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Maurer, Meyer, Pfleger, Weber: GC-MS Library of Drugs, Poisons, and Their Metabolites

From the Leader in Spectral Data



The essential reference for clinical and forensic toxicologists, newly updated!

The most comprehensive reference for clinical and forensic toxicologists has once more been extensively updated. *The Maurer, Meyer, Pfleger, Weber: GC-MS Library of Drugs, Poisons, and Their Metabolites 6th Edition (MMPW)* spectral database contains experimental data that are relevant to the analytical toxicologist. To aid in compound identification, all substances are classified according to their toxicological categories. Methods are now provided with the database in a convenient PDF format to enhance lab efficiency.

Developed and updated by the renowned toxicology group in

Saarland, Hans H. Maurer, Markus Meyer, and Armin Weber, the Maurer Meyer Pfleger Weber (MMPW) is one of the most esteemed spectral databases for GC-MS identification and is globally recognized and relied upon by toxicologists, forensic scientists, coroners, and environmental chemists in the identification of drugs, poisons, and other toxins, and their metabolites.

This extensive spectral collection includes **10,948 high-quality mass spectra** and GC retention indices with compounds from **175 categories** including psychoactive substances, almost all relevant therapeutic drugs, and over **7,800 of their metabolites**.

Available in the most common instrumentation manufacturer formats, this spectral library is a necessity for any laboratory engaged in the GC-MS analysis of drugs, poisons, and other toxins.



WHAT'S NEW IN THIS RELEASE

The MMPW 6th edition incorporates 518 carefully evaluated new datasets and 1,897 structures, introducing recent designer drugs, cannabinoids, opioids, stimulants, and compounds from many other crucial categories. Methods are now incorporated in PDF.



SPECIFICATIONS

- Spectra: 10,948
- Structures: 10,653
- Unique Compounds: 10,055
- Metabolites: > 7,800



APPLICATIONS

The MMPW GC-MS database offers exceptional reliability as a comprehensive resource for compound identification, characterization, and data interpretation for the forensic and clinical toxicology laboratory. With the this library, forensic and clinical toxicologists have a powerful tool that enhances their laboratory capabilities for confident identification.

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ADDITIONAL INFORMATION

When it comes to spectral analysis, the more data you have the better. Wiley spectral databases provide much more information than simply the spectrum. Database records include the following valuable details when available for the record:

- Chemical Structure
- Chemical Name
- Exact Mass
- Formula

- InChl/InChlKeyMolecular Weight
- Compound
- Classifications



COMPOUND COVERAGE

- Designer drugs
- Psychedelics
- Stimulants
- Antidepressants
- Chemicals
- Neuroleptics
- Antihistamines

- Tranquilizers
- Cannabinoids
- Analgesics
- Hypnotics
- Biomolecules
- Insecticides
- Antibiotics

- Herbicides
- Beta-blockers
- Fungicides
- Drugs of abuse
- And more



TECHNIQUE

Spectra were collected using the following apparatuses: Agilent Technologies (Waldbronn, Germany) 5890 Series II gas chromatograph combined with an HP 5970 MSD, an HP 5989B MS Engine mass spectrometer, or an Agilent Technologies HP 6890 gas chromatograph combined with Agilent/HP 5972, 5973, or 5977B MSDs and Thermo Fisher Scientific (Dreieich, Germany) DSQ II or ISQ GC-MS system, Trace GC Ultra (2.0), and Tri Plus autosampler (2.0).

The operating conditions were as follows:

 Column: cross-linked methylsilicone capillary Optima-1 MS 12 m x 0.2 l.D., film thickness 0.35 μm (Macherey-Nagel, Düren, Germany)

- Column temperature: solvent delay: 3 min at 100 °C programmed from 100 to 310 °C/min, 5 min at maximum temperature
- Injector port temperature: 280 °C
- Carrier gas: helium, flow rate 1 mL/min
- Ionization mode: electron ionization (EI)
- Ionization energy: 70 eV
- Ion source temperature: 200 °C
- Scan rate: 1 scan/secThe operating conditions were as follows:



ABOUT THE AUTHORS

Hans H. Maurer has been a full Professor of Pharmacology & Toxicology at the Faculty of Medicine and at the Faculty of Pharmacy, Saarland University from 1992 until October 2016. He was head of the Department of Experimental and Clinical Toxicology and is now Emeritus Professor at the same department. His main two areas of research are analytical toxicology (GC-MS, LC-MS of drugs, poisons and their metabolites) and in-vitro and in-vivo toxicokinetics (phase I and phase II metabolism, isoenzyme identification, drug transporters, pharmacogenomics, biotechnological metabolite synthesis). He has published extensively in both areas: over 300 peerreviewed original papers, 30 reviews articles, and three mass spectral libraries (GC-MS, LC-MSn , LC-HRMS/MS. He received several international scientific awards for his outstanding work, e.g. 1997 the IATDMCT Irving Sunshine Award, 2003 the TIAFT Alan Curry Award, and 2017 the GTFCh Jean-Servais Stas Medal. In 2007, he received an Honorary Doctorate (Doctor honoris causa) of the Ghent University in Belgium for his outstanding scientific achievements. He was board (1999-2011) and president of IATDMCT (2007-2009), councilor of TIAFT (2005-2017), and treasurer of GTFCh (1987-2017). From 2012-2014, he was Dean of the Faculty 2, Theoretical Medicine and Biosciences, of the Saarland University in Homburg. From 2013-2022, he was member of the expert committee of the German Federal Government for scheduling new drugs of abuse.

Markus R. Meyer is his successor since October 2016 as Full Professor of Pharmacology & Toxicology and holds the Chair of Experimental & Clinical Toxicology and Pharmacology at the Center for Molecular Signaling, Saarland University in Homburg, Germany. After PhD and habilitation in Homburg, he moved to the Department of Clinical Pharmacology at the Karolinska Institute in Stockholm and thereafter to the Department of Clinical Pharmacology and Pharmacoepidemiology at Heidelberg University Hospital, Germany. He has published over 200 peerreviewed original papers or review articles and received several international and national scientific awards amongst them the IATMDCT Victor Armstrong Young Investigator Award, the TIAFT Achievement Award, and the GTFCh Young Scientist Award. Prof. Meyer is member of several international and national scientific societies such as the IATDMCT, TIAFT, GTFCh, DGPT, and DGMS.

Karl Pfleger was the predecessor of Hans H. Maurer from 1967 until 1992. Under his far-seeing guidance, this mass spectral collection was initiated in the early 1980s. Together with his PhD student Hans H. Maurer and their coworker Armin A. Weber, they published in 1985 the first edition of this unique collection of mass spectra, first as handbook and later also as library. In 1987, Karl Pfleger received the Jean-Servais Stas Medal of the Gesellschaft für Toxikologische und Forensische Chemie (GTFCh) in Mosbach for his outstanding achievements in mass spectrometry in clinical toxicology. Unfortunately, in 2013, Karl Pfleger passed away.

Armin A. Weber was and is responsible for all technical and software developments, including the mass spectral database that was initially developed from the printed collection. He is coauthor of several papers of his group and also of the Maurer/Wissenbach/Weber LC-MSn Library of drugs, poisons, and their metabolites as well as of the corresponding new Maurer/Meyer/Helfer/Weber LC-high resolution-MS/MS library.



COMPATIBILITY

Compatible with most current and legacy mass spectrometry data systems. For full compatibility information please visit **sciencesolutions.wiley.com/compatibility**



ORDERING INFORMATION

- Maurer, Meyer, Pfleger, Weber: GC-MS Library of Drugs, Poisons, and Their Metabolites 6th Edition USB ISBN: 978-3-527-35286-9
- Maurer, Meyer, Pfleger, Weber: GC-MS Library of Drugs, Poisons, and Their Metabolites 6th Edition Upgrade USB ISBN: 978-3-527-35285-2

Also available as a subscription for Wiley's KnowltAll Software. This software features automated deconvolution and library search, and MS Adaptive search to aid with truly novel compounds.

- Maurer, Meyer, Pfleger, Weber: GC-MS Library of Drugs, Poisons, and Their Metabolites (Annual Subscription) SKU: 978EALDB05864
- Maurer, Meyer, Pfleger, Weber: GC-MS Library of Drugs, Poisons, and Their Metabolites (Annual Subscription Renewal) SKU: 978EALDB05857



TRUSTED DATA FROM A TRUSTED SOURCE

Wiley is the authoritative source for spectral data. Our renowned databases are processed according to rigorous protocols to ensure they are of the highest quality. Qualification procedures start at data acquisition and continue throughout the database development process. Any data acquired from trusted partners is thoroughly vetted before inclusion in our collections.