

**New and Changed Entries**  
**October 2003**

**Revision of Analytic Chemistry**

We continue to feature highlights from *Dewey Decimal Classification and Relative Index*, Edition 22 (DDC 22). The October revision shows the consolidation of analytic chemistry in 543, including relocation of qualitative analysis from 544, quantitative analysis from 545, analytic chemistry of metals in general from 546.3, and analytic organic chemistry from 547.3. It also shows the relocation of specific methods of chemical analysis from 543.08 and subdivisions of 544 and 545 to numbers in 543.2-543.8 that were either previously unused or last used in Edition 17.

The full development for 543-545 is included, plus the records for 546.3 and 547.3.

**Edition 22**

543 Analytical chemistry

Of inorganic or organic chemicals in general

Class here specific qualitative techniques [*formerly* 544], specific quantitative techniques [*formerly* 545], analytical chemistry of metals in general [*formerly* 546.3], specific techniques of analytic organic chemistry [*formerly* 547.3]

Unless other instructions are given, class a subject with aspects in two or more subdivisions of 543 in the number coming last, e.g., chromatography in organic chemical analysis 543.8 (not 543.17)

*For analytical chemistry of specific elements, compounds, mixtures, groupings (other than metals and metallic compounds in general), see 546; for analytical chemistry of specific organic compounds, see 547*

- .001 Philosophy and theory
  - Relocated to 543.01
- .002 Miscellany
  - Relocated to 543.02
- .003-.006 Standard subdivisions
  - Relocated to 543.03-543.06
- .007 Education, research, related activities
  - Relocated to 543.07
- .008 History and description with respect to kinds of persons

- Relocated to 543.08
- .009 Historical, geographic, persons treatment  
           Relocated to 543.09
- .01 Philosophy and theory [*formerly* 543.001]  
           Reagents relocated to 543.0284
- .02 Miscellany [*formerly* 543.002]  
           Sample preparation relocated to 543.19
- .028 4 Materials  
           Including reagents [*formerly* 543.01]  
           Do not use for apparatus and equipment; class in 543.19
- .03–.06 Standard subdivisions [*formerly* 543.003–543.006]
- .07 Education, research, related topics [*formerly* 543.007]  
           Instrumentation relocated to 543.19
- .08 History and description with respect to kinds of persons [*formerly*  
 543.008]  
           Specific methods relocated to 543.2–543.8
- .09 Historical, geographic, persons treatment [*formerly* 543.009]
- .1 General topics in analytical chemistry  
           Including qualitative analysis [*formerly* 544], quantitative analysis [*formerly*  
 545]
- .17 Analytical organic chemistry [*formerly* 547.3]
- .19 Techniques of general application  
           Including sample preparation [*formerly* 543.02]  
           Class here instrumentation [*formerly* 543.07]
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- > 543.2–543.8 Specific methods [*formerly* 543.08]  
           Class comprehensive works in 543
- .2 Classical methods  
           Not provided for elsewhere  
           Including diffusion methods, gravimetric analysis
- .22 Microchemistry (Microanalysis)

- Including microscopic analysis, spot tests
- .24 Volumetric analysis
  - Class here titration
- .26 Thermal analysis
  - Including thermogravimetry
- .4 Electrochemical analysis
  - Including coulometry, electrophoresis, polarography
- .5 Optical spectroscopy (Spectrum analysis)
  - Class here atomic and ultraviolet spectroscopy, interdisciplinary works on spectroscopy
  - For spectroscopy in physics, see 535.84; for spectroscopic interpretation of chemical structure, see 541.2; for nonoptical spectroscopy, see 543.6*
- .52 Atomic emission spectroscopy
  - Including flame emission spectroscopy
- .54 Molecular spectroscopy
- .55 Spectrophotometry
  - Class here colorimetry
- .56 Luminescence spectroscopy
  - Class here fluorescence spectroscopy
- .57 Infrared and Raman spectroscopy
  - Standard subdivisions are added for infrared and Raman spectroscopy together, for infrared spectroscopy alone
- .59 Methods based on refraction, interference, scattering
  - Including interferometry, polariscopic analysis, refractometry
  - For Raman spectroscopy, see 543.57*
- .6 Nonoptical spectroscopy
  - Including gamma-ray, microwave spectroscopy
  - Class here nuclear spectroscopy
- .62 X-ray and electron spectroscopy
  - Standard subdivisions are added for X-ray and electron spectroscopy together, for X-ray spectroscopy alone

- .63 Radiochemical analysis
  - Including nuclear activation analysis
- .65 Mass spectrometry (Mass spectroscopy)
- .66 Nuclear magnetic resonance spectroscopy
- .67 Electron paramagnetic resonance spectroscopy
  - Variant name: electron spin resonance spectroscopy
- .8 Chromatography
- .82 Ion-exchange chromatography
- .84 Liquid chromatography
  - Including paper and thin-layer chromatography
- .85 Gas chromatography
- .86 Supercritical fluid chromatography
  - Variant name: supercritical gas chromatography
- [544] Qualitative analysis
  - Comprehensive works on qualitative analysis relocated to 543.1; specific qualitative techniques relocated to the technique in 543, e.g., diffusion methods 543.2
- [545] Quantitative analysis
  - Comprehensive works on quantitative analysis relocated to 543.1; specific quantitative techniques relocated to the technique in 543, e.g., volumetric analysis 543.24
- 546.3 Metals, metallic compounds, alloys
  - Standard subdivisions are added for any or all topics in heading
  - Analytical chemistry of metals in general relocated to 543
  - Class metallic elements studied collectively in 546.31; class physical and chemical metallurgy in 669.9; class interdisciplinary works on metals in 669
  - For metals of groups other than 1 and 2, see 546.4–546.7; for organometallic compounds, see 547.05*
- 547[.3] Analytical organic chemistry
  - Comprehensive works on analytic organic chemistry relocated to 543.17; specific techniques in analytic organic chemistry relocated to the technique in 543, e.g., spectroscopy in organic chemistry 543.5