

**Keyword index**

- AB diblock copolymer**
  - Core-shell microsphere, Binary blend 1580
- ABS**
  - Nylon 6, Morphology 3164
  - Poly(vinyl chloride), Char formation 343
- ABS polymers**
  - Compression creep, Steady-state strain 4110
  - Impression creep, Steady-state strain 4103
- ADC resin**
  - Plastic deformation, Glassy polymer 2985
- Acetone diffusion**
  - N.m.r. imaging, Poly(vinyl chloride) 2744
- Acetylene-terminated monomers**
  - Synthesis, Characterization 4462
- Acid catalyst**
  - Fluorinated polybenzoxazoles, Solution cyclization 5046
- Acrylates**
  - Methacrylates, Photopolymerization 3243
- Acrylic acid copolymers**
  - Poly(vinyl halide)s, Polybutadiene 1787
  - Polymeric drugs, N.m.r. spectroscopy 2501
- Acrylonitrile**
  - Surface enhanced Raman scattering, Silver 723
- Acrylonitrile copolymers**
  - Blends, Maleic anhydride copolymers 3351
  - Homopolymer-copolymer blends, Phase behaviour 1487
- Activation energy**
  - Semi-empirical calculation, Free radical reaction 5364
- Additive sorption centres**
  - Topological disorder, Size distribution 1031
- Additives**
  - Fracture toughness, Polymer networks 5041
- Adhesion**
  - Peeling, Diffusion 271
  - Polyethylene, Plasma treatment 2098
- Adhesive**
  - Radiation curing, Polyurethane methacrylate 2001
- Adhesive properties**
  - Polyisoimide, Surface morphology 4022
- Adsorption**
  - Polymer-metal interface, Catalysis 2488
- Ageing**
  - Poly(vinyl alcohol), Gels 2573
  - Poly(vinyl chloride), Dynamic mechanical properties 2800
- Aggregate**
  - Nylon 66, Spherulites 5300
  - Poly(allylammonium) chloride, Sodium 1-octanesulfonate 2004
- Aggregation**
  - Core-shell microspheres, Arm length 2329
  - Pyrene, Excimer 3920
- Aggregation phenomena**
  - Poly(ether imide), Fluorescence spectra 2730
- Alcohols**
  - Transesterification, Copolymers 3082
- Alginate**
  - Intermolecular associations, Fluorescence spectroscopy 3557
- Alicyclic dianhydride**
  - Soluble polyimides, Optical transparency 4203
- Aliphatic polyesters**
  - Blend miscibility, Poly(haloalkyl methacrylate)s 3290
- Alkali metal ions**
  - Poly(crown ether), Ion conduction 5753
- Alkyl acrylates**
  - Polymerization, Molecular weight distribution 862
- Allyl alcohol**
  - Plasma polymerization, Trifluoroacetic anhydride 4382
- Allyl alcohol oligomers**
  - Fluoroalkylates, Radical process 4028
- Allyl cinnamate monomers**
  - Cyclocopolymerization, Kinetics 5349
- Alpha-organotin alcohols**
  - Quaternary ammonium halides, Cyclotrimerization 5146
- Alternating copolymer**
  - Heat capacity, Sequence length distribution 3698
  - P(VDCN/VFo), Piezoelectricity 718
  - Polyarylether, Cyano 5355
- Amine-cured epoxy resin**
  - Thermoplastic-thermoset resin, Positron annihilation 5319
- Amino acid**
  - Membrane, Transport 204
- $\alpha$ -Amino acid**
  - Biodegradability, Copolyamides 4678
- Aminolysis**
  - Poly(hydroxyalkylglutamine)s, Chain scission 2443
- Ammonium salts**
  - Epoxy resins, Two-dimensional networks 3635
  - Water-soluble cyclopolymers, Free radical polymerization 3503
- Amorphous**
  - Energy transfer, Polyethylene 5057
- Amorphous nylon**
  - PBO, Fluorescence 1090
- Amorphous PEEK**
  - Poly(ether ether ketone), Trifluoromethylated PEEK 5124
