

Referees' Questionnaire

Dear Colleague

Please complete the following questionnaire if you are willing to act as a referee for the Society's primary publications.

Please provide a brief summary on page 2 of your current or recent research activities and areas of expertise, and tick the keyword entries on pages 4–11 that cover your main interests. Both the textual and the keyword information are used in our search procedures, and the efficient operation of our system depends on both parts of the form being completed. If none of the categories cover your interests, please give a brief description on page 2.

Your help in identifying colleagues who would be willing and able to act as referees for The Society would also be appreciated.

Please return the completed questionnaire using the pre-paid reply label provided.

Thank you for your help and co-operation.

Robert J Parker
General Manager, Journals & Reviews

Name: (Prof/Dr/Mr/Mrs/Miss/Ms)

Address:

.....

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E-mail: Web address:

If you DO NOT wish to receive manuscripts for review electronically, please tick this box

The details provided in this questionnaire form will be input into our computerised administration system. There will be no disclosure of these details to anyone outside the RSC.

For non-members of the Royal Society of Chemistry:

The RSC will store the information you supply on its electronic records in order that information about its activities, products and services may be sent to you. If you DO NOT want to receive this information, please tick this box

Please summarise your current research activities (bullet points are clearest) in which you feel you would be able to act as a referee. Please use a separate sheet if necessary. Our refereeing system includes a facility for searching the text in this section and therefore the information provided here is an essential part of our searching procedures. It is particularly important that keywords covering your interests which do not appear elsewhere on the questionnaire are included here.

Other possible referees within your field of interest (see preamble; names and addresses please).

Any other information.

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Periodic Table Please encircle elements or groups of major/particular interest

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
(H)																	He
Li	Be											B	C	N	O	F	Ne
Na	Mg											Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Cs	Ba	Lu	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
Fr	Ra	Lr	Rf	Db	Sg	Bh	Hs	Mt									
Lanthanides			La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	
Actinides			Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	

Chemistry

- Analytical science
- Biochemistry
- Bioinorganic chemistry
- Bioorganic chemistry
- Biophysical chemistry
- Biotechnology
- Chemical biology
- Chemical physics
- Crystallography
- Environmental chemistry
- Food chemistry
- Geology
- Geochemistry
- Green chemistry
- Industrial chemistry
- Inorganic chemistry
- Materials chemistry
- Mathematics
- Medicinal chemistry
- Miniaturisation
- Organic chemistry
- Organometallic chemistry
- Pharmaceutical science
- Physical chemistry
- Physical organic chemistry
- Physics
- Theoretical chemistry

Reactions

- Baeyer–Villiger
- Claisen
- Curtius
- Diels–Alder
- Fischer–Tropsch
- Friedel–Crafts
- Fries
- Heck
- Mannich
- Michael
- Mitsunobu
- Nazarov

- Peterson
- Sharpless
- Staudinger
- Vilsmeier
- Wittig

Reaction types

- Aldol
- Addition
- Cycloaddition
- Elimination
- Homolysis
- Oxidation
- Rearrangement
- Redox reactions
- Reduction
- Ring expansion/contraction
- Substitution

Organic chemistry

- Alicyclic
- Aliphatic (general)
- N-containing aliphatic
- S-containing aliphatic
- Alkaloids
- Alkenes
- Alkanes
- Amino acids
- Aromatic
- Biomimetic
- Biosynthetic
- Carbohydrates
- Monosaccharides
- Polysaccharides
- Enzymes (general)
- Artificial enzymes
- Enzyme models
- Enzymes in synthesis
- Fullerenes
- Heterocyclic (general)
- Heterocyclic nitrogen
- Heterocyclic oxygen

- Heterocyclic sulfur
- Heterocyclic other element (please specify)
- Single ring heterocyclic
- Multi ring heterocyclic
- Single heteroatom type
- Multi heteroatom type
- Lipids
- Phospholipids
- Mechanistic studies
- Metabolites
- Animal metabolites
- Fungal metabolites
- Insect metabolites
- Marine metabolites
- Plant metabolites
- Natural products (general)
- Natural products synthesis
- Natural products structure elucidation
- Nucleic acids
- Nucleosides/nucleotides
- Peptides
- Polycyclic
- Polyketides
- Proteins
- Metalloproteins
- Quinones/phenolic compounds
- Reactive intermediates
- Carbenes
- Nitrenes
- Reactivity parameters (e.g. Hammett)
- Rings: 3/4-membered
- Rings: 7/8/9-membered
- Steroids
- Terpenes
- Vitamins
- Ylides

