U.S. Department of Justice
Drug Enforcement Administration
Office of Forensic Sciences

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.

1. Denooz R, Vanheugen JC, Frederich M, de Tullio P, Charlier C. **Identification and structural elucidation of four cannabimimetic compounds (RCS-4, AM-2201, JWH-203 and JWH-210) in seized products.** Journal of Analytical Toxicology 2013;37(2):56-63. [Editor's Notes: Presents title study. Contact: Laboratory of Clinical, Forensic, Environmental and Industrial Toxicology, CHU Sart-Tilman, CIRM, University of Liege, Belgium.]

2. Elie L, Baron M, Croxton R, Elie M. **Microcrystalline identification of selected designer drugs.** Forensic Science International 2012;214(1-3):182-188. [Editor's Notes: A microcrystalline test for the detection of 4-methylmethcathinone, benzylpiperazine, and 5,6-methylenedioxy-2-aminoindane using aqueous solutions of mercury chloride is described. Contact: School of Natural and Applied Sciences, University of Lincoln, Lincoln, United Kingdom.]

3. Gambelunghe C, Marsili R, Aroni K, Bacci M, Rossi R. **GC-MS and GC-MS/MS in PCI mode determination of mescaline in peyote tea and in biological matrices.** Journal of Forensic Sciences 2013;58(1):270-278. [Editor's Notes: Presents title study. Contact: Department of Clinical and Experimental Medicine, Division of Legal and Sports Medicine, University of Perugia, Perugia 06123, Italy.]

4. Jankovics P, Varadi A, Toelgyesi L, Lohner S, Nemeth-Palotas J, Balla J. **Detection and identification of the new potential synthetic cannabinoids 1-pentyl-3-(2-iodobenzoyl)indole and 1-pentyl-3-(1-adamantoyl)indole in seized bulk powders in Hungary.** Forensic Science International 2012;214(1-3):27-32. [Editor's Notes: Presents title study. Contact: National Institute of Pharmacy, H-1051 Budapest, Hungary.]

5. Parthasarathy S, Ramanathan S, Murugaiyah V, Hamdan MR, Said MI, Lai CS, Mansor SM. **A simple HPLC-DAD method for the detection and quantification of psychotropic mitragynine in Mitragyna speciosa (ketum) and its products for the application in forensic investigation.** Forensic Science International 2013;226(1-3):183-187. [Editor's Notes: Presents title study. Contact: Centre for Drug Research, Universiti Sains Malaysia, Penang 11800, Malaysia.]

6. Shevyrin V, Melkozerov V, Nevero A, Eltsov O, Morzherin Y, Shafran Y. **Identification and analytical properties of new synthetic cannabimimetics bearing 2,2,3,3-tetramethylcyclopropanecarbonyl moiety.** Forensic Science International 2013;226(1-3):62-73. [Editor's Notes: Presents title study. Contact: Ural Federal University, Institute of Chemistry and Technology, Yekaterinburg 620002, Russia.]

7. Zhang Y, Woods RM, Breitbach ZS, Armstrong DW. **1,3-Dimethylamylamine (DMAA) in supplements and geranium products: natural or synthetic?** Drug Testing and Analysis 2012; 4(12):986-990. [Editor's Notes: In this study, the enantiomeric and diastereomeric ratios of 2 different known synthetic DMAA compounds, as well as the total concentration of DMAA and its stereoisomeric ratios in 13 different supplements, were determined by gas chromatography. Eight different commercial geranium extracts were also analyzed for the presence of DMAA. Contact: University of Texas at Arlington, Department of Chemistry and Biochemistry, Arlington, TX 76019, USA.]

Additional References of Possible Interest:

1. Athanasiadou I, Angelis YS, Lyris E, Vonaparti A, Thomaidis NS, Koupparis MA, Georgakopoulos C. **Two-step derivatization procedures for the ionization enhancement of anabolic steroids in LC-ESI-MS for doping control analysis.** Bioanalysis 2012;4(2):167-175. [Editor's Notes: Presents title study. Contact: Doping Control Laboratory of Athens, Olympic Athletic Center of Athens, Maroussi, Greece 15123.]

2. Blachut D, Danikiewicz W, Wojtasiewicz K, Olejnik M, Kalinowska I, Szawkalo J, Czarnocki Z. **The synthesis, mass spectrometric properties and identification of some N,N-di-(β-arylisopropyl)formamides related to the synthesis of ring-modified amphetamines.** Forensic Science International 2011;206(1-3): 197-206. [Editor's Notes: Presents title study. Contact: Faculty of Chemistry, Warsaw University, 02-093 Warsaw, Poland.]

4. Iwata YT, Mikuma T, Kuwayama K, Tsujikawa K, Miyaguchi H, Kanamori T, Inoue H. **Applicability of chemically modified capillaries in chiral capillary electrophoresis for methamphetamine profiling.** Forensic Science International 2013;226(1-3):235-239. [Editor's Notes: Presents title study. Contact: National Research Institute of Police Science, Kashiwa, Chiba 277-0882, Japan.]

5. Lovett DP, Yanes EG, Herbelin TW, Knoerzer TA, Levisky JA. **Structure elucidation and identification of a common metabolite for naphthoylindole-based synthetic cannabinoids**

using LC-TOF and comparison to a synthetic reference standard. Forensic Science International 2013;226(1-3):81-87. [Editor's Notes: The metabolite 3-(3-(1-naphthoyl)-1H-indol-1-yl)propanoic acid (1, JWH-072 N-propanoic acid metabolite) was successfully identified by MS, LC, and chemical derivatization. Full characterization by ^{1}H NMR, ^{13}C NMR, FTIR, and HRMS was also conducted. The identity of the metabolite was confirmed against a known reference material. Contact: HQ Air Force Drug Testing Laboratory, Lackland Air Force Base, TX 78236-5310, USA.]

6. Morelato M, Beavis A, Kirkbride P, Roux C. **Forensic applications of desorption electrospray ionisation mass spectrometry (DESI-MS).** Forensic Science International 2013;226(1-3):10-21. [Editor's Notes: Presents title study. Contact: Centre for Forensic Science, Sydney (UTS), University of Technology, Broadway NSW 2007, Australia.]

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:
Employer:	
Your Office Mailing Address (include city, state, and zipcode):	Length of Service:
Business Telephone: ( ) -	Business Fax: ( ) -
Date of Application:	
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: _____