

TDTS 4

Publications and presentations citing Markes' products

Introduction


This Application Note is a compilation of publications and representative presentations that cite Markes' products. The aim is to allow the reader to quickly identify relevant citations in the literature, as well as to demonstrate the versatility of Markes' equipment across the whole range of VOC analytical applications.

Where available, links to the original sources are provided; if none is given, please contact us (enquiries@markes.com) to check on availability.

Within each subsection, citations are presented in reverse chronological order, and the products covered appear in bold type at the end of each entry. These products are briefly described below – to visit the relevant webpage, please click on the product name.

Air Server	For canisters and on-line sampling
Bio-VOC	For non-invasive breath monitoring
CIA Advantage	Automated analyser for canisters
Easy-VOC	Easy-to-use grab-sampler
µ-CTE	The Micro-Chamber/Thermal Extractor
MTS-32	Multi-tube sampler
TargetView	Software for compound identification
TC-20	Multi-tube conditioner
TD-100	Automated 100-tube thermal desorber
TT24-7	For continuous on-line monitoring
TubeTAG	Sorbent tube tagging and tracking
ULTRA	100-Tube autosampler
UNITY	Universal TD platform for single tubes
VOC-Mole	For below-ground VOC monitoring.

Key

	Book
	Peer-reviewed journal article
	Technical report
	Magazine article
	Conference presentation or poster

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General



E. Woolfenden, Thermal desorption for gas chromatography, in: *Gas Chromatography*, ed. C.F. Poole, Elsevier, 2012, chapter 10, pp. 235–289.

http://www.elsevier.com/wps/find/bookdescription.cws_home/727845/description#description

Air Server CIA 8 μ -CTE TargetView TD-100 TT24-7 ULTRA UNITY



E. Woolfenden, Sorbent-based sampling methods for volatile and semi-volatile organic compounds in air. Part 1: Sorbent-based air monitoring options, *Journal of Chromatography A*, 2010, 1217: 2674–2684.

<http://dx.doi.org/10.1016/j.chroma.2009.12.042>

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E. Woolfenden, Sorbent-based sampling methods for volatile and semi-volatile organic compounds in air. Part 2: Sorbent selection and other aspects of optimizing air monitoring methods, *Journal of Chromatography A*, 2010, 1217: 2685–2694.

<http://dx.doi.org/10.1016/j.chroma.2010.01.015>

Bio-VOC ULTRA UNITY VOC-Mole

Environmental monitoring

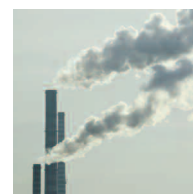
General



N. Watson and K. Thaxton, Making tube sampling easy: The development of a new type of 'grab sampler', *Pittcon*, Orlando, FL, USA, March 2012.

<http://www.markes.com/downloads/publications.aspx>

Easy-VOC TD-100



N. Watson, S. Davies and D. Wevill, Air monitoring: New advances in sampling and detection, *The Scientific World Journal*, 2011, 11: 2582–2598.

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CIA Advantage TD-100



N. Ramírez, A. Cuadras, E. Rovira, F. Borrull and R.M. Marcé, Comparative study of solvent extraction and thermal desorption methods for determining a wide range of volatile organic compounds in ambient air, *Talanta*, 2010, 82: 719–727.

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MTS-32 ULTRA UNITY



D. Wevill, S. Davies and J. Dwan, Recent enhancements to monitoring volatiles in air by thermal desorption, *Pittcon*, Chicago, IL, USA, March 2009.

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Air Server ULTRA UNITY



M. Bates, P. Bruno, M. Caputi, M. Caselli, G. de Gennaro and M. Tutino, Analysis of polycyclic aromatic hydrocarbons (PAHs) in airborne particles by direct sample introduction thermal desorption GC/MS, *Atmospheric Environment*, 2008, 42: 6144–6151.

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M.A. Parra, D. Elustondo, R. Bermejo and J.M. Santamaría, Quantification of indoor and outdoor volatile organic compounds (VOCs) in pubs and cafés in Pamplona, Spain, *Atmospheric Environment*, 2008, 42: 6647–6654.

<http://dx.doi.org/10.1016/j.atmosenv.2008.04.026>

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M. Caputi, Monitoring of volatile organic compounds and polycyclic aromatic compounds in atmosphere (Ph.D. thesis), University of Bari, Italy, 2004.

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Industrial



M. Amodio, G. de Gennaro, A. Marzocca, L. Trizio and M. Tutino, Assessment of impacts produced by anthropogenic sources in a little city near an important industrial area (Modugno, Southern Italy), *The Scientific World Journal*, 2013, article no. 150397.

