

Acronyms in Mass Spectrometry

We have previously published (*Spectroscopy*, 17(2), 54 (2002)) a list of common acronyms in mass spectrometry, reflecting the need for elucidation of short-hand terms used by mass spectrometrists to describe particular experiments or applications. It might be tempting to relegate the usefulness of such lists to newcomers, or to the uninitiated, but this is unwise for an analytical endeavor that expands and evolves as quickly as does mass spectrometry. As the field grows, the practitioners in one sub-discipline invariably become more isolated from their colleagues in another area of application. An environmental mass spectrometrist is comfortable with assessment of results from a SIM GC-MS BTEX analysis. A carbohydrate mass spectrometrist will feel more at home with data originating in a PSD MALDI TOF experiment using DHB; different folks like different ROOMS.

Most of the acronyms in this compilation find common use in the literature and at professional meetings. Some acronyms in common use are protected trademarks (past, present, or future), and precautions should be exercised in their appearance in the literature. Inclusion of an acronym in this list is explicitly not an endorsement for its use, especially when there may be a “competitive” acronym available. Let the nomenclators make their judgments; in this compilation, errors will fall on the side of unabashed inclusion, and a few “symbols” will sneak in as well. Particular attention has been given to acronyms introduced to the field of mass spectrometry within the past few years. For recent additions to the acronym list, a short description is provided, along with a recent (and not necessarily the first) reference.

Acronyms are listed in alphabetical order. Most acronyms are composed of upper-case letters, but a few are traditionally given as sequences of lower-case letters, or a mixture, to the consternation of spell checkers in word processors every-

where. If your favorite acronym or abbreviation is missing from the list, please feel free to contact the author.

| | |
|--------------|--|
| A | Anion |
| ACMS | Asilomar Conference on Mass Spectrometry |
| ADC | Analog-to-digital converter |
| ADO | Average dipole orientation |
| AE | Appearance energy |
| AEI | Associated Electric Industries, a past MS manufacturer |
| AGC | Automatic gain control |
| AGHIS | All-glass-heated-inlet system |
| AMS | Accelerator mass spectrometry |
| amu | atomic mass unit |
| AN | Auger neutralization |
| ANP | 2-amino-5-nitropyridine, a MALDI matrix |

ANZSMS Australia and New Zealand Society for Mass Spectrometry

R. A. J. O'Hair, *Eur. J. Mass Spectrom.*, 9(6), 525 (2003)

A brief historical vignette of ANZSMS is found in this article, along with perhaps the only musical selection published in a mass spectrometry journal. The location of perhaps the only poem published in a mass spectrometry journal shall remain the author's personal secret.

| | |
|----------------|--|
| AP | Appearance potential |
| APCI | Atmospheric pressure chemical ionization |
| API | Atmospheric pressure ionization |
| ARMS | Angle-resolved mass spectrometry |
| ASGDIMS | Atmospheric-sampling glow discharge ionization mass spectrometry |
| ASMS | American Society for Mass Spectrometry |
| ASTM | American Society for Testing and Materials |
| ATT | 6-aza-2-thiothymine, a MALDI matrix |
| AVS | Accelerating-voltage scan American Vacuum Society |

| | |
|------------|---|
| b | impact parameter |
| B | Magnetic sector mass analyzer, magnetic field Magnetic sector field strength or flux density |
| BAT | Best anode temperature |

BDE Bond dissociation energy

P. Armentrou, *Eur. J. Mass Spectrom.*, 9(6), 531 (2003)

The kinetic energy dependence of reactions between mass-selected ions and neutral molecules is interpreted to provide the threshold for the process, revealing basic thermochemical information, such as the bond dissociation energy for intriguing metal-containing species.