- Amorphous polymer blends**
  - Structural relaxation, Glass transition temperature 1688
- Amorphous polymers**
  - Dielectric properties, Liquid crystalline polymers 1915
- Amorphous polyurethane**
  - Mechanical spectroscopy, Small-angle X-ray scattering 2737
- Amorphous scattering**
  - X-ray diffraction, Poly(vinyl alcohol) fibre 1369
- Amphiphilic copolymer**
  - Block copolymer, Solid polymer electrolyte 4914
- Amphiphilic terpolymers**
  - Micellar polymerization, Hydrophobic association 4429
- Amylopectin**
  - Branching, complexation 2222
- Anabarc crystallization**
  - Poly(ethylene terephthalate), Microhardness 4775
- Anaerobic adhesive**
  - Complex permittivity, Dielectric spectroscopy 939
- Anionic polycondensation**
  - Silicon-containing oligomer, Photocrosslinking 4228
- Anionic polymerization**
  - Block copolymer, Electrical properties 1556
  - Block copolymer, Micelle 1759
  - Block copolymers, Polyamide-3 2438
  - Poly(sec-butyl crotonate), Optical properties 441
  - Polysilylene, Masked disilene 4990
  - Poly( $\alpha$ -n-alkyl-L-aspartate)s, Helical conformation 4502
- Anionomer**
  - Polyurethane, Phenolphthalins 3107
- Anisotropy**
  - Finite element analysis, Rolled high-density polyethylene 1442
- Annealing**
  - Poly(4-methylpentene-1), Spherulites 1855
- Antichiral crystal**
  - Crystallization, Syndiotactic polypropylene 1884
- Antiplastization**
  - Polystyrene films, Permeability 2549
- Applications**
  - New polymer materials, Synthesis 4484
- Aqueous polymerization**
  - Nitrioltriacetic acid, Cerium (IV) redox initiators 849
- Aqueous solutions**
  - Viscosity, Triblock copolymers 1100
- Aramid fibre**
  - Surface graft polymerization, Argon plasma treatment 5336
- Argon plasma treatment**
  - Aramid fibre, Surface graft polymerization 5336
- Arm length**
  - Core-shell microspheres, Aggregation 2329
- Aromatic dicyanates**
  - High pressure polymerization, Polycyanurates 1203
- Aromatic ionenes**
  - Poly(pyridinium salt)s, Rigid-rod polymers 4940
- Aromatic polyamides**
  - High performance polymers, Transformation 2218
  - Modified polyisophthalamides, Thermally stable polymers 1986
  - Synthesis, Benzothiazole pendent groups 872
- Aromatic polyester**
  - Molecular motion, Dielectric relaxation 2364
  - Molecular motion, Dynamic mechanical behaviour 2359
  - Polymer whiskers, Morphology control 123
- Aromatic-aliphatic polyesters**
  - Odd-even effect, Synthesis 4697
- Aromatization**
  - Size exclusion chromatography, Poly(*p*-phenylene) 4133
- Artificial granules**
  - Poly(3-hydroxybutyrate), Poly(3-hydroxyoxanoate) 5079
- Aryl vinyl ketones**
  - Methyl methacrylate, Photolysis 4079
- Association model**
  - Blends, Phase diagrams 3712
- Associative polymer**
  - Thermothickening, Water-soluble polymer 2624
- Asymmetric substitution**
  - Polyelectrolyte, Poly(*p*-phenylene vinylene) 1312
- Atactic polystyrene**
  - Gelation, Viscoelastic properties 2180
- Atomic force microscopy**
  - Block copolymer, Morphology 5778
  - Molecular orientation, Isotactic polypropylene 461
- Azine**
  - Bismaleimide, Heteroaromatic *N*-oxide 653
- Bacterial polyesters**
  - Polyalkanoates, Spreading 435
- Bacterial polymer**
  - X-ray diffraction, Rietveld technique 4595
- Benzilic acid**