<http://dx.doi.org/10.1155/2013/150397>

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N. Ramírez, A. Cuadras, E. Rovira, F. Borrull and R.M. Marcé, Chronic risk assessment of exposure to volatile organic compounds in the atmosphere near the largest Mediterranean industrial site, *Environment International*, 2012, 39: 200–209.

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B. Pekey and H. Yilmaz, The use of passive sampling to monitor spatial trends of volatile organic compounds (VOCs) at an industrial city of Turkey, *Microchemical Journal*, 2011, 97: 213–219.

<http://dx.doi.org/10.1016/j.microc.2010.09.006>

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M.Y. Civan, O.O. Kuntasal and G. Tuncel, Source apportionment of ambient volatile organic compounds in Bursa, a heavily industrialized city in Turkey, *Environmental Forensics*, 2011, 12: 357–370

<http://dx.doi.org/10.1080/15275922.2011.622345>

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R. Lindahl, A.-S. Claesson, M.A. Khan and J.-O. Levin, Development of a method for the determination of naphthalene and phenanthrene in workplace air using diffusive sampling and thermal desorption GC-MS analysis, *Annals of Occupational Hygiene*, 2011, 55: 681–687.

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TC-20



L.T. Budnik, S. Fahrenholtz, S. Kloth and X. Baur, Halogenated hydrocarbon pesticides and other volatile organic contaminants provide analytical challenges in global trading, *Journal of Environmental Monitoring*, 2010, 12: 936–942.

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E. Kabir and K.-H. Kim, An on-line analysis of 7 odorous volatile organic compounds in the ambient air surrounding a large industrial complex, *Atmospheric Environment*, 2010, 44: 3492–3502.

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<http://dx.doi.org/10.1021/es101507s>

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M. Ruchirawat, P. Navasumrit and D. Settachan, Exposure to benzene in various susceptible populations: Co-exposures to 1,3-butadiene and PAHs and implications for carcinogenic risk, *Chemico-Biological Interactions*, 2010, 184: 67–76.

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Urban



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M. Caselli, G. de Gennaro, M.R. Saracino and M. Tutino, Indoor contaminants from newspapers: VOCs emissions in newspaper stands, *Environmental Research*, 2009, 109: 149–157.

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H.T. Nguyen, K.-H. Kim and M.-Y. Kim, Volatile organic compounds at an urban monitoring station in Korea, *Journal of Hazardous Materials*, 2009, 161: 163–174.

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M.A. Parra, D. Elustondo, R. Bermejo and J.M. Santamaría, Ambient air levels of volatile organic compounds (VOC) and nitrogen dioxide (NO₂) in a medium size city in Northern Spain, *Science of the Total Environment*, 2009, 407: 999–1010.

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B.-M. Svensson, L. Mårtensson, L. Mathiasson, T. Åkeson and A. Persson, Leachability testing of sludge from street gullies, *Waste Management & Research*, 2006, 24: 260–268.

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Rural



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M.A. Parra, L. González, D. Elustondo, J. Garrigó, R. Bermejo and J.M. Santamaría, Spatial and temporal trends of volatile organic compounds (VOC) in a rural area of northern Spain, *Science of the Total Environment*, 2006, 370: 157–167.

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Agricultural



D.B. Parker et al., Odorous VOC emission following land application of swine manure slurry, *Atmospheric Environment*, 2013, 66: 91–100.

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A. Feilberg, A.P.S. Adamsen, S. Lindholst, M. Lyngbye and A. Schaefer, Evaluation of biological air filters for livestock ventilation air by membrane inlet mass spectrometry, *Journal of Environmental Quality*, 2010, 39: 1085–1096.

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UNITY VOC-Mole

Landfill/waste treatment



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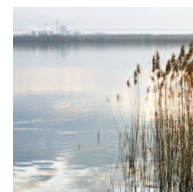
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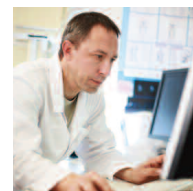
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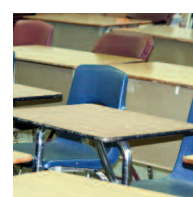
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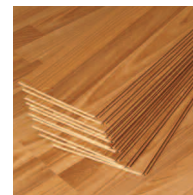


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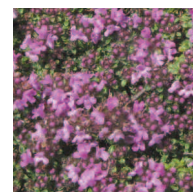
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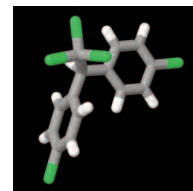
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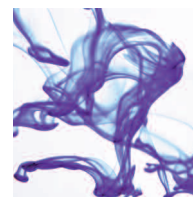
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