

BOOK REVIEW

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A Review of *GC/MS Assays for Abused Drugs in Body Fluids*

REFERENCE: *GC/MS Assays for Abused Drugs in Body Fluids*, Research Monograph Series 32, National Institute on Drug Abuse, National Institutes of Health, Washington, DC, 202 pages, Aug. 1980, no price listed.

GC/MS Assays for Abused Drugs in Body Fluids, a monograph from the National Institute on Drug Abuse (NIDA), deals with the gas chromatographic/mass spectrometric quantitative analysis for eleven commonly abused drugs. Two introductory chapters provide a discussion of the relative usefulness and advantages of chemical ionization GC/MS (CI-MS) versus electron-impact GC/MS and outline principles of operation common to all of the assays.

The remaining chapters deal individually with the eleven commonly abused drugs, including the amphetamines, phencyclidine, tetrahydrocannabinol, and cocaine. Each of these chapters includes a several-page, up-to-date discussion of the history, pharmacokinetics, interpretation of biological fluid concentrations, metabolism, and conventional methods for the agent. It then describes the detailed procedure for analysis by CI-MS.

Unfortunately, the use of this manual as a methods handbook will be limited for the forensic toxicologist of today simply because of the limited number of laboratories that have access to CI-MS. One of the deterrents has probably been the requirement to use isotope-labeled compounds as internal standards, which are, of themselves, quite expensive. NIDA is helping to overcome this problem by offering some of them free, and this book gives instructions on how to obtain them, as well as noting where they can be purchased from other sources.

One of the goals of NIDA in publishing this monograph is to encourage research in and further use of CI-MS; this work is certainly ideally suited for use by anyone using or contemplating the use of this technique.

Even aside from the analytical review and new methods presented, this monograph should find a widespread utility among forensic toxicologists because of its thorough and up-to-date reviews of the forensic science and interpretive aspects of each of the eleven abused drugs discussed.

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