Organic: functional groups

- Acids and derivatives
- Alcohols/phenols
- Amines/imines and analogues

- Carbonyl (aldehydes/ketones)
 - Cationic (*e.g.* onium)
 - Cyanides/isocyanides
 - Diazo/azides
 - Ethers/sulfides
 - Halides and pseudohalides
 - Hydroperoxides/peroxides
 - Nitro/nitroso compounds
 - Organoboron
 - Organofluorine
 - Organophosphorus
 - Organosilicon
 - Organo other element (please specify)
-
- Organic synthesis**
 - Asymmetric synthesis
 - Computer-aided synthesis
 - Microwave synthesis
 - Organometallic reagents
 - Regiocontrol
 - Stereocontrol
 - Supported reagents organic synthesis
 - Synthetic methods and reagents
-
- Pharmaceutical science**
 - Antisense agents
 - Cancer related chemistry
 - Anticancer drugs
 - Carcinogens
 - Combinatorial chemistry
 - DNA/RNA cleavage
 - Drug delivery
 - Drugs (preparation *etc.*)
 - Antibiotics
 - Antifungal drugs
 - Antitumour drugs
 - Antiviral drugs
 - Gene delivery
 - Pharmaceutical analysis
 - Antibiotics/penicillin
 - Drugs/formulations
 - Steroid drug
 - Residues
 - Pharmacology
 - Structure-activity relationships
 - Structure-based drug design
-
- Supramolecular chemistry**
 - Calixarenes
 - Catenanes
 - Crystal engineering
 - Cyclophanes
 - Hydrogen bonding
 - Weak interactions
 - Inclusion
 - Crown ethers
 - Cryptands
 - Cyclodextrins
 - Donor-acceptor systems
 - Macrocycles
- Macromolecules
 - Molecular recognition
 - Receptors
 - Rotaxanes
-
- Stereochemistry**
 - Chirality
 - Resolution
 - Optical activity
 - Inorganic stereochemistry
 - Organic stereochemistry
 - Conformational analysis
 - Theoretical stereochemistry
 - Tautomerism
-
- Inorganic chemistry**
 - Cage compounds
 - Coordination chemistry
 - Main group chemistry
 - Main group ring systems
 - Transition metal chemistry
 - Organometallic chemistry
 - Inorganic synthesis
 - Alkene ligands
 - Alkyl ligands
 - Alkyne ligands
 - Allyl ligands
 - Alums
 - Arene ligands
 - Aquation
 - Bioinorganic
 - Metals in biological systems
 - Model bioinorganic
 - Carbaboranes
 - Carbene complexes
 - Carbonyl complexes
 - Chelates
 - Clusters
 - Crystal field theory
 - Cyclometallated compounds
 - Cyclopentadienyl ligands
 - Defect structures
 - Di/trinuclear compounds
 - Fluxionality
 - Inorganic solid state chemistry
 - Halogens/halogen complexes
 - Heterocyclic ligands
 - Heteropolyanions
 - Isopolyanions
 - Macrocyclic ligands
 - Magnetism (inorganic)
 - Metal atom synthesis
 - Metallocenes/sandwich compounds
 - Metal-metal bonds
 - Mixed valence compounds
 - Nitrosyls
 - Phosphine ligands
 - Pi-bonding ligands
 - Porphyrins and analogues
 - Schiff's-base complexes
 - Sigma-bonding ligands
 - Silicates
-
- Theoretical chemistry**
 - Ab initio* calculations
 - Atomic & molecular properties
 - Bond properties
 - Electron affinity
 - Ionisation energy
 - Molecular association
 - Potential energy surfaces
 - Atomistic simulation
 - Brownian motion
 - Calculations on large systems
 - Calculations on small systems
 - Computational developments
 - Computer graphics
 - Computing in chemistry
 - Density functional theory
 - Dipole moments
 - Electronic structure
 - Atomic orbitals
 - Band structure
 - Electron configuration
 - Electron correlation
 - Energy levels
 - Fermi levels
 - Frontier orbitals
 - Molecular orbitals
 - MO calculations
 - Wavefunctions
 - Fractals
 - Graph theory
 - Intermolecular forces (theory)
 - Intermolecular potentials
 - Lasers (general)
 - Liquid-structure theory
 - MINDO/CNDO *etc.*
 - Molecular dynamics
 - Molecular mechanics
 - Molecular modelling
 - Monte Carlo calculations
 - Polarizability
 - Population analysis/charge density
 - Tunnelling
 - Quantum mechanics
 - Quasiclassical dynamics
 - Reaction dynamics
 - Rydberg state
 - Semiempirical calculations
 - Spin coupling
 - Spin properties
 - Statistical thermodynamics
 - Superfluidity
 - Symmetry
 - Group theory
 - Point groups
 - Space groups
 - Valence bond theory
 - Trajectory calculations
 - van der Waals complexes
 - Virial/hypervirial theorems
-
- Kinetics**
 - Activation parameters

