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The abuse or illegal use of drugs is a worldwide social problem that is growing more serious rather than improving. The increase in drug abuse is, at least partially, thought to be due to the development of information gathering facilities, that is, today, anybody can easily access drug information. More types of drugs that had never been used illegally as well as classic drugs such as opioids and amphetamines are being used. In doping, athletes use endogenous substances such as steroids and growth factors to conceal drug use. In addition, it is feared that terrorists may use highly toxic substances of biological origin. To suppress the use of these substances and to respond rapidly to accidents involving the use of hazardous substances, it is necessary for forensic chemists to improve their ability to analyze and determine a wide variety of substances that may be abused. The analysis of trace contaminants in drug preparation is expected to be one methodology for identifying the origin of drug supply. In these analyses, forensic chemists are required to work accurately and rapidly, because the results reported affect the personal rights or the life of people. This symposium will discuss: 1) control and handling of information on toxic substances; 2) the metabolism of abused drugs and its relevance to effect and toxicity; 3) advances in the analysis of drugs of abuse; 4) profiling analysis of abused drugs: a tool for identifying the origin of supply; 5) doping analysis: recent advances and practice; and 6) analysis and problems of toxins from biological origins.