  - Crosslinking, Rearrangement 1339
- Benzocyclobutene**
  - Crosslinking, Polyaramid 5123
- Benzothiazole pendent groups**
  - Synthesis, Aromatic polyamides 872
- Benzoxazole**

- Monomer synthesis, Pendent groups 1317
- $\beta$ -form polypropylene**  
Microvoid, phase transformation 3442
- $\beta$ -Nucleator**  
Propylene copolymers, Crystalline form 5067
- Beta process**  
Dielectric relaxation, Linear polyethylene 1797
- Beta relaxation**  
Novalac phenol-formaldehyde, T.s.d.c. measurements 5336
- Biaxial orientation**  
Refractive indices, PET films 2192
- Binary blend**  
Core-shell microsphere, AB diblock copolymer 1580  
Morphology, Ordering 2296
- Binary blends**  
Phase separation, Polyethylenes 1991
- Binary copolymerization**  
Copolymerization parameters, *N*-antipyril acrylamide 3329
- Binding position**  
Polymer-drug interaction, Bovine serum albumin 1512
- Bioactive carboxylic acids**  
Dextran functionalization, Chloroacetate groups 2651
- Biodegradability**  
Copolyamides,  $\alpha$ -amino acids 4678  
Polyhydroxyalkanoates, Blend miscibility 5155
- Biodegradation**  
Biopolymer, Poly(hydroxyalkanoate) 2090
- Biopolymer**  
Biodegradation, Poly(hydroxyalkanoate) 2090
- Biphasic region**  
Gas sorption, Liquid crystalline polymer 2808
- Biphenyl**  
Mechanical properties, Poly(*p*-phenylene) 300
- Birefringence**  
Orientation, Raman spectroscopy 3119  
Stress-Optical law, Polymer melt 734
- Bis(ether anhydride)**  
Catechol, Poly(ether imide) 5148
- Bismaleimide**  
Azine, Heteroaromatic *N*-oxide 653  
Polystyrene, Poly(phenylene methylene) 658
- Bisphenol-A**  
Polycarbonate, Telechelic 371
- Bisphenol A polycarbonate**  
Orientation, Creep 2084
- Blend miscibility**  
Phase behaviour, Interaction parameter 162  
Phase behaviour, Ternary polymer blends 1051  
Poly(haloalkyl methacrylate)s, Aliphatic polyesters 3290  
Poly(hydroxyalkanoate)s, Biodegradability 5155
- Blend morphology**  
Polystyrene, Styrene-butadiene copolymer 5051
- Blends**  
Acrylonitrile copolymers, Maleic anhydride copolymers 3351  
Association model, Phase diagrams 3712  
Block copolymer, Compatibility 5511  
Block copolymer, Microsphere 866  
Cellulose, Chitosan 983  
Cellulose, Polyacrylonitrile 3565  
Compatibilizing effect, Morphology 212  
Composition, Dynamic mechanical analysis 956  
Crystallization behaviour, Dynamic mechanical method 1680  
Dielectric properties, Interphase 475  
Graft copolymer, Miscibility window 2229  
Hydrogen bonding, Thermal analysis 4423  
Hydrolytic degradation, Poly(3-hydroxybutyrate) 286  
Miscibility, Epoxy resins 2229  
Miscibility, Light scattering 1242  
Morphology, *In situ* polymerization 3643  
N.m.r., Dynamics, 57  
Orientation, Liquid crystalline polymer 104  
PEEK, PET-PHB 60 1994  
Phase behaviour, Liquid crystal polymers 3706  
Phase separation, Structure development 257  
Phase size, Interface 1552  
Poly(butylene terephthalate), Poly(ether ester) 5247  
Poly( $\beta$ -hydroxybutyrate), Crystallization kinetics 3984  
Poly( $\beta$ -hydroxybutyrate), Multiple melting 3990  
Poly(ether sulfone), Epoxy resin 353  
Poly(ethylene terephthalate) fibres, Thermotropic liquid-crystalline 4303  
Poly(hydroxybutyrate), Poly(methyl methacrylate) 2884  
