004 Computer science, data processing (see relevant shelf guide)

004.67 Internet

005 Computer programming

500 General science

500.212 Scientific units, symbols, tables etc. (Housed in Reference section)

507 Science: Study and teaching, research, general texts on science, science education

510 Mathematics (see relevant shelf guide)

519 Statistics (see relevant shelf guide)

530 Physics (see relevant shelf guide)

.8 Physical constants; formulae etc. [most housed in Reference section]

.81 Unit conversion

540 General Chemistry incl. Mathematics for Chemistry

.2 Chemistry of materials (general)

.3 Chemical data and nomenclature, chemical information literature

.36 Environmental chemistry (see also 363.7394, 541.34, 543.3 and 574.5...)

.38 Models, teaching aspects, general experimental chemistry, including laboratory manuals

.9 History, biographies, anecdotes, humour

541 Theoretical and physical chemistry

General solid state chemistry, including solid state solar energy chemical conversion, intercalation props (for solid state physics see 530.41)

.2 Quantum chemistry, spectroscopy and molecular structure (see also 535.84 and 530.12)

.3 Texts on physical chemistry

.34 Solutions, solvents, desalination, synthetic membranes, osmotic phenomena, physical chemistry of water

.3453 Surface properties - adsorption

.345 Colloids, micelles, microemulsions

.35 Photochemistry, radiation chemistry

.36 Thermodynamics (see also 530.13 and 536.7)

.37 Electrochemistry - electrolytic solutions, corrosion, pH buffers, photoelectrochemistry, solid electrolytes

.372 Ionic interactions in solution, ion selective electrodes

.378 Magnetoochemistry

.38 Radiochemistry, laser induced applications, Mossbauer spectroscopy, molecular beam scattering

.385 Theoretical mass spectroscopy

.39 Reaction kinetics and catalysis, including enzyme kinetics, catalysis using metal complexes

542 Chemical laboratories, apparatus, equipment, chemical technician's handbooks

Safety

Vacuum technology

Automation, electronics, computing, computer applications in chemistry (see also Computer Science - 004-006)

543 Computational chemistry

Analytical chemistry (general analysis)

Statistics for chemists (see also Statistics - 519.5, Graphs, nomograms, etc. - 511.5)

.1 Food analysis, including beverages

.3 Water analysis (see also 540.59 and 541.372)

.6 Geochemical analysis

.7 Organic analysis, including pharmaceuticals (see also 547.09, 615.1, 615.19 and 615.9)

544 Qualitative chemistry (qualitative analysis)

Spectrochemical

Micro and semimicro

Chromatographic and solvent extraction, including all applications of chromatography

545 Quantitative chemistry (quantitative analysis)

Volumetric titration, including thermometric methods, general titration indicators

.2 Electrochemical

.3 Spectrochemical and radiochemical

.8 NMR and ESR spectroscopy, including all applications
<table>
<thead>
<tr>
<th>546</th>
<th><strong>Inorganic chemistry</strong> (introductory texts and general aspects)</th>
</tr>
</thead>
<tbody>
<tr>
<td>.1</td>
<td>Theoretical inorganic and reaction mechanisms</td>
</tr>
<tr>
<td>.15</td>
<td>Synthesis and experimental inorganic chemistry</td>
</tr>
<tr>
<td>.3</td>
<td>Metallurgical aspects, liquid metals (see also 669)</td>
</tr>
<tr>
<td>.34</td>
<td>Molten salts</td>
</tr>
<tr>
<td>.345</td>
<td>Complexes, organometallic, including inorganic biochemistry</td>
</tr>
<tr>
<td>.68</td>
<td>Zeolites, molecular sieves</td>
</tr>
<tr>
<td>.7</td>
<td>Inorganic aspects of nitrogen fixation, N chemistry, P chemistry, S chemistry</td>
</tr>
<tr>
<td>547</td>
<td><strong>Organic chemistry</strong> (introductory texts and general aspects)</td>
</tr>
<tr>
<td>.01</td>
<td>Synthetic methods</td>
</tr>
<tr>
<td>.09</td>
<td>Toxicology - chemotherapy, germicides, general pharmaceuticals (see also 615.1, 615.19 and 615.9)</td>
</tr>
<tr>
<td>547.1</td>
<td>Theoretical and structural, including physical methods for structural determination</td>
</tr>
<tr>
<td>.134</td>
<td>Organic solvents</td>
</tr>
<tr>
<td>.16</td>
<td>Stereochemistry</td>
</tr>
<tr>
<td>.29</td>
<td>Fermentation processes</td>
</tr>
<tr>
<td>.3</td>
<td>Organic mass spectroscopy</td>
</tr>
<tr>
<td>.59</td>
<td>Heterocyclic compounds</td>
</tr>
<tr>
<td>.7</td>
<td>Natural products, including perfumes, waxes, soaps, essential oils, naturally occuring foods, wood chemistry</td>
</tr>
<tr>
<td>.72</td>
<td>Alkaloids</td>
</tr>
<tr>
<td>.73</td>
<td>Steroids, hormones</td>
</tr>
<tr>
<td>.75</td>
<td>Proteins, enzymes</td>
</tr>
<tr>
<td>.76</td>
<td>Carbohydrates</td>
</tr>
<tr>
<td>.83</td>
<td>Fossil fuels and technology (see also 662)</td>
</tr>
<tr>
<td>.84</td>
<td>Polymers, including macrocyclic compounds</td>
</tr>
<tr>
<td>.86</td>
<td>Dyes and pigments</td>
</tr>
<tr>
<td>548</td>
<td><strong>Crystallography</strong></td>
</tr>
<tr>
<td>.3</td>
<td>Chemical crystallography</td>
</tr>
<tr>
<td>.7</td>
<td>Mathematical crystallography</td>
</tr>
<tr>
<td>.8</td>
<td>Physical and structural crystallography, including x-ray diffraction</td>
</tr>
<tr>
<td>.9</td>
<td>Optical crystallography, including liquid crystals</td>
</tr>
<tr>
<td>549</td>
<td><strong>Mineralogy</strong></td>
</tr>
<tr>
<td>.3</td>
<td>Geology, meteorology, general hydrology</td>
</tr>
<tr>
<td>.9</td>
<td>Geochemistry</td>
</tr>
</tbody>
</table>

**Life Sciences**
- Biophysics
- Biochemistry
- Ecology incl. biogeochemistry
- Tissue, cellular, molecular biology

**Genetics**
- Metabolism
- Biophysics and biochemistry of plants
- Economic botany; ethnobotany
- Biophysics and biochemistry of animals
- Waste technology
- Hazardous materials technology
- Inventions

**Medical sciences**
- Pharmacology and therapeutics; chemicals & drugs
- Drugs - pharmacology
- Pharmaceutical chemistry
- Toxicology
- Industrial toxicology
- Tests, analysis, detection of poisons
- Treatment of cancer

**Applied chemistry**, including general introductory industrial/applied chemistry

**Chemical engineering**: chemical processes
- Applied physical chemistry
- Industrial chemicals technology
- Technology of explosives, fuels (see also 547.83), pyrotechnics
- Beverages technology including brewing
- Food technology
- Industrial oils, fats, waxes, gases
- Glass-technology and utilization
- Ceramics (see also 738 and 540.2)
- Technology of organic products eg. glues, plastics, surfactants, cosmetics etc.
- Surfactants (see 541.3453)
- Pulp and paper technology (for wood chemistry see also 547.7)
- Cleaning, colour and related technologies
- Metallurgy (see also 546.3)
- Metallurgy

**Preparation and style guides for research papers, theses etc; referencing techniques**