- Atmospheric chemistry (kinetics)
 - Chemical waves
 - Collision processes
 - Inelastic scattering
 - Molecular beams
 - Electron exchange
 - Energy transfer (kinetics)
 - Reactive collisions
 - Combustion/flames
 - Crossed-beam techniques
 - Dissolution kinetics
 - Enzyme kinetics
 - Exciplex
 - Excited states
 - Fast reactions
 - Femtosecond kinetics/ spectroscopy
 - Free radical
 - Spin labelling
 - Gas phase kinetics
 - High pressure
 - High temperature
 - Kinetic isotope effects
 - Isotope-exchange reactions
 - Kinetic spectroscopy
 - Kinetic theory
 - LIF spectroscopy
 - Low temperatures
 - Micellar kinetics
 - Oscillatory phenomena
 - Belousov–Zhabotinskii
 - Photofragment translation
 - Photodissociation kinetics
 - Photophysics
 - Positron-annihilation studies
 - Pulse radiolysis
 - Pyrolysis (kinetics)
 - RRKM theory
 - Shock-wave experiments
 - Solution kinetics
 - Stochastic kinetics
 - Stopped flow
 - Supersonic jets
 - Temperature jump
 - Thermolysis
 - Transition-state theory
 - Ultrasonics (kinetics)
-
- Photoscience**
 - Applied photochemistry
 - Atmospheric photochemistry
 - Chemiluminescence
 - Dyes
 - Chromophores
 - Pigments
 - Electrochromism
 - Energy transfer (photochemistry)
 - Environmental photochemistry
 - Excited state properties
 - Fluorescence (general)
 - Fluorescence quenching
 - Gas phase photochemistry
 - Inorganic photochemistry
-
- Laser photochemistry
 - Luminescence
 - Mechanistic photochemistry
 - Methyl viologen
 - Non-linear optical effects
 - Optical properties
 - Optical modulation/switching
 - Organic photochemistry
 - Phosphors
 - Photocatalysis
 - Photochemical kinetics
 - Photochemistry of biomolecules
 - Photochromism
 - Photodegradation
 - Photodissociation
 - Photographic chemistry
 - Photolysis
 - Flash photolysis
 - Photoresists
 - Photosynthesis
 - Phototechnology
 - Porphyrin (photochemistry)
 - Preparative photochemistry
 - Quenching kinetics
 - Solar energy conversion
 - Solar energy utilization
 - Solid state photochemistry
 - Solution photochemistry
 - Supramolecular photochemistry
 - Synthetic photochemistry
 - Theoretical photochemistry
 - Water splitting
-
- Thermodynamics**
 - Acid–base equilibria
 - Acid dissociation constants
 - Acidity functions
 - Activities
 - Aqueous solutions
 - Calorimetry
 - Complex formation (thermodynamics)
 - Cryogenics
 - Density (thermodynamics)
 - Differential scanning calorimetry
 - Differential thermal analysis
 - Electrolyte solutions
 - Extraction (thermodynamics)
 - Partition coefficients
 - Hydration phenomena
 - Ion association
 - Isotope-exchange equilibria
 - Macroscopic properties
 - Binary systems
 - Compressibility
 - Condensation
 - Critical properties
 - Diffusion (thermodynamics)
 - Taylor dispersion
 - Electrodiffusion
 - Evaporation
 - Equation of state
 - Excess properties
-
- Heat capacitance
 - Ionic solvation
 - Ion transport
 - Solution thermodynamic properties
 - Specific heats
 - Sublimation
 - Ternary systems
 - Vapour pressure
 - Virial coefficient
 - Metallic solutions
 - Non-aqueous solutions
 - Non-electrolyte solutions
 - Phase properties
 - Phase equilibria
 - Phase diagrams
 - Poisson–Boltzmann theory
 - Rheology
 - Electrorheology
 - Dilatometry
 - Viscoelasticity
 - Viscosity
 - Solubility
 - Solution phase studies
 - Solution properties
 - Solvation
 - Stability constants
 - Supercritical fluids
 - Thermal properties
 - Joule–Thompson effect
 - Thermal conductivity
 - Thermal diffusivity
 - Thermochemical properties
 - Enthalpy
 - Entropy
 - Free energy
 - Partial molar functions
 - Thermodynamic theory
 - Thermogravimetry
 - Ultrasonics (thermodynamics)
 - Ultrasonic speed
 - Vapour transport equilibria
-
- Surface/interface/film**
 - Adhesion
 - Aggregation
 - BET surface area
 - Bilayers
 - Bronzes
 - Capillary phenomena
 - Colloids
 - DLVO theory
 - Dispersion
 - Emulsifiers
 - Films/layers
 - Deposition of films
 - Langmuir–Blodgett films
 - Optical properties (films)
 - Interfaces/junctions
 - Double layers
 - Interfacial tension
 - Ionophores