Poly(hydroxybutyrate), Phase separation 86  
Poly(vinyl alcohol), Syndiotactic 1970  
Poly(vinylidene fluoride), Crystallization 706  
Polyamides, Block copolymers 1386  
Polyethylene, *Trans*-1,4-polybutadiene 729  
Polypropylene, Polyethylene 3332  
Polystyrene, Crystal growth rate 5699  
Polystyrene, Poly(vinyl methyl ether) 2716  
Slow crack growth, Polyethylene 3619  
Surfaces, Wetting 2160  
Ternary system, Hydrogen bonds 5379  
Terpolymer, Copolymer 1473  
Toughening, Interfacial bonding 988
- Blend sheet**  
Liquid crystalline polymer, Poly(ethylene terephthalate) 5138
- Block copolymer architecture**  
Epoxidized styrene-butadiene, Chlorinated polymers 1425
- Block copolymerization**  
Magnetic field, Poly(ethylene glycol) 1105
- Block copolymers**  
Amphiphilic copolymer, Solid polymer electrolyte 4914  
Anionic polymerization, Electrical properties 1556  
Anionic polymerization, Micelle 1759  
Anionic polymerization, Polyamide-3 2438  
Atomic force microscopy, Morphology 5778  
Blend, Microsphere 866  
Blends, Compatibility 5511  
Blends, Polyamides 1386  
Chain diffusion, Microphase structure 145  
Coupling reaction, Phase behaviour 1115  
Crystal transformation, Styrene-butadiene 4238  
Light scattering, Poly(methyl methacrylate) 3377  
Lignin, Cellulose propionate 1977  
Living character, *t*-Butyl acrylate 4011  
Micellization, Light scattering 5309  
Morphology, Selective solvents 490  
Morphology, Tetragonal structure 3786  
PEEK, PES 3549  
Phase modification, Polymorphism 3943  
Poly(4-vinylpyridine), Polydimethylsiloxane 243  
Poly(*p*-phenylene vinylene), Synthesis 391  
Polyamides, Rubber toughening 1399  
Roll-casting, Thermal expansion coefficient 4115
- Bound water**  
Hydrogel, Sodium polyacrylate gel 5626
- Bovine serum albumin**  
Polymer-drug interaction, Binding position 1512
- Box models**  
Polymer blends, Yield strength 3631
- Branching**  
Amylopectin, Complexation 2222
- Branching density distribution**  
Molecular weight distribution, Non-linear polymerization 3023
- Brill transition**  
Nylon-6,6, Crystallization 2483
- Brillouin scattering**  
Gelation, Polymerizing microemulsion 2701
- Bulk modulus**  
Compressibility, Rubber 2759
- Butadiene**  
Rare earth, Dichloroethane 2897
- 1-Butanol**  
Poly(methyl methacrylate), Phase separation 5141
- Butyl acrylate**  
Chain transfer, Grafting 2888
- Butyl rubber/polypropylene**  
Mechanical damping, Dynamically vulcanized blends 2579
- CP/MAS <sup>13</sup>C n.m.r.**  
Microbial cellulose, Cellulose-brightener complexes 75
- <sup>13</sup>C CP/MAS n.m.r.**  
Conducting polypyrrole, Structural characterization 1593  
Urea-formaldehyde resins, Reaction mechanisms 1602
- <sup>15</sup>N CP/MAS n.m.r. spectra**  
Urea-formaldehyde resins, Spin diffusion 1621
- Calorimetry**  
Heat of mixing, Polystyrene 2893
- Capillary extrusion**  
Melt flow rheology, Enhanced extrudability 3863
- Carbon Black**  
Poly(*N*-vinylcarbazole), Conductive composite 4470
- Carbonate**  
Miscibility, Cyclic oligomers 209
- Carboxymethyl cellulose**  
N.m.r. relaxation, Lineshape analysis 2749  
Polymolecularity, Sedimentation analysis 2137
- Catalysis**  
Polymer-metal interface, Adsorption 2488
- Catalyst**  
Crosslinking, Polyolefins 438  
Imprinted polymer, Molecular recognition 5372
