers

Marie Martin Fabritius, Wolfgang Weinmann, Marc Augsburger, Christian Giroud

The controlled cannabis administration study was already published: Fabritius M, Favrat B, Chtioui H, Battistella G, Annoni JM, Appenzeller M, Dao K, Fornari E, Lauer E, Mall JF, Maeder P, Mangin P, Staub C, Giroud C. THCCOOH concentrations in whole blood: Are they useful in discriminating occasional from heavy smokers? *Drug Test Anal* 2014;6:155-163.

The validation of threshold was recently published: Fabritius M, Augsburger M, Chtioui H, Favrat B, Giroud C. Fitness to drive and cannabis: Validation of two blood THCCOOH threshold to distinguish occasional users from heavy smokers. *For Sci Int* 2014;242:1-8.