Kenneth L. Busch made a first and last effort at immortalization through acronym generation within his dissertation. There, he used the acronym MENIMS for methane-enhanced negative ion mass spectrometry. Since then, he has sagely demurred from CAD/CID and FAB/LSIMS nomenclature imbroglis, since he is truly

only a SCC (simple country chemist). The contents of this article represent the views of the author and not those of the National Science Foundation (NSF). He can be reached at: buschken@hotmail.com.

| | | | | | |
|-----------------|---|--|---|--|--|
| B/E | Linked scan for product ions in MS-MS | | | | |
| B2E | Linked scan for parent ions in MS-MS | | | | |
| BEoQ | A reverse geometry sector instrument followed by an octupole collision cell followed by a quadrupole mass filter | | | | |
| BEqQ | A reverse geometry sector instrument followed by a collision quadrupole followed by a quadrupole mass filter | | | | |
| BEMS | <i>Biomedical and Environmental Mass Spectrometry</i> (a former MS journal) | | | | |
| BET | Best emitter temperature | | | | |
| BIAMSTM | Biomolecular interaction analysis mass spectrometry D. Nedelkov and R. W. Nelson, <i>J. Molec. Recogn.</i> , 16 , 15 (2003) In this combined technique, a surface plasmon resonance sensor first is used to characterize an analyte bound to an affinity labeled surface. Then, MALDI matrix is added, the analyte is desorbed and ionized, and the MALDI mass spectrum is used to characterize the surface species. | | | | |
| BIRD | Blackbody infrared radiative dissociation | | | | |
| BMS | Biomedical mass spectrometry, biological mass spectrometry | | | | |
| BTEX | Benzene, toluene, ethylbenzene, and xylene | | | | |
| C | Cation | | | | |
| CA | Collisional activation | | | | |
| CAD | Collisionally activated decomposition | | | | |
| CAF | Chemically assisted fragmentation | | | | |
| CCA | alpha-cyano-4-hydroxy cinnamic acid, a MALDI matrix | | | | |
| CDEM | Continuous-dynode electron multiplier | | | | |
| CDNT | Conformation-dependent neutralization theory V. J. Nesatyy and M. J.-F. Suter, <i>J. Mass Spectrom.</i> , 39 , 93 (2004) Mass spectrometry now deals with high molecular mass, highly charged ions of complex structures. The reactions and structures of these ions is a matter of experimental interrogation as well as theoretical modeling. The authors discuss the CDNT theory in this paper and | | | | |
| | | | its applicability in determination of the charge state distribution for folded proteins in the gas phase. | | |
| CE | Charge exchange Capillary electrophoresis | | | | |
| CEC | Consolidated Electric Corporation (a former MS manufacturer) | | | | |
| CEMA | Channel electron-multiplier array | | | | |
| cf | ConFlat™ | | | | |
| CFFAB | Continuous-flow fast atom bombardment | | | | |
| CFP | Continuous flow probe | | | | |
| CHCA | Cyano-4-hydroxycinnamic acid, a MALDI matrix | | | | |
| CI | Chemical ionization | | | | |
| CID | Collision-induced dissociation | | | | |
| CIDI | Collisionally induced dissociative ionization | | | | |
| CIT | cylindrical ion trap | | | | |
