Electronic Supplementary Material (ESI) for Analytical Methods.

Periodic Table of Mass Spectrometry (MS) Terms

Example use:	Technique	Sample Introduction		Ionization	Mass Analysis	
	TD-GC-CI-MS	TD	GC	CI	MS	
	LC-ESI-ToF-MS	LC		ESI	ToF	MS

Sample Introduction — **Separation** / **Direct**

Ionization — **Vacuum Pressures** → **Atmospheric Pressure** → **Ambient Pressure**

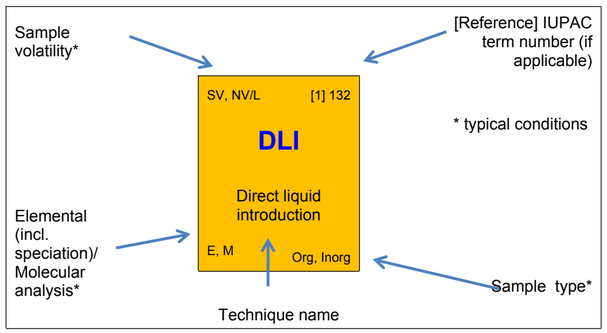
Mass Analysis — **Low Resolution** / **High Resolution**

Operational Modes (MS/MS)

Data Acquisition Modes

Volatility

V/G [2] 1.4.02 **GC** Gas chromatography E, M Org, Inorg												[1] 89 **CID** Collision-induced dissociation E, M Org, Inorg	[1] 413 **PI** Product ion scan E, M Org, Inorg
V/G, L [1] 332 **MI** Membrane inlet M Org, Inorg	V, SV/G, L [4] **HS** Headspace E, M Org, Inorg										[1] 295 **MaS** Magnetic sector E, M Org, Inorg	[1] 219 **InS** In source collision-induced dissociation E, M Org, Inorg	[1] 479 **SIM** Selected ion monitoring E, M Org, Inorg
V, SV/L [2] 1.4.04 **SFC** Supercritical fluid chromatography E, M Org, Inorg	V, SV/G, L, S [4] **TD** Thermal desorption E, M Org, Inorg	V/G, L [1] 520 **TI** Thermal ionization E Inorg	V/G, L [1] 154 **EI** Electron ionization E, M Org, Inorg	V/G, L [1] 77 (361) **CI** Chemical ionization M Org	V, SV/G [5] **APGC** Atmospheric pressure gas chromatography M Org	V, SV/G, L [1] 33 **APPI** Atmospheric pressure photoionization M Org	V, SV, NV/G, L, S [8] **FAPA** Flowing atmospheric pressure afterglow E, M Org, Inorg	V, SV, NV/G, L, S [11] **LTP** Low temperature plasma probe M Org, Inorg	V, SV, NV/G, L, S [1] 19 **DART** Direct analysis in real time M Org, Inorg	[1] 536 **Q** Quadrupole E, M Org, Inorg	[1] 160 **ESA** Electrostatic energy analyzer E, M Org, Inorg	[1] 199 **HCID** High-energy collision-induced dissociation E, M Org, Inorg	[1] 481 (354) **SRM** Selected reaction monitoring E, M Org, Inorg
SV, NV/L [2] 1.4.03 **LC** Liquid chromatography E, M Org, Inorg	SV, NV/L [1] 132 **DLI** Direct liquid introduction E, M Org, Inorg	V, SV/G, L [1] 150 **ECI** Electron capture ionization M Org	V, SV/G, L [1] 174 **FI** Field ionization M Org, Inorg	SV, NV/L, S [1] 119 **DCI** Desorption chemical ionization M Org	V, SV, NV/G, L, S [6] **APGD** Atmospheric pressure glow discharge M Org	V, SV, NV/G, L, S [1] 214 **ICP** Inductively coupled plasma E Inorg	V, SV/L, S [9] **DAPPI** Desorption atmospheric pressure photoionization M Org	V, SV/L, S [12] **REIMS** Rapid evaporative ionization mass spectrometry M Org	V, SV, NV/L, S [14] **PADI** Plasma-assisted desorption ionization M Org	[1] 385 **QIT** Quadrupole (cubic) ion trap E, M Org, Inorg	[1] 227 **ICR** Ion cyclotron resonance E, M Org, Inorg	[1] 149 **ECD** Electron capture dissociation M Org, Inorg	[1] 364 **NL** Neutral loss scan M Org, Inorg
SV, NV/L [3] **CE** Capillary electrophoresis E, M Org, Inorg	SV, NV/L, S [1] 171 **FD** Field desorption E, M Org, Inorg	SV, NV/L, S [1] 475 **SI** Secondary ionization E, M Org, Inorg	SV, NV/L, S [1] 169 **FAB** Fast atom bombardment M Org, Inorg	SV, NV/L, S [1] 401 **PDI** Plasma desorption ionization E, M Org, Inorg	V, SV/L, S [7] **ASAP** Atmospheric pressure solids analysis probe M Org, Inorg	SV, NV/L [1] 31 **APCI** Atmospheric pressure chemical ionization M Org	V, SV, NV/L, S [1] 125 **DBDI** Dielectric barrier discharge ionization M Org, Inorg	SV, NV/L [13] **PESI** Probe electrospray ionization M Org, Inorg	SV, NV/L, S [15] **DAPCI** Desorption atmospheric pressure chemical ionization M Org	[1] 283 **LIT** Linear ion trap E, M Org, Inorg	[1] 525 **ToF** Time-of-flight E, M Org, Inorg	[1] 155 **ETD** Electron transfer dissociation M Org, Inorg	[1] 112 **DDA** Data-dependent acquisition M Org, Inorg
SV, NV/L [2] 1.5.03 **IC** Ion chromatography E, M Org, Inorg	SV, NV/L, S [1] 279 **LD** Laser desorption E, M Org, Inorg	SV, NV/L, S [1] 280 **LDI** Laser desorption/ionization E, M Org, Inorg	SV, NV/L, S [1] 326 **MALDI** Matrix-assisted laser desorption/ionization M Org, Inorg	NV/S [1] 492 **SSI** Spark source ionization E Inorg	SV, NV/L [1] 158 **ESI** Electrospray ionization E, M Org, Inorg	SV, NV/L, S [1] 32 **AP MALDI** Atmospheric pressure matrix-assisted laser desorption/ionization M Org, Inorg	SV, NV/L, S [10] **ELDI** Electrospray-assisted laser desorption/ionization E, M Org, Inorg	SV, NV/L, S [1] 120 **DESI** Desorption electrospray ionization E, M Org, Inorg	SV, NV/S [16] **LESA** Liquid Extraction Surface Analysis M Org	[17] **SRIG** Stacked ring ion guide M Org, Inorg	[1] 276 **O** Orbitrap E, M Org, Inorg	[1] 395 **PD** Photodissociation E, M Org, Inorg	[18] **TSA** Transient signal acquisition E Inorg



Ion Mobility Separation (IMS)

[1] 138 **DT** Drift tube M Org, Inorg	[19] **TWIG** Travelling wave ion guide E, M Org, Inorg	[1] 200 **FAIMS** (High-)Field asymmetric wave form ion mobility spectrometry E, M Org, Inorg	[20] **DMA** Differential mobility analyzer E, M Org, Inorg

Legend

V	Volatile
SV	Semi-volatile
NV	Non-volatile
G	Gas
L	Liquid
S	Solid
Org	Organic substance
Inorg	Inorganic substance (incl.

	organometallic)

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