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Jiří Barek; Viktor Mejstřík; Alexandr Muck; Jiří Zima

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POLAROGRAPHIC AND VOLTAMMETRIC DETERMINATION OF CHEMICAL CARCINOGENS

Jiří Barek¹, Viktor Mejstřík², Alexandr Muck¹ and Jiří Zima¹

¹UNESCO Laboratory of Environmental Electrochemistry,

Department of Analytical Chemistry, Charles University,

12843 Prague 2, Czech Republic,

Phone: +420-2-2195 2295 Fax: +420-2-24913538

E-mail: Barek@prfdec.natur.cuni.cz

²Centre for Ecology, Toxicology and Analysis, Research Institute for Organic Syntheses, 532 18 Pardubice-
Rybitví, Czech Republic

The polarographic and voltammetric behaviour of chemical carcinogens will be reviewed and the possible role of electrochemistry in elucidation of their genotoxic and ecotoxic properties, mechanism of their action, metabolism, fate in the environment etc. will be briefly discussed. The use of modern electroanalytical techniques, namely differential pulse polarography, differential pulse voltammetry, adsorptive stripping voltammetry and high performance liquid chromatography with electrochemical detection for the determination of trace amounts of polycyclic aromatic hydrocarbons, nitrated polycyclic aromatic hydrocarbons, amino derivatives of polycyclic aromatic hydrocarbons, hydroxy derivatives of polycyclic aromatic hydrocarbons, heterocyclic aromatic hydrocarbons and their derivatives, n-nitrosocompounds, azocompounds (derivatives of N,N-dimethyl-4-amino-azobenzene and azodyes), derivatives of 1-phenyl-3,3-dimethyltriazene, mycotoxins and some other chemical carcinogens will be reviewed.