| CM | Center-of-mass | | | | |
| CNL | Constant neutral loss | | | | |
| CODA | Component detection algorithm | | | | |
| COM | Center-of-mass | | | | |
| COMSPARI | Comparison of spectral retention information J. E. Katz, D. S. Dumlao, S. Clarke, and J. Hau, <i>J. Amer. Soc. Mass Spectrom.</i> , 15 (4), 580 (2004) COMSPARI is a collection of data visualization software that allows the analyst to detect small differences in complex datasets, including GC-MS and LC-MS data. Perceptive differences in mirrored displays are key to highlighting spectral differences. | | | | |
| CREMS | Charge-reduction electrospray mass spectrometry | | | | |
| CS | Charge stripping | | | | |
| CV | Compensation voltage | | | | |
| CX | Charge exchange | | | | |
| CZE-MS | Capillary zone electrophoresis mass spectrometry | | | | |
| D | Disproportionation factor Deuterium | | | | |
| Da | Daltons | | | | |
| DAC | Digital-to-analog converter | | | | |
| DADI | Direct analysis of daughter ions | | | | |
| DB | Database | | | | |
| dbe | Double-bond equivalent | | | | |
| DCI | Desorption (or direct) chemical ionization | | | | |
| DCT | Double charge transfer | | | | |
| DCTB | trans-2-[3-{4-tert-butylphenyl}-2-methyl-2-propenylidene]malononitrile, a MALDI matrix | | | | |
| DE | Delayed extraction | | | | |
| DEI | Desorption (or direct) electron ionization | | | | |
| DF | Double focusing | | | | |
| DFTPP | Decafluorotriphenylphosphine | | | | |
| DHB | 2,5-dihydroxybenzoic acid, a MALDI matrix | | | | |
| DI | Desorption ionization | | | | |
| DIN | Direct injection nebulizer | | | | |
| DIOSMS | Desorption ionization on silicon mass spectrometry | | | | |
| DIP | Direct-insertion probe | | | | |
| DLI | Direct liquid introduction | | | | |
| DLV | Direct laser vaporization | | | | |
| DP | Direct probe Diffusion pump | | | | |
| DS | Data system | | | | |
| DTIMS | Drift-tube ion mobility spectrometry | | | | |
| E | Energy, Electric sector mass analyzer Electric sector voltage | | | | |
| EA | Electron affinity | | | | |
| EAD | Electron avalanche desorption | | | | |
| ECD | Electron-capture dissociation | | | | |
| ECID | Electron-capture-induced dissociation | | | | |
| ECMS | Electron-capture mass spectrometry | | | | |
| ECNCI | Electron-capture negative chemical ionization | | | | |
| ECNI | Electron capture negative ionization | | | | |
| ECP | Emitter-current programmer | | | | |
| EDD | Energy distribution difference | | | | |
| EE | Even-electron ion | | | | |
| EED | Electron excitation dissociation | | | | |
| EHI | Electrohydrodynamic ionization | | | | |
| EI | Electron ionization (or impact) | | | | |
| EIEIO | Electron-induced excitation of ions from organics | | | | |
| EIS | External ion source | | | | |
| EJMS | <i>European Journal of Mass Spectrometry</i> | | | | |
| EM | Electron multiplier | | | | |
| EMP | Electron multiplier | | | | |
| EOID | Electro-optical ion detector | | | | |
| ERMS | Energy-resolved mass spectrometry | | | | |
| ES | Electrospray or electrospray ionization | | | | |
| ESA | Electrostatic analyzer | | | | |