- Catalytic action of acid**  
Polyaniline, Reaction mechanism 2915
- Catechol**  
Bis(ether anhydride), Poly(ether imide) 5148
- Catenated polymers**  
Cyclic polyester, Polymer supports 1542
- Cationic initiators**  
Photopolymerization, Vinyl ether 217

Keyword index

- Cationic polymer**  
Sulfobetaine, N.m.r. spectroscopy 2210
- Cationic polymerization**  
Charge-transfer complexes, Cyclohexane oxide 2428  
Photoinitiator, Pyridinium salt 4694
- Cationic surfactant**  
Phase transfer technique, Natural rubber latex 5144
- Cavitation**  
Ultrasonic degradation, Water-soluble polymers 30
- Cellulose**  
Chitosan, Blends 983  
Hydroxyl accessibility, Crystallinity 4717  
Polyacrylonitrile, Blends 3565  
Polyacrylonitrile, Graft polymer 168  
Sulfuric acid, Saccharification 50
- Cellulose acetate-propionate**  
Craze, Shear yielding 667
- Cellulose derivatives**  
Moisture adsorption, Ionic effects 5729
- Cellulose propionate**  
Lignin, Block copolymers 1977
- Cellulose-brightener complexes**  
Microbial cellulose, CP/MAS <sup>13</sup>C n.m.r. 75
- Cerium (IV) redox initiators**  
Nitrilotriacetic acid, Aqueous polymerization 849
- Chain conformation**  
Polydiacetylene, Solution 4787
- Chain diffusion**  
Block copolymers, Microphase structure 145
- Chain kink**  
Ethylene-butane copolymers, Crystalline defects 2049
- Chain scission**  
Poly(hydroxyalkylglutamine)s, Aminolysis 2443
- Chain transfer**  
Grafting, Butyl acrylate 2888
- Chain transfer to polymer**  
Molecular weight distribution, Poly(vinyl acetate) 3032
- Char formation**  
Poly(vinyl chloride), ABS 343
- Characterization**  
Acetylene-terminated monomers, Synthesis 4462  
Deformation, Processing 3831  
LC association chain polymers, Synthesis 4550  
Matrix-fibre composites, Electrochemical preparation 1306  
Nylon 7, Structure 66  
PET copolymer, Dialkyl propanediols 1274  
Poly(allyltrimethylsilane), Synthesis 4648  
Poly( $\beta$ -hydroxyoctanoate), Crystallization 1059  
Poly(methyl methacrylate), Fractionation 367  
Poly(tetrahydrofuran), Photoelectron spectroscopy 5185  
Polybisoxazoles, Synthesis 198  
Polyphosphazenes, Solution properties 819  
Synthesis, Comb-shaped polyesters 4449  
Synthesis, Poly(diarylsiloxane)s 4197
- Charge-transfer complexes**  
Cationic polymerization, Cyclohexane oxide 2428  
Poly(*N*-vinylcarbazole), Fluorescence dynamics 3149
- Chemical amplification**  
Negative resist, Microlithography 5
- Chemical inversion**  
Ethylene-propylene copolymer, Random copolymer 1336
- Chemical labelling**  
Phase behaviour, P2CS/PVME blends 1236
- Chemical shift**  
Polyimide, <sup>13</sup>C n.m.r. 4300
- Chemorheology**  
Phenol-formaldehyde resins, Lignin filler 1280
- Chiral polyanilene**  
Optical activity, Electropolymerization 3113
- Chitin**  
Hydroxypropyl chitin, Thermal properties 3212
- Chitosan**  
Cellulose, Blend 983
- Chlorinated polymers**  
Block copolymer architecture, Epoxidized styrene-butadiene 1425
- Chloroacetate groups**  
Dextran functionalization, Bioactive carboxylic acids 2651
- Chlorodiphenylphosphine**  
 $\alpha,\beta$ -unsaturated esters, Epoxide 2907
- Chromium acrylate**  
Terpolymerization, Styrene-acrylonitrile 4665
- Circular dichroism**  
Copolymers, Optical activity 5758
