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- JUNE 2010 -

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.]

1. Camilleri A, Johnston MR, Brennan M, Davis S, Caldicott DGE. **Chemical analysis of four capsules containing the controlled substance analogues 4-methylmethcathinone, 2-fluoromethamphetamine, α-phthalimidopropiophenone and N-ethylcathinone.** Forensic Science International 2010;197(1-3):59-66. [Editor's Notes: Presents title study. Contact: Forensic Science, 21 Divett Place, Adelaide, SA, Australia.]

2. Rodriguez-Cruz SE, Carson KA. **Anion identification via complexation with meso-octamethylcalix(4)pyrrole and detection using electrospray ionization mass spectrometry.** Journal of Forensic Sciences 2010;55(2):499-507. [Editor's Notes: The routine identification of controlled substances and adulterants during forensic chemistry analysis often involves the identification of counter ions or salt forms present in an exhibit. Here, the use of the compound meso-octamethylcalix(4)pyrrole (C4P) during salt-form identification analysis is presented. C4P is a commercially-available, anion-

binding agent that can be reacted with a controlled substance or adulterant, resulting in the sequestration of anionic species, usually present as counter ions to the active ingredient. Formation of noncovalent complexes between the cyclic host C4P compound and anionic guests is investigated using electrospray ionization–mass spectrometry (ESI–MS). Complexes with chloride, bromide, iodide, nitrate, and acetate are readily observed and mass spectrometry analysis provides identification via molecular weight characterization. Chloride and bromide complexes are also characterized by the isotopic distribution of their molecular ions. Formation of host–guest complexes is not observed for sulfate and phosphate salts, presumably due to steric hindrance and energetically unfavorable conditions. Contact: U.S. Drug Enforcement Administration, Southwest Laboratory, Vista, CA 92081, USA.]

3. Uchiyama N, Kikura-Hanajiri R, Ogata J, Goda Y. **Chemical analysis of synthetic cannabinoids as designer drugs in herbal products.** Forensic Science International 2010;198(1-3):31-38. [Editor's Notes: Several synthetic cannabinoids were found in 44 of 46 different kinds of herbal products that are currently distributed on the illegal drug market in Japan. GC/MS and LC/MS analyses indicated that most of the products contained two major synthetic cannabinoids: cannabicyclohexanol and JWH-018. Oleamide, JWH-073, and CP-47,497 were also detected in some of the products. This study details the analysis and identification of these synthetic cannabinoids in herbal products. Contact: National Institute of Health Sciences, 1-18-1 Kamiyoga, Setagaya-ku, Tokyo 158-8501, Japan.]

Additional References of Possible Interest:

1. Green FM, Salter TL, Stokes P, Gilmore IS, O'Connor G. **Ambient mass spectrometry: Advances and applications in forensics.** Surface and Interface Analysis 2010;42(5):347-357. [Editor's Notes: Presents title study. Contact: National Physical Laboratory, Teddington, Middlesex TW11 0LW.]

2. Mario JR. **A probability-based sampling approach for the analysis of drug seizures composed of multiple containers of either cocaine, heroin, or Cannabis.** Forensic Science International 2010;197(1-3):105-113. [Editor's Notes: Presents title study. Contact: Suffolk County Crime Laboratory Drug Chemistry Section, Office of the Chief Medical Examiner, Hauppauge, NY 11788, USA.]

3. Pavlic M, Schubert B, Libiseller K, Oberacher H. **Comprehensive identification of active compounds in tablets by flow-injection data-dependent tandem mass spectrometry combined with library search.** Forensic Science International 2010;197 (1-3):40-47. [Editor's Notes: Presents title study. Contact: Institute of Legal Medicine, Innsbruck Medical University, Muellerstrasse 44, Innsbruck 6020, Austria.]

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THE JOURNAL/TEXTBOOK COLLECTION EXCHANGE

The Journal/Textbook Collection Exchange is a service intended to facilitate the transfer of unwanted journals and textbooks to forensic libraries or other *Microgram* subscribers. The current donations are listed below. The offers are First Come/First Serve (except **libraries have preference**). There are no charges to the requestor. Please provide a full mailing address in the request. **Important!:** Do not provide an address that irradiates mail!

Journal of Forensic Sciences:

2001: January (#1), March (#2), May (#3), September (#5), November (#6)
2002: Complete set
2003: Complete set
2005: January (#1), May (#3), November (#6)

All subscribers are encouraged to donate surplus or unwanted items/collections. Reference texts and long runs of forensic/analytical journals are of particular interest; however, even single issues are worthwhile, and may fill a hole in an existing collection. If interested, please consult the *Microgram* website or contact the *Microgram* Editor for further instructions.

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THE DEA FY 2010 STATE AND LOCAL FORENSIC CHEMISTS SEMINAR SCHEDULE

The FY 2010 schedule for the State and Local Forensic Chemists Seminar is as follows:

September 13-17, 2010

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 (Attention: J. Head) at 22624 Dulles Summit Court, Dulles, VA 20166. For additional information, call (703) 668-3349.

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SCIENTIFIC MEETINGS

Title: 2010 Southwestern Association of Forensic Scientists Annual Meeting
Sponsoring Organization: Southwestern Association of Forensic Scientists
Inclusive Dates: September 20 - 24, 2010
Location: Great Wolf Lodge (Grapevine, TX)
Contact Information: swafs2010@yahoo.com
Website: www.swafs.us

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Title: Southern Association of Forensic Scientists Annual Fall Meeting
Sponsoring Organization: Southern Association of Forensic Scientists
Inclusive Dates: September 19 - 24, 2010
Location: Hollywood Casino Hotel (Tunica, MS)
Contact Information: See Website
Website: www.southernforensic.org

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Title: 2010 Northwest Association of Forensic Scientists Meeting
Sponsoring Organization: Northwest Association of Forensic Scientists
Inclusive Dates: September 27 - October 1, 2010
Location: Crown Plaza Portland (Portland, OR)
Contact Information: See Website
Website: www.nwafs.org

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Title: 2010 Midwestern Association of Forensic Scientists 39th Annual Meeting
Sponsoring Organization: Midwestern Association of Forensic Scientists
Inclusive Dates: October 4 - 8, 2010
Location: Kansas City Marriott Downtown (Kansas City, MO)
Contact Information: See Website
Website: www.mafs.net

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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		IR
	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: _____