| | | | | | |
|--|---|---|--|--|--|
| ESCI | Combined electrospray and atmospheric pressure ionization source | HABA | 2-(4-hydroxyphenylazo) benzoic acid, a MALDI matrix | IE | Ionization energy, ionizing energy |
| ESI | Electrospray ionization | 4-HBSA | 4-hydroxybenzenesulfonic acid, an LSIMS matrix | IELC | Ion exchange liquid chromatography |
| ESP | Electrospray ionization | HCCA | alpha-cyano-4-hydroxycinnamic acid, a MALDI matrix | IJMSIP | <i>International Journal of Mass Spectrometry and Ion Physics</i> (Volumes 1-62) |
| ESPI | Electrospray ionization | HCD | Heated capillary dissociation | <i>International Journal of Mass Spectrometry and Ion Processes</i> (after Volume 62) | |
| esu | electrostatic unit | HCP | Hollow cathode plume | IJMS | <i>International Journal of Mass Spectrometry</i> |
| ETV | Electrothermal vaporization | HDX | Hydrogen/deuterium exchange | IKE(S) | Ion kinetic energy (spectrometry) |
| eV | electron volt | HE | High energy | IMAC | Immobilized metal affinity chromatography |
| FA | Flowing afterglow | HECD | Hot electron capture dissociation | IP | ionization potential |
| FAB | Fast atom bombardment | 2-HEDS | 2-Hydroxyethyl disulfide, an LSIMS matrix | IPD | ion-photon detector |
| FAIMS | High Field Asymmetric Waveform Ion Mobility Spectrometry | HMM | High molecular mass | IRMPD | Infrared multiphoton dissociation |
| <p>W. Gabryelski and K. L. Froese, <i>J. Amer. Soc. Mass Spectrom.</i>, 14(3), 278 (2004)</p> <p>Changes in ion mobility measured at a relatively high dispersion voltage are measured to separate various isomers as they move through a transport region and ultimately into a mass analyzer.</p> | | | | | |
| FAME | Fatty acid methyl ester | HPA | 3-hydroxypicolinic acid, a MALDI matrix | <p>K. Hakansson, R. R. Hudgins, A. G. Marshall, and R. A. J. O'Hair, <i>J. Amer. Soc. Mass Spectrom.</i>, 14(1), 23 (2003)</p> <p>A comparison between ECD and IRMPD for oligodeoxynucleotide dications was completed with an FT-ICR instrument. Different means of mass-selected parent ion activation resulted in different dissociation processes, each with specific advantages in determining structure.</p> | |
| FC | Faraday cup | 2-HPEA | 2-Hydroxyphenethyl alcohol, an LSIMS matrix | | |
| FD | Field desorption | HRMS | High resolution mass spectrometry | | |
| FFID | Fission-fragment induced desorption | HSI | Hyperthermal surface ionization | | |
| FFR | Field-free region | HSMS | Headspace mass spectrometry | | |
| FI | Field ionization | HT | High tension, which is a criticism for high voltage | | |
| FIA | Flow injection analysis | HTMS | High temperature mass spectrometry | | |
| FIB | Fast ion bombardment | HT-TOF MS | Hadamard Transform time-of-flight mass spectrometry | | |
| FIK | Field ionization kinetics | HXMS | hydrogen/deuterium exchange mass spectrometry | | |
| FIMS | Field ionization mass spectrometry | <p>A. Nazabal, M. Laguerre, J.-M. Schmitter, J. Vaillier, S. Chaignepain, and J. Velours, <i>J. Amer. Soc. Mass Spectrom.</i>, 14(5), 471 (2003)</p> <p>Acidic hydrogens in accessible positions will exchange for deuteriums in the proper solvent. Mass spectrometry is used to "count" and sometimes locate the exchanged atoms, because the masses of ions recorded in the mass spectrum will differ. The experimental targets range from simple molecules to complex three-dimensional structures of peptides and proteins.</p> | | | |
| FNB | Fast neutral beam | IC | Ion chromatography | IRMS | Isotope ratio mass spectrometry |
| FT-ICR | Fourier-transform ion cyclotron resonance | ICAT | Isotope-coded affinity tag | ISD | In-source decay |
| FT-MS | Fourier-transform mass spectrometry | ICDR | Ion cyclotron double resonance | ISP | ionspray |
| FT-TOF MS | Fourier-transform time-of-flight mass spectrometry | IC-MS | Ion chromatography-mass spectrometry | ISR | Ion/surface reaction |
| FWHH | Full width at half height | ICP-MS | Inductively coupled plasma mass spectrometry | ITD™ | ion trap detector |
| FWHM | Full width at half maximum | ICR | Ion cyclotron resonance | ITMS | ion trap mass spectrometry |
| G | Multiplier gain | IDMS | Isotope dilution mass spectrometry | ITPMS | Isotacopheresis mass spectrometry |
| GC | Gas chromatography | | | | |
| GC-MS | Gas chromatography-mass spectrometry | IUPAC | International Union of Pure and Applied Chemistry | | |
| GDMS | Glow discharge mass spectrometry | JASMS | <i>Journal of the American Society for Mass Spectrometry</i> | | |
| GIANT | <i>Gas-phase Ion and Neutral Thermochemistry</i> (a published compilation of such data) | JMS | <i>Journal of Mass Spectrometry</i> | | |
| GLP | Good laboratory practice | K | Kelvin | | |
| GPC | Gel permeation chromatography | KCMS | Knudsen cell mass spectrometry | | |
| <p>M. Heyrman, C. Chatillon, H. Collas, and J. L. Chemin, <i>Rapid Commun. Mass Spectrom.</i>, 18(2), 163 (2004)</p> <p>A Knudsen cell is a high-temperature device that is used to create a vapor phase in thermal equilibrium with a condensed phase. Sampling of the</p> | | | | | |