- Cis/trans content**  
Polyacetylene, Rhodium (I) complexes 5235
- Citraconic anhydride**  
Radical copolymerization, Styrene 2302
- Closed loop**  
Ternary blends, Phase diagram 1033
- Cloud-point curve**  
Cosolvent, Hydrogen bonding 3272
- Coacervation**  
Microencapsulation, Phase diagrams 777
- Co-crystallization**  
PVF<sub>2</sub>, VF<sub>2</sub>-VF<sub>4</sub> copolymers 4804  
Random copolymers, Copolyesters 117
- Coil shrinkage**  
Critical concentration, Polystyrene 3127
- Comb**  
Dendrimer, Ion exchange 3343
- Comb graft copolymers**  
Polystyrene macromonomers, ROMP 3542
- Comb-like polymers**  
Isotactic poly(1-hexadecene), Crystallization kinetics 3039
- Comb-shaped polyesters**  
Synthesis, Characterization 4449
- Compatability**  
Block copolymer, Blends 5511  
Nylon, Polyhydroxy ether of bisphenol-A 2764
- Compatibilization**  
Ionomer, PET/LLDPE blends 3624  
Polyamide 66, Polypropylene 3949  
Polymer blends, Transesterification 758  
Structure, Ternary blends 1433
- Compatibilized blends**  
Rheology, Morphology 128
- Compatibilizers**  
Interfacial tension, Polymer blends 281  
Reactive copolymer, Polymer blend 5641
- Compatibilizing effect**  
Blends, Morphology 212
- Compatible blend**  
Polystyrene, Microstructural deformation 2256
- Complex crystal**  
Iodine, Nylon 6 2665
- Complex permittivity**  
Dielectric spectroscopy, Anaerobic adhesive 939
- Complexation**  
Poly(allylamine), Schiff base 2153  
Amylopectin, Branching 2222
- Composites**  
High performance polymers, Particle 4949  
Microemulsions, Surfactants 4606  
Micromechanical modelling, Performance 5035  
Polyamide-6,6, Glass fibre 5241  
Poly(ethylene terephthalate), Glass fibre 514  
Poly(ether imide), Morphology 519  
Polyimide, Mechanical properties 4956  
Polymer blends, Glass fibre filler 3679
- Composition**  
Blends, Dynamic mechanical analysis 956
- Compressibility**  
Bulk modulus, Rubber 2759
- Compression creep**  
ABS polymers, Steady-state strain 4110
- Compressive yield stress**  
Fracture, Morphology 752
- Computer modelling**  
Polymer miscibility, Molecular mechanics 3251
- Computer simulation**  
Polymer blend, Spinodal decomposition 3774  
Semibatch reactor, Nylon 6 3722
- Concentrated emulsions**  
PVDC/PBMA composites, Mechanical properties 4343
- Concentrated solutions**  
Polystyrene microgels, Self-diffusion 1936
- Condensation polymerization**  
Lipase, 11-Hydroxyundecanoic acid 3576
- Conducting films**  
Polyphenylquinoxaline, Proton doping 2977
- Conducting polymer colloids**  
Electropolymerization, Polypyrrole 3801
- Conducting polymer systems**  
Poly(vinylidene fluoride), Polyblends 3752
- Conducting polymers**  
Polyanilene, Open-circuit potentials 3572  
Polyindole, Electrochromic properties 2010  
Polythiophene derivatives, Synthesis 4057  
Spiro[2,4]hepta-4,6-diene, Electron hopping 2467  
Thermal treatment, Electrochemical properties 2372
- Conducting polypyrrole**  
<sup>13</sup>C CP/MAS n.m.r., Structural characterization 1593
- Conduction mechanism**  
Poly(phenylene vinylene), Molecular orientation 4569
- Conductive composite**  
Poly(*N*-vinylcarbazole), Carbon black 4470
- Conformational analysis**  
Linear epoxy system, Torsional angles 4326  
Poly(methyl methacrylate