- Latex
 - Membranes
 - Dialysis
 - Membrane transport
 - Microemulsions
 - Monolayers
 - Oxides (surface)
 - Percolation theory
 - Polydispersity
 - Self assembly
 - Small-angle neutron scattering
 - Small-angle X-ray scattering
 - Soaps
 - Surfactants/detergents
 - Temperature-programmed methods
 - Transport**
 - Diffusion (general)
 - Osmosis
 - Self-diffusion
 - Wetting agents
 - Zeolites (general)
 - Aluminophosphate/silicate
 - Dealumination of zeolites
 - Ion exchange (zeolites)
 - Molecular sieves
 - Preparation of zeolites

 - Solid–liquid systems**
 - Gels
 - Sols
 - Electrokinetic potential
 - Electroosmosis
 - Electric double layer
 - Ion-exchange theory

 - Liquid–gas systems**
 - Absorption
 - Aerosols
 - Foams
 - Surface potentials
 - Surface tension

 - Solid–gas systems**
 - Adsorption
 - Chemisorption
 - Physisorption
 - Pore filling

 - Liquid–liquid systems**
 - Emulsions
 - Micelles
 - Vesicles

 - Solid state**
 - Low-dimensional solids
 - Microporous solids
 - New materials (solid state)
 - Packing forces
 - Polar solids
 - Pore structure
 - Solid state decomposition
 - Topochemistry
- Gas phase**
 - Atmospheric chemistry
 - Combustion/flames
 - Fluorescence
 - Gas phase kinetics
 - Gas phase photochemistry
 - Propellants
 - Solar radiation
 - Tropospheric chemistry

 - Catalysis**
 - Acid–base catalysis
 - Activated carbons
 - Autocatalysis
 - Catalyst preparation
 - Catalyst properties
 - Electrocatalysis
 - Heterogeneous catalysis
 - Carbon monoxide (catalysis)
 - Homologation (catalysis)
 - Isomerisation catalysts
 - Metathesis catalysts
 - Oxidation catalysts
 - Reduction catalysts
 - Sulfidation catalysts
 - Homogeneous catalysis
 - Hydrocarbons (catalysis)
 - Hydrogenation catalysts
 - Isotope exchange
 - Ion-transfer reactions
 - Metal-support interaction
 - Micellar catalysis
 - Mixed oxides
 - Phase-transfer catalysis
 - Photocatalysis
 - Polymerisation catalysts
 - Promotion (catalysis)
 - Shape selectivity
 - Supported catalysts
 - Alumina
 - Carbon/graphite
 - Metals (supported catalysts)
 - Molybdena
 - Oxide supports (catalysis)
 - Silica (specify)
 - Titania
 - Vanadia
 - Zeolite supports (catalysis)
 - Transition metal catalysts (please specify)