vapor phase species by a mass spectrometer allows characterization of the various components that determine the overall thermal equilibrium.

| | |
|--|---|
| kDa | kiloDalton |
| KERD | Kinetic energy release distribution |
| K+IDS | Potassium ion desorption spectrometry |
| KM | Kinetic method |
| KNN | K-nearest neighbor |
| L | Length of flight tube |
| LAMMA™ | Laser microprobe mass analyzer |
| LBO | Light beam oscillograph |
| LC-MS | Liquid chromatography–mass spectrometry |
| LD | Laser desorption |
| LDI | Laser desorption ionization |
| LDLP | Laser desorption/laser photoionization |
| LE | Low energy |
| LI | Liquid ionization |
| LIMA™ | Laser ionization mass analyzer, Laser ion microprobe analyzer |
| LMM | Low molecular mass |
| LMMS | Laser microprobe mass spectrometer |
| LMS | Laser mass spectrometry |
| <hr/> | |
| LOD | Limit of detection |
| R. Bethem, J. Boison, J. Gale, D. Heller, S. Lehotay, J. Loo, S. Musser, P. Price, and S. Stein, <i>J. Amer. Soc. Mass Spectrom.</i> , 14 (5) 528 (2003) | |
| This reference is an excellent overview of establishing the fitness for purpose of mass spectrometric methods. It includes essential definitions and discussions of analytically important terms such as the limit of detection. | |
| <hr/> | |
| LOQ | Limit of quantification |
| LRB | Laboratory reagent blank |
| LSIMS | Liquid matrix secondary ion mass spectrometry |
| LTOF | Laser time-of-flight |
| | Linear time-of-flight |
| LV/EI | Low voltage electron ionization |
| <hr/> | |
| u | mass unit (1/12 of the mass of C), now replaced by Dalton |
| m | mass of the ion in units of u |
| MAGIC | Monodisperse aerosol generator interface to chromatography |
| MALD | Matrix-assisted laser desorption |

| | |
|---|---|
| MALDI | Matrix-assisted laser desorption ionization |
| MAPS | Method for analyzing patterns in spectra |
| MB | Molecular beam |
| MBMS | Molecular beam mass spectrometry |
| MCA | Multichannel analyzer |
| MCI | Massive cluster impact |
| MCP | Microchannel plate |
| MCPD | Microchannel plate detector |
| MDMS | Microdialysis mass spectrometry |
| MDL | Method detection limit |
| MI | Metastable ion |
| MID | Multiple ion detection |
| MIKE(S) | Mass-analyzed ion kinetic energy (spectrometry) |
| MIM | Multiple ion monitoring |
| MIMS | Membrane introduction mass spectrometry |
| MIP | Microwave-induced plasma |
| MNBA | meta-Nitrobenzyl alcohol, an LSIMS matrix |
| MNDO | Modified neglect of differential overlap |
| MO | Molecular orbital |
| MPD | Multiphoton dissociation |
| MPI | Multi-photon ionization |
| MPM | Multiple peak monitoring |
| MQDT | Multi-channel quantum-defect theory |
| MRM | Multiple reaction monitoring |
| MSn | If n = 2, MS-MS. If n = 3, MS-MS-MS. Repeat as necessary. |
| MSB | <i>Mass Spectrometry Bulletin</i> |
| MSD™ | Mass selective detector |
| MSDC | Mass Spectrometry Data Center |
| MSM | Multiple-scattering method |
| MSR | <i>Mass Spectrometry Reviews</i> |
| MS-MS | Mass spectrometry-mass spectrometry |
| MSSS | Mass spectral search system |
| <hr/> | |
| MULTUM | Multiturn mass spectrometer |
| D. Okumura, M. Toyoda, M. Ishihara, and I. Katakuse, <i>J. Mass Spectrom.</i> , 39 , 86 (2004) | |
| A multiturn time-of-flight mass spectrometer has been used to achieve high mass resolution for ions generated by MALDI by multiple passages of the ion through the flight tube. A sophisticated ion injection and timing scheme must be used to accomplish this feat, but the authors demonstrate feasibility and impressive results. | |
| <hr/> | |
| MW | Molecular weight |
| Mwt | Molecular weight |

