

## Subject Index

- 1-alkanoates, 25  
1-alkanols, 25  
2D NMR, 57  
4-nonylphenol, 115  
 $^1\text{H-NMR}$ , 173  
 $^1\text{H-NMR}$  spectroscopy, 25  
 $^{13}\text{C-NMR}$  spectroscopy, 25
- ab initio, 95  
adamantane analogues  
 $\alpha$ -cyclodextrin, 173  
adsorbent, 115  
alkali metal ion, 87  
alkali metal perchlorates, 157  
alkylation, 193  
AM1, 95  
anion effect, 157  
asymmetric synthesis, 111
- binding constant, 25  
bisphenol A, 115  
bivalent substrates, 43  
BSA, 183
- calixarenes, 193  
calix[4]resorcinarene, 199  
catalysis, 31  
catalysts, 19  
chiral crown ether, 165  
chitosan, 115  
chloroform complex, 187  
chloropropamide, 73  
circular dichroism, 121  
co-grinding, 67  
complex compounds, 133  
complexation, 13  
complexes, 157  
conformation, 173  
controlled assembly, 19  
crystal structure, 165, 199, 227  
crystalline inclusion compound, 187  
cucurbit[ $n$ ]uril, 203  
cyclodextrin, 13, 25 51, 57, 67, 87, 111  
 $\beta$ -cyclodextrin, 115, 151  
 $\gamma$ -cyclodextrin, 63, 79  
cyclodextrin complexation, 95  
cyclodextrin glycosyltransferase, 37  
cyclodextrins, 1, 3, 19, 43, 105, 183, 209  
cyclooctene, 111
- diastereomer, 121  
dibenzo-18-crown-6, 157  
dioxanide furoate, 151  
dipole moment, 157  
dissolution, 219  
distribution behavior, 157  
DMSO solvation, 199
- electron donor-acceptor linked compounds, 105  
electronic absorption, 209  
excimer emission, 79  
extractability, 157
- fluorescence, 209  
fluorescent molecular sensing, 79  
fluoroionophore, 87  
FTIR, 219  
fundamental equilibria, 157
- gemfibrozil, 219
- heptakis-2,6-di-*O*-methyl- $\beta$ -cyclodextrin, 219  
hetero rim, 79  
host-guest chemistry, 31
- host-guest interaction, 57  
HPLC, 51  
humidity, 73  
hydration, 173  
hydrazyl radicals, 183  
hydrogen bond, 173, 193  
hydrogen bonding, 121  
hydroxy protons, 173  
2-hydroxypropyl- $\beta$ -cyclodextrin, 73
- inclusion, 173  
inclusion complex, 25, 57, 203  
inclusion complexes, 151, 209, 219  
insoluble material, 115  
inter-atomic contacts, 133  
intramolecular complex, 79, 121  
ion-pair formation constants in water, 157
- labile interactions, 133  
lead ion, 87
- macromolecules, 199  
membrane diffusion, 219  
mercury(II) nitrate, 227  
moisture condition, 67  
molar volumes, 157  
molecular device, 13  
molecular flask, 63  
molecular imprinting, 51  
molecular reactors, 19  
molecular recognition, 3, 95, 165  
moulding pressure, 73  
multiple equilibria, 43
- nanoparticle, 67  
NMR, 121  
NMR chemical shift, 43
- ONO-8713, 67
- photochirogenesis, 111  
photodimerization, 63  
photoisomerization, 13, 111  
PM3, 95  
polycationic tag, 37  
polymorphic transition, 73  
poorly water soluble drug, 67  
purification, 37  
pyridine, 227
- recognition, 31  
regioselectivity, 19, 193  
regular solution theory, 157  
rotaxane, 203  
rotaxane type complexation, 105
- selectivity, 157  
self-assembly, 19, 31, 203  
sensor, 31  
separation, 31  
solid-state refolding, 37  
solubility parameters, 157  
solute-solvent interaction, 157  
solution structure, 43  
solvent extraction, 157  
stability constant, 151  
stationary phase, 51  
stereoselective reaction, 63  
steroids, 3, 51  
sugar, 87  
supramolecular polymer, 57  
supramolecular sensor, 87  
supramolecular structure, 105  
synthetic receptors, 31

- temperature, 73  
templates, 19  
tensimetric method, 227  
tetraaza macrotricycle, 187  
tetrakis(4-carboxyphenyl)porphyrin, 209  
tetrakis(4-sulfonatophenyl)porphyrin, 209  
thermal denaturation, 183  
thermoanalytical investigations, 219  
thermodynamic stability, 227  
thermodynamics, 3  
vapor pressure osmometry, 57  
water, 173  
weak attractions, 133  
Werner clathrates, 227  
X-ray structure determination, 187