 - Materials chemistry**
 - Alloys
 - Amorphous materials
 - Apatites
 - Biomaterials
 - Carbide
 - Cements/concrete (general)
 - Ceramics
 - Charge Transfer
 - TCNQ and related compounds
 - Chemical vapour deposition
- Clathrates
 - Clays
 - Properties (clays)
 - Reagent supports (clays)
 - Controlled/restrained release
 - Corrosion
 - Diamond
 - Electronic materials
 - Electroceramics
 - Encapsulation
 - Fabrication
 - Glasses (general)
 - Hydrothermal synthesis
 - Image processing
 - Information storage
 - Intercalation
 - Lattices
 - Layered materials
 - Matrices
 - Mesoporous solids
 - Metallurgy
 - Microencapsulation
 - Minerals
 - Biominerals
 - Modelling of materials
 - Molecular electronics
 - Nanotechnology
 - Nanoparticles
 - Nanotubes
 - Nanocomposites
 - Nitride
 - Organic solids
 - Organometallic precursors of films/ceramics
 - Oxides (general)
 - Perovskite structures
 - Solid-state ionics
 - Sol-gel synthesis
 - Aerogel
 - Hydrogel
 - Xerogel
 - Templates
 - Zeolites (general)
 - Aluminophosphate/silicate

 - Properties of materials**
 - Chemical properties of materials
 - Protective coatings
 - Electrical properties of materials
 - Optical properties of materials
 - Structural properties of materials
 - Adhesives
 - Composite materials
 - Hard materials
 - Prosthetic applications
 - Refractory materials
 - Structural ceramics
 - Synthesis/characterisation of materials
 - Synthetic minerals

- Crystalline state/diffraction/microscopy**
- Ab initio* powder diffraction
- Crystallography
- Crystal engineering
- Crystallisation/nucleation/ growth
- Electron diffraction
- Gas-phase electron diffraction
- LEED
- Neutron diffraction
- Powder diffraction
- X-Ray diffraction
- Structure determination (X-ray)
- Organic mainly (X-ray)
- Inorganic mainly (X-ray)
- Protein crystallography
- Epitaxy
- Lattice dynamics
- Liquid crystals
- Lyotropic liquid crystals
- Thermotropic liquid crystals
- Microscopy
- Atomic force microscopy
- Electron microscopy
- Scanning electron microscopy
- Scanning tunnelling microscopy
- Transmission electron microscopy
- Optical microscopy
- Morphology/crystallinity
- Phase transitions
- Rietveld refinement
- Structural database analysis (CCDC)
- Synchrotron diffraction
- Thermal expansion

-
- Electric/dielectric/magnetic**
 - Conductivity
 - Ionic conductivity
 - Metallic conductivity
 - Mixed ionic/electronic conductivity
 - Molecular conductors
 - Photoconductivity/photovoltaic effect
 - Semiconductivity
 - Amorphous semiconductors
 - Solid state conductivity
 - Superconductivity
 - Dielectric properties
 - Capacitance
 - Conductance
 - Dielectric loss
 - Impedance
 - Dielectric spectroscopy
 - Ferroelectricity/ferrites
 - Ionic species
 - Magnetism/magnetic properties
 - Ferromagnetism
 - Ferrimagnetism
 - Antiferromagnetism
 - Magnetic bubbles
 - Magnetic domains
 - Magnetic hysteresis
 - Magnetoresistance

- Organic magnetism
- Spin glass behaviour
- Piezoelectricity
- Pyroelectricity
- Thermoelectricity
- Work function

-
- Electrochemistry**
 - Amperometry
 - Batteries
 - Chronoamperometry
 - Chronopotentiometry
 - Coulometry
 - Electrochemical theory
 - Electrochemical synthesis
 - Electrocrystallisation
 - Electrodeposition
 - Electrode potentials
 - Electrodes
 - Enzyme electrodes
 - Ion-selective electrodes
 - Membrane electrodes
 - Modified electrodes
 - pH electrodes
 - Polymer-modified electrodes
 - Rotating-disc electrodes
 - Microelectrodes/ultramicroelectrodes
 - Electrolysis
 - Electron transfer
 - Electrophoresis
 - Electroplating
 - Ellipsometry
 - Fuel cells
 - Fused salts
 - Photoelectrochemistry
 - Polarography
 - Polyaniline *etc.*
 - Potentiometry
 - Quartz-crystal microbalance
 - Solid electrolytes
 - Voltammetry
 - Cyclic voltammetry

-
- Polymers**
 - Anionic/coordination polymerisation
 - Aromatic polymers
 - Biodegradable/biocompatible polymers
 - Biopolymers
 - Conducting polymers
 - Cross-linking
 - Degradation of polymers
 - Dendrimers
 - Elastomers
 - Fibres (polymers)
 - Gas permeability of polymers
 - Grafting
 - Inorganic polymers
 - Macromolecules
 - Materials application of polymers
 - Molecular weight determination of polymers
 - Organic polymers