| | |
|--|---|
| N | Neutral molecule or species |
| NBA | meta-Nitrobenzyl alcohol, an LSIMS matrix |
| NCI | Negative ion chemical ionization |
| NI | Negative ion |
| NICI | Negative ion chemical ionization |
| NOBA | meta-Nitrobenzyl alcohol, an LSIMS matrix |
| +NR+ | Neutralization reionization; a positive ion is neutralized and then reionized |
| NRMS | Neutralization reionization mass spectrometry |
| <hr/> | |
| o | Orthogonal |
| oa | Orthogonal acceleration |
| OE | Odd-electron ion |
| OMS | Organic Mass Spectrometry |
| oTOF | Orthogonal (source) time-of-flight |
| <hr/> | |
| PA | Proton affinity |
| PAD | Post-acceleration detector |
| PAI | Post ablation ionization |
| PBM | Probability-based matching |
| PBMS | Particle-beam mass spectrometry |
| PCI | Positive ion chemical ionization |
| PD | Plasma desorption |
| | Photodissociation |
| PDMS | Plasma desorption mass spectrometry |
| PEPICO | Photoelectron-photoion coincidence spectroscopy |
| PES | Photoelectron spectroscopy |
| PFK | Perfluorokerosene |
| PFTBA | Perfluorotributylamine |
| PHD | Pulse height distribution |
| PI | Positive ion |
| PID | Particle-induced desorption |
| | Photon-induced dissociation |
| PIE | Photoionization efficiency |
| PIPECO | Photoion-photoelectron coincidence spectroscopy |
| PLE | Pressurized liquid extraction |
| PMF | Peptide mass fingerprinting |
| PMM | Peptide mass maps |
| PMS | Parallel mass spectrometry |
| PPINICI™ | Pulsed positive ion negative ion chemical ionization |
| <hr/> | |
| PSD | Post-source decay |
| A. J. Hoteling and K. G. Owens, <i>J. Amer. Soc. Mass Spectrom.</i> , 15 (4), 523 (2004) | |
| Post-source decay is a term often used in conjunction with a time-of-flight mass spectrometer. After the ions are formed in the source and accelerated | |

into the analyzer region, they can unimolecularly dissociate, or can be induced to dissociate through collision. Manipulation of subsequent focusing and reflecting voltages can elucidate these mass-changing reactions.

PSI Pulsed sample introduction
PSPF Post source pulse focusing
PyMS pyrolysis mass spectrometry

q Quadrupole device used in rf-only mode as a collision cell
Q Quadrupole mass filter
Q Reaction endothermicity
QA Quality assurance
QC Quality control
qCID Collision-induced dissociation accomplished within an rf-only quadrupole

QCPE Quantum Chemistry Program Exchange
QET Quasi-equilibrium theory
QFTMS Quadrupole Fourier-Transform mass spectrometry

