

MICROGRAM BULLETIN

The U.S. Attorney General has determined that the publication of this periodical is necessary in the transaction of the public business required by the Department of Justice. Information, instruction, and disclaimers can be found at www.dea.gov.

SELECTED REFERENCES

The Selected References section is a compilation of recent publications of presumed interest to forensic chemists. Unless otherwise stated, all listed citations are published in English. Abbreviated mailing address information duplicates that which is provided by the abstracting service. Patents and Proceedings are reported only by their *Chemical Abstracts* citation number. For full text copies of any of the articles listed, you may email the DEA Library at dea.library@usdoj.gov.

- Choi H, Heo S, Choe S, Yang W, Park Y, Kim E, Chung H, Lee J. **Simultaneous analysis of synthetic cannabinoids in the materials seized during drug trafficking using GC/MS.** *Analytical and Bioanalytical Chemistry* 2013; 405(12):3937-3944. [Editor's Notes: Presents title study. Contact: National Forensic Service-Narcotics Analysis Division, Seoul 158-707, South Korea.]
- Elliott SP, Brandt SD, Freeman S, Archer RP. **AMT (3-(2-aminopropyl)indole) and 5-IT (5-(2-aminopropyl)indole): An analytical challenge and implications for forensic analysis.** *Drug Testing and Analysis* 2013;5(3):196-202. [Editor's Notes: Discusses the differentiation of AMT and the new designer drug 5-IT by NMR, GC/MS, LC, and LC/MS. Contact: Malvern Hills Science Park, ROAR Forensics, Malvern WR14 3SZ, United Kingdom.]
- Fornal E, Stachniuk A, Wojtyla A. **LC-Q/TOF mass spectrometry data driven identification and spectroscopic characterisation of a new 3,4-methylenedioxy-N-benzyl cathinone (BMDP).** *Journal of Pharmaceutical and Biomedical Analysis* 2013;72:139-144. [Editor's Notes: Presents title study. Contact: Chemistry Department, The John Paul II Catholic University of Lublin, 20-718 Lublin, Poland.]
- Mohr S, Weiss JA, Spreitz J, Schmid MG. **Chiral separation of new cathinone- and amphetamine-related designer drugs by gas chromatography-mass spectrometry using trifluoroacetyl-L-prolyl chloride as chiral derivatization reagent.** *Journal of Chromatography, A* 2012;1269:352-359. [Editor's Note: Presents title study. Contact: Department of Pharmaceutical Chemistry, Institute of Pharmaceutical Sciences, Karl-Franzens-University Graz, A-8010 Graz, Austria.]
- Zuba D, Sekula K, Buczek A. **25C-NBOMe - New potent hallucinogenic substance identified on the drug market.** *Forensic Science International* 2013;227(1-3):7-14. [Editor's Notes: Presents title study. Contact: Institute of Forensic Research, Krakow 31033, Poland.]
- Zuba D, Sekula K. **Analytical characterization of three hallucinogenic N-(2-methoxy)benzyl derivatives of the 2C-series of phenethylamine drugs.** *Drug Testing and Analysis* 2012, Ahead of Print, doi: 10.1002/dta.1397. [Editor's Notes: The characterization of 2-(2,5-dimethoxy-4-methylphenyl)-N-(2-methoxybenzyl)ethanamine (25D-NBOMe), 2-(4-ethyl-2,5-dimethoxyphenyl)-N-(2-methoxybenzyl)ethanamine (25E-NBOMe), and 2-(2,5-dimethoxy-3,4-dimethylphenyl)-N-(2-methoxybenzyl)ethanamine (25G-NBOMe) by GC/MS, FTIR, NMR, and liquid chromatography-electrospray ionization-quadrupole time of flight mass spectrometry (LC-ESI-QTOF-MS) is reported. Contact: Institute of Forensic Research, Krakow 31033, Poland.]
- Zuba D, Byrska B. **Prevalence and co-existence of active components of legal highs 'Analysis of legal highs'.** *Drug Testing and Analysis* 2012, Ahead of Print, doi: 10.1002/dta.1365. [Editor's Notes: Presents title study. Contact: Institute of Forensic Research, Department of Forensic Toxicology, Krakow, Poland.]
- Zuba D, Sekula K. **Identification and characterization of 2,5-dimethoxy-3,4-dimethyl-beta-phenethylamine (2C-G) - A new designer drug.** *Drug Testing and Analysis* 2012, Ahead of Print, doi: 10.1002/dta.1396. [Editor's Notes: Presents title study. Contact: Institute of Forensic Research, Krakow 31033, Poland.]