- Physical properties of polymers
- Polymerisation mechanism
- Polymer composites
- Polymer electrolytes
- Polymer film
- Polymer solutions
- Polymer synthesis
- Radical polymerisation

-
- Spectroscopy**
 - Astrophysics
 - Auger
 - Birefringence
 - Brillouin scattering
 - Candoluminescence/MECA
 - CARS
 - CD
 - Polarimetry
 - MCD
 - Chemiluminescence
 - Derivative techniques (analytical)
 - Dielectric spectroscopy
 - EELS
 - Electroluminescence
 - Electron impact
 - Electron spin echo
 - Electronic spectroscopy
 - Electro-optical absorption
 - ESCA
 - ESR
 - EXAFS
 - Exciton/phonon
 - Gas phase
 - High resolution spectroscopy
 - Hole burning
 - Interferometry
 - Interstellar chemistry
 - IR
 - DRIFTS
 - Far-IR
 - FTIR
 - Near-IR
 - Mid-IR
 - Laser spectroscopy
 - Light scattering
 - LIF spectroscopy
 - Luminescence
 - Magneto-optical absorption
 - Mass spectrometry (also see atomic and ICP-MS)
 - Cyclotron resonance
 - Electrospray-MS
 - FAB-MS
 - Ion trap-MS
 - MALDI-MS
 - Secondary ion MS
 - Tandem mass spectrometry
 - Total reflection MS
 - TOF-MS
 - Matrix isolation
 - Microwave
 - Mossbauer

- MRD
 - Neutron scattering
 - Inelastic neutron scattering
 - Muon spin resonance
 - NMR
 - H-1/C-13 NMR
 - NMR other nuclei
 - High resolution NMR
 - NOE
 - Nuclear spin coupling
 - Solid-state NMR
 - MAS NMR
 - Two/multidimensional NMR
 - Relaxation (NMR)
 - NMR in liquid crystals
 - NQR
 - Optical double resonance
 - Optoacoustic/wave imaging
 - Oscillator strength/force constant
 - Penning ionisation
 - Phosphorescence
 - Photoacoustic
 - Photoelasticity
 - Photoelectric emission
 - Photoelectron
 - Photoionisation
 - Photoluminescence
 - Photon correlation spectroscopy
 - Plasmas
 - RAIRS
 - Raman
 - Resonance Raman
 - Time-resolved resonance Raman
 - SERS
 - Refractive index/dispersion
 - REMPI/ZEKE
 - Rotational spectroscopy
 - SAXS
 - Solvatochromism
 - Sonochemistry/ultrasound
 - Spectrofluorimetry
 - Spectrophotometry
 - Stark effect
 - Synchrotron radiation
 - Thermochromism
 - TRIPLE
 - UV/visible
 - WAXS
 - XANES
 - X-Ray photoelectron
 - Zeeman effect
-
- Atomic spectroscopy**
 - Theory
 - Instrumentation
 - Sample preparation
 - Sample introduction
-
- Atomic absorption**
 - Flame (AAS)
 - ETAAS
 - Atom trapping
-
- Background correction techniques
 - Continuum sources
 - Light sources
 - Hydride generation
-
- Atomic mass spectrometry (analytical)**
 - Accelerator MS (AMS)
 - Glow discharge MS (GDMS)
 - Laser microprobe MS (LMMS)
 - Resonance ionization MS (RIMS)
 - Secondary ion MS (see Spectroscopy)
 - Spark source MS (SSMS)
 - Sputtered neutral MS (SNMS)
 - Stable isotope ratio MS
 - Thermal ionization MS (TIMS)
-
- Atomic emission**
 - Flame (AES)
 - ICP-AES
 - Direct current plasma
 - Microwave induced plasma
 - Capacitively induced plasma
 - Electrothermal atomization
 - Arcs, sparks
 - Low-pressure discharges
-
- Coupled atomic techniques**
 - FI-AAS
 - GC-AAS
 - GC-MIP
 - GC-ICP
 - HPLC-AAS
 - HPLC-ICP
 - HPLC-DCP
 - HPLC-MIP
 - CE-ICP
 - Other hyphenated techniques (state which)
-
- Atomic fluorescence**
 - Flame
 - ICP-AFS
 - Electrothermal atomization
 - Light sources
 - Non-dispersive AF
-
- X-Ray fluorescence**
 - Energy dispersive
 - Wavelength dispersive
 - Total reflectance XRF
-
- ICP-MS**
 - Electrothermal vaporization (ETV-ICP-MS)
 - Laser ablation
 - Isotopic analysis
-
- Analytical science: techniques**
(see also Electrochemistry; Microscopy; and Spectroscopy sections above)
 - Acoustic methods
 - Amplification reactions
 - Automation
 - Catalytic analytical methods
 - Chromatography (general)
 - Affinity chromatography
 - Chiral chromatography
 - Electrophoresis
 - CEC
 - CE/CZE
 - Gel permeation chromatography
 - GC
 - GC-MS
 - LC/HPLC
 - Other hyphenated techniques (state which)
 - Ion chromatography
 - Ion exchange resins
 - LC-MS
 - MECC/MEKC
 - SFC
 - TLC
 - Complexometry
 - Detectors (analytical), state-type
 - Diode arrays
 - Enzymic analytical methods
 - Extraction (general)
 - Solvent extraction
 - SFE
 - SPE
 - SPME
 - Fire assay
 - Flow injection
 - Sequential injection
 - Stopped flow
 - Fluorescence (general)
 - Chemiluminescence
 - Luminescence
 - Phosphorescence
 - Spectrofluorimetry
 - Gravimetry
 - Immunoassay (general)
 - Enzyme immunoassay/ ELISA
 - Radioimmunoassay
 - Isotope dilution
 - Isotopes/isotopic labelling
 - Mathematical analytical
 - LIMS
 - Computers
 - Chemometrics
 - Experimental design
 - Factor analysis
 - Pattern recognition
 - Calibration
 - Expert systems
 - Modelling
 - Neural networks
 - Statistical analysis

