Obvyklé derivatizační postupy pro jednotlivé skupiny látek

	GC	HPLC, CE, TLC
Aflatoxins	Use HPLC or TLC	Post-column derivatization
Amino acids	n-Butyl ester, TFA	OPA, Dansyl
Aminoglycosides (Antibiotics)	Use HPLC or TLC	FDNB, OPA
Bile acids	Me ester–TMS	*p*-Bromophenacyl esters
Biogenic amines	Perfluoroacyl	Not usually necessary Post-column
Carbohydrates	TFA, TMS, boronate	Phenyl isocyanate Post-column
Drugs	Multifunctional.	Often not necessary
Fatty acids	Me ester	*p*-Bromophenacyl ester
Keto acids	Oxime–TMS	2,4-DNP
Mycotoxins	See Aflatoxins	
Nitrosamines	Chromatograph without derivatization	Chromatograph without derivatization
Nucleotides, nucleosides and bases	TMS	Depends on specific analyte
Organic acids	TMS	*p*-Bromophenacyl ester
keto	Oxime –TMS	2,4-DNP
α-keto	Quinoxalinol–silyl	Quinoxalinol
Peptides	Me ester–TFA	Dansyl
Polychlorinated biphenyls (PCB)	No derivatizable groups	No derivatizable groups
Polyamines	TFA	Benzoyl, dansyl
Polycyclic aromatic hydrocarbons (PAH)	(TMS for metabolite–OH groups)	Chromatograph without derivatization
Porphyrins	TMS	Chromatograph without derivatization
Prostaglandins (thromboxanes)	Me ester–oxime–TMS PFB ester–oxime–TBDMS	*p*-Bromophenacyl ester
Steroids	MO–TMS HFB	Keto: 2,4-DNP, dansyl benzoyl
Sugars	Reduce to alditols, then TFA or TMS	Phenyl isocyanate Post-column
Vitamins:		
A (retinol)	TMS	Chromatograph without derivatization
B_1 (thiamine)	Acyl	Chromatograph without derivatization, or post-column
B_6	Use HPLC	Chromatograph without derivatization, or post-column
C	TMS	Chromatograph without derivatization, or oxidize to dehydro-form and prepare 2,4-DNP or quinoxalinol derivatives
D and metabolites	TMS, boronate–TMS	Chromatograph without derivatization
E (tocopherol)	TMS	Chromatograph without derivatization
K	Chromatograph without derivatization (HPLC preferred)	Chromatograph without derivatization

OPA – o-ftalaldehyd

FDNB – 1-fluoro-2,4-dinitrobenzen

TMS – trimethylsilyl

DNP – dinitrofenyl

PFB – pentafluorobenzyl

TBDMS – t.-butyldimethylsilyl

TFA – trifluoracetyl