Additional References of Possible Interest:

- Athanasidou I, Angelis YS, Lyris E, Georgakopoulos C. **Chemical derivatization to enhance ionization of anabolic steroids in LC-MS for doping-control analysis.** *Trends in Analytical Chemistry* 2013;42:137-156. [Editor's Notes: Presents title review. Contact: Doping Control Laboratory of Athens, Olympic Athletic Center of Athens, Maroussi 15123, Greece.]
- Choe S, Heo S, Choi H, Kim E, Chung H, Lee J. **Analysis of pharmaceutical impurities in the methamphetamine crystals seized for drug trafficking in Korea.** *Forensic Science International* 2013;227(1-3):48-51. [Editor's Notes: Presents title study. Contact: National Forensic Service, Seoul 158-707, South Korea.]
- Jac P, Scriba GKE. **Recent advances in electrodriven enantioseparations.** *Journal of Separation Science* 2013;36(1):52-74. [Editor's Notes: Presents title review. Contact: Friedrich Schiller University, Department of Pharmaceutical Chemistry, Jena, Germany.]
- Kunalan V, Kerr WJ, NicDaeid N. **Clarification of route specific impurities found in methylamphetamine synthesized using the Birch method.** *Forensic Science International* 2013;223(1-3):321-329. [Editor's Notes: Presents title study. Contact: Centre for Forensic Science, Department of Pure and Applied Chemistry, WestCHEM, University of Strathclyde, Scotland G1 1XW, United Kingdom.]

5. Koo C, Cox M, Klass G, Johnston M. **Stereochemical analysis of methorphan using (-)-menthyl chloroformate.** *Journal of Forensic Sciences* 2012;57(6):1549-1555. [Editor's Notes: Presents a GC/MS method for the determination of the enantiomers of methorphan using the derivatizing agent (-)-menthyl chloroformate. Contact: (School of Pharmacy and Medical Sciences, University of South Australia, Adelaide, SA, Australia.)
6. Makino Y. **Simple HPLC method for detection of trace ephedrine and pseudoephedrine in high-purity methamphetamine.** *Biomedical Chromatography* 2012;26(3):327-330. [Editor's Notes: Presents title study. Contact: The University of Tokyo, -0033, 7-3-1, Hongo, Graduate School of Pharmaceutical Sciences, Tokyo, Japan 113.]
7. Moran J, McCall H, Yeager B, Bell S. **Characterization and validation of ion mobility spectrometry in methamphetamine clandestine laboratory remediation.** *Talanta* 2012;100:196-206. [Editor's Notes: The use of ion mobility spectrometry (IMS) as a tool for the determination of remediation success at clandestine methamphetamine laboratory sites was evaluated. The recovery of pseudoephedrine and methamphetamine from a variety of surfaces encountered at clandestine laboratories were also examined. Contact: C. Eugene Bennett Department of Chemistry, West Virginia University, Morgantown, WV 26506 USA.]
8. NicDaeid N, Jayamana S, Kerr WJ, Meier-Augenstein W, Kemp HF. **Influence of precursor solvent extraction on stable isotope signatures of methylamphetamine prepared from over-the-counter medicines using the Moscow and Hypophosphorous routes.** *Analytical and Bioanalytical Chemistry* 2013;405(9):2931-2934. [Editor's Notes: Presents title study. Contact: Department of Pure and Applied Chemistry, Centre for Forensic Science, University of Strathclyde, Glasgow G1 1XW, United Kingdom.]
9. Tsujikawa K, Kuwayama K, Miyaguchi H, Kanamori T, Iwata YT, Inoue H. **Chemical profiling of seized methamphetamine putatively synthesized from phenylacetic acid derivatives.** *Forensic Science International* 2013;227(1-3):42-44. [Editor's Notes: Presents title study. Contact: National Research Institute of Police Science, Kashiwa, Chiba 277-0882, Japan.]

THE DEA STATE AND LOCAL FORENSIC CHEMISTS SEMINAR SCHEDULE

The schedule for the DEA State and Local Forensic Chemists Seminar is as follows:

September 16 - 20, 2013
November 4 - 8, 2013

The school is open only to forensic chemists working for law enforcement agencies. It is intended for chemists who have completed their agency's internal training program and have also been working on the bench for at least one year. There is no tuition charge. The course is held at the Hyatt Place Dulles North Hotel in Sterling, Virginia (near the Washington/Dulles International Airport). A copy of the application form is reproduced on the last page of this issue of *Microgram Bulletin*. Completed applications should be mailed to the Special Testing and Research Laboratory at 22624 Dulles Summit Court, Dulles, VA 20166. For additional information, send an email to: DEA-Forensic.Chemist.Seminar@usdoj.gov.

DEA State and Local Forensic Chemist Seminar Application

Name: (PRINT NAME EXACTLY AS IT IS TO APPEAR ON CERTIFICATE)	Title:
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Employer:

Your Office Mailing Address (include city, state, and zip code):	Length of Service:
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Business Telephone: () -	Business Fax: () -	Date of Application:
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Email Address:

Education

College or University	Degree	Major

Please Check Which Techniques or Equipment Are Used in Your Laboratory

Color Tests	UV
Column Chromatography	IR
Microcrystal Tests	CE
Thin Layer Chromatography	GC/MS
GC	Other (please specify)
HPLC	Other (please specify)

Indicate Analytical Problem(s) Nominee Would Like to Have Covered:

Choice of Seminar Dates:
1st Choice: _____ 2nd Choice: _____

Laboratory Chief/Director:

Printed Name: _____ Signature: _____

Title: _____ Date: _____

Phone: _____