QIT Quadrupole ion trap
QTOF Quadrupole followed by a time-of-flight mass analyzer
QUISTOR Quadrupole ion storage trap

r radius of electric or magnetic sector
RA Relative abundance
RCM *Rapid Communications in Mass Spectrometry*

rdbe Rings plus double bonds equivalent
REMPI Resonance-enhanced multi-photon ionization

rf Radio frequency
RGA Residual gas analyzer
RI Relative intensity
RIMS Resonance-ionization mass spectrometry

RLCT Rayleigh limiting charge theory
RN Resonance neutralization
ROOMS Regular old ordinary mass spectrometry (courtesy of R. A. Hites)

R2PI Resonant 2 photon ionization
RP Resolving power
RPD Retarding potential difference
RPLC Reversed-phase liquid chromatography

RRKM Rice, Ramsperger, Kassel, and Marcus
rTOF Reflectron time-of-flight

SA Sinapinic acid, a MALDI matrix
SCMS Sanibel Conference on Mass Spectrometry

SDM Selected dissociation monitoring
SEAC Surface-enhanced affinity capture
SEC Size exclusion chromatography

SELDI Surface-enhanced laser desorption ionization
 N. Tang, P. Tornatore, and S. R. Weinberger, *Mass Spectrom. Rev.*, **23**, 34 (2004)
 In SELDI, the matrix that supports the sample of interest also serves to purify, extract, or modify the sample. More precisely, the SELDI matrix is designed for a particular target analyte, as contrasted with the general purpose matrices used in MALDI.

SEND Surface-enhanced neat desorption
SFC-MS Supercritical fluid chromatography-mass spectrometry

SFE Supercritical fluid extraction
SI Spray ionization
 Surface ionization

SID Surface-induced dissociation
SIFDT Selected ion flow drift tube
SIFT Selected ion flow tube
SIM Selected-ion monitoring

SIMBROC Simulated background and reduction/oxidation calculations

SIMS Secondary ion mass spectrometry
SIN Surface-induced neutralization
SIOMS Surface ionization organic mass spectrometry

SIR Selected-ion recording
SMB Supersonic molecular beam
SMOKE Stored modulation of kinetic energy

SMOW Standard mean ocean water
SNR Signal-to-noise ratio

SPE Solid phase extraction
SPME Solid phase micro extraction
SRBC Simulated reduction and background calculations

SRM Selected reaction monitoring
SRM Standard reference material
SSMS Spark source mass spectrometry

STIRS Self-Training Interpretive and Retrieval System
STMT Stieltjes-Tchebycheff moment theory

SWIFT Stored-waveform inverse Fourier Transform
SWIM Stored waveform ion modulation

t ion flight time, time
T Tesla
TAC Kinetic energy release value
TAC Time-to-amplitude converter
TAMS Tandem accelerator mass spectrometry

TDC Time-to-digital converter
TEL Translational energy loss
TEPSICO Threshold electron photoion secondary ion coincidence spectroscopy

TES Translational energy spectroscopy
TGAMS Thermogravimetric analysis mass spectrometry

TG GC-MS Thermogravimetry gas chromatography mass spectrometry

TI Thermal ionization
TIC Total ion current
TID Trapped ion detector

Thermally induced dissociation
TIMS Thermal ionization mass spectrometry

TISI Turbo ionspray ionization
TLC-MS Thin layer chromatography-mass spectrometry

TMS Trimethylsilyl, tetramethylsilane
TMS Tandem mass spectrometry
TMS Thermospray mass spectrometry

ToF Time-of-flight
TOF Time-of-flight
TOFMS Time-of-flight mass spectrometry

TQ Triple quadrupole
TQMS Triple quadrupole mass spectrometry

TRPD Time-resolved photodissociation

TSP Thermospray
TSQ™ Triple stage quadrupole

uVLD Ultraviolet laser desorption
UVPD Ultraviolet photodissociation

v ion velocity
V Accelerating voltage
V Accelerating voltage scan
VG Vacuum Generators, former name of a manufacturer of mass spectrometers

VOC Volatile organic compound
VTST Variational transition state theory

W Wien filter

z the charge state of the ion in units of the electric charge ■