- Miniaturisation
- Microchips
- Micro-TAS
- Particle analysis/characterisation
- Particle size analysis
- PCR (polymerase chain reaction)
- Process analysis
- Sample preparation
- Microwave digestion
- Sampling
- Diffusive samplers/sampling
- Slurry
- Sampling devices
- Sensors (general)
- Biosensors
- Chemical sensors
- Optical sensors
- Thermal methods
- Titrimetric/volumetric

Analytical science: applications
(see also Environmental chemistry below)

- Agriculture/animals (general)
- Animals
- Feedstuffs
- Fertilisers
- Fish
- Pesticides
- Plant materials
- Soils
- Wood
- Yeasts
- Bioanalytical
- Antibodies
- Biological samples
- Biological samples (metals analysis)
- Cell/single organelle analysis
- Carbohydrates/sugars
- DNA
- Peptides
- Proteins
- Single molecule detection
- Clinical biochemistry (general)
- Clinical samples
- Blood analysis
- Body fluids
- Catalysts
- Detergents
- Environmental analysis (see Environmental Chemistry below)
- Epidemiology
- Food (general)
- Additives
- Alcoholic beverages
- Bread/flour/cereals
- Carbohydrates/sugars
- Contaminants
- Dairy products
- Eggs
- Enzymes (food)

- Essential oils
- Fats/oils
- Fish/fish products
- Fruits/vegetables
- Meat/meat products
- Proteins/soya
- Vitamins (food)
- Forensic
- Explosives
- Fibres
- Gases/vapours
- Hydrocarbons
- Inorganic compounds
- Halogen compounds
- Peroxides (inorganic)
- Phosphorus compounds
- Silicon compounds
- Sulfur compounds
- Inorganic materials (general)
- Asbestos
- Cement/concrete
- Dental materials
- Glasses/ceramics
- Metals (general)
- Alloys
- Iron/steel
- Platinum group metals
- Transition metals
- Rare earth elements
- Minerals/geological (general)
- Coal
- Rocks/ores
- Sediments
- Multielement analysis
- Organic compounds (specify type)
- Organometallics
- Paints/dyes
- PCBs (polychlorobiphenyl compounds)
- Petroleum fluids
- Diesel fuels
- Exhaust gases
- Pharmaceutical
- Combinatorial chemistry
- Drugs/formulations
- Antibiotics/penicillin
- Steroid drug
- Residues
- Polymers/plastics
- Quality control
- Collaborative studies
- Reference materials
- Safety/hazards
- Semiconductors
- Soils/sediments/plants
- Tobacco
- Toxicology/toxicity
- Waters (general)
- Industrial water
- Natural water
- Potable water
- Sea water

Radiochemistry/nuclear chemistry

- Actinometry
- Alpha/gamma spectroscopy
- Hot-atom chemistry
- Ion beams
- Ion sources
- Liquid scintillation counting
- Neutron activation/INAA
- Nuclear fission
- Nuclear fusion
- Nuclear fuels
- Radiation biochemistry
- Radiation detection devices
- Radioactive wastes
- Radiolysis
- Radiotracers
- Recoil
- Thermography
- Tracers
- Transuranics/actinoids
- Tritium
- Waste disposal

Environmental chemistry

- Aerosols
- Air monitoring
- Bioaerosols
- Bioavailability
- Bioindicators
- Biomarkers
- Biomonitoring
- Contaminants
- Food
- Natural
- Anthropogenic
- Inorganic
- Organic
- Transport of
- Ecosystems
- Marine
- Limnic
- Terrestrial
- Environmental assessment
- Environmental regulations
- Environmental monitoring
- Exposure assessment
- Sampling strategies
- Sampling devices
- Epidemiology
- Occupational health
- Occupational hygiene
- Pollution (general)
- Ambient air pollution
- Atmospheric pollution
- Noise pollution
- Soil pollution
- Water pollution
- Workplace or indoor air pollution
- Risk assessment
- Speciation

- Toxicology/toxicity
- Ecotoxicology
- Human toxicology
- Toxicokinetics

- Green chemistry**
- Alternative feedstocks
- Atom efficiency
- Biotechnology
- Clean synthesis
- Formulation
- Heterogeneous catalysis
- Industrial ecology
- Intensive processing
- Ionic liquids
- Life cycle analysis
- New synthetic methodology
- Reactor design
- Risk assessment
- Separation technology
- Solventless processes
- Solvents
- Supercritical fluids
- Waste avoidance
- Water as a reaction medium

- Miniaturisation**
- Biochips
- Biomedical devices
- BioMEMs
- Biomolecular motors
- Bio-synthesis
- Catalytic microreactors
- Cellomics
- Chip-based systems
- Combinatorial chemistry
- Diagnostics
- DNA purification
- Electromechanical devices
- Etching
- Gene sequence analysis
- Genetic analysis
- Genomics
- High-speed catalysis
- High-throughput screening
- Integrated systems
- Lithography
- MEMS
- Microanalysis
- Microarray
- Microbiology
- Microbiotechnology
- Microcatalysis
- Microchips
- Microchromatography
- Microcolumn
- Microdetection devices
- Microdetection methods
- Microdevices
- Microelectrochemistry
- Microengineering
- Microfabrication
- Microfluidics
- Micromachining
- Micromechanics
- Micro-optics
- Microphotolithography
- Microprocessors
- Microreactions
- Microreactors
- Microsensors
- Microstructures
- Microsynthesis
- Molecular motors
- Nanofabrication
- Nanomanipulation
- Nanomaterials
- Nanoscale imaging
- Nanotechnology
- Point-of-care analysis
- Polynucleotide arrays
- Proteomics
- Rheology
- SAMS
- Surface modification

- Chemical biology**
- Nucleic Acids
- DNA
- RNA
- Oligonucleotides
- DNA structure
- RNA structure
- RNA catalysis/ribozymes
- DNA/RNA cleavage
- DNA/RNA recognition
- Proteins
- Peptides
- Antibodies
- Catalytic antibodies
- Enzymes (general)
- Enzyme mechanism
- Enzyme inhibition
- Glycoproteins
- Lipoproteins
- Membrane proteins
- Metalloproteins
- Protein/peptide design
- Protein folding
- Carbohydrates
- Polysaccharides
- Glycoconjugates
- Bioconjugates
- Lipids
- Phospholipids
- Biomembranes
- Glycolipids
- Bioenergetics
- Bioinformatics
- Cell recognition
- Cellular processes
- Cell death, apoptosis
- Transcription
- Translation
- Replication
- Signal transduction
- Membrane transport
- Chemical ecology
- Computational biology
- Directed evolution
- Gene regulation/control
- Genetic engineering/transgenics
- Genomics
- Metabolomics
- Microbiology
- Molecular biology
- Molecular recognition
- Mutagenesis
- Pharmacology
- Prebiotic chemistry
- Protein engineering
- Proteomics
- Single nucleotide polymorphisms (SNPs)
- Structural biology