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ABBREVIATIONS AND SYMBOLS

amu	atomic mass unit
AR	analytical reagents
ACGIH	American Conference of Governmental Industrial Hygienists
BTEX	benzene, toluene, ethylbenzene, xylenes
C_0	initial concentration of the analyte in the sample
C_{18}	octadecyl
C_f	concentration of the analyte in the fiber coating
C_h	concentration of the analyte in the headspace
C_s	concentration of the analyte in the sample
cm	centimeter
cm^2	square centimeter
cm^3	cubic centimeter
CNS	Central Nervous System
DVB	divinylbenzene
e.g.	for example
eqn.	equation
Ed.	Editor
EI	electron impact
EPA	Environmental Protection Agency
etc.	and others
eV	electron volt
FID	flame ionization detector
FTIR	fourier transformed infrared spectroscopy
g	gram
GC	gas chromatograph
GC-FID	gas chromatograph with flame ionization detector
GC-IR	gas chromatograph with infrared spectrometer
GC-MS	gas chromatograph with mass spectrometer
GLC	gas-liquid chromatography

H	plate height
HP	high purity
HRGC	high resolution (capillary) gas chromatography
HPLC	high performance liquid chromatography
HSSPME	headspace solid phase microextraction
hr	hour
hrs	hours
I.D.	internal diameter
i.e.	that is
IR	infrared spectroscopy
ITP	isotachopheresis
IUPAC	International Union of Pure and Applied Chemistry
k	capacity factor
K	distribution constant
K _{ow}	octanol-water partition coefficient
kg	kilogram
L	liter
l	column length
LOD	limit of detection
m	meter
mg	milligram
mg/kg	milligram per kilogram
mg/L	milligram per liter
min	minute
ml/min	milliliter per minute
mm	millimeter
mm Hg	millimeter of mercury
MS	mass spectrometry , mass spectrometer
MSD	mass spectrometric detector
m/z	mass-to-charge ratio
MW	molecular weight
n	amount of the analyte extracted on SPME fiber

n	amount of the analyte extracted on SPME fiber
N	number of theoretical plates
no.	number
ng	nanogram
nm	nanometer
PDMS	polydimethylsiloxane
PTFE	polytetrafluoroethylene
pA	pico ampere
ppb	part per billion
ppm	part per million
psi	pound per square inch
RSD	relative standard deviation
R^2	correlation coefficient
R_s	resolution
s/n	signal to noise ratio
SPE	solid phase extraction
SPME	solid-phase microextraction
t_M	hold up time
t_R	retention time
t'_R	corrected retention time
TIG	Thai Industrial Gas
TR	template resin
UV	ultraviolet
UHP	ultra high purity
USEPA	United States Environmental Protection Agency
v	volt
V_f	volume of the SPME fiber coating
V_h	volume of the headspace
V_m	volume of the mobile phase
V_R	retention volume
V_s	volume of the sample

W_b	peak width at baseline
W_h	peak width at half height
WHO	World Health Organization
>	greater than
%	percent
e	electron
α	selective factor
$^{\circ}\text{C}$	degree Celsius
$^{\circ}\text{C}/\text{min}$	degree Celsius per minute
$\mu\text{g}/\text{kg}$	microgram per kilogram
$\mu\text{g}/\text{L}$	microgram per liter
μm	micrometer
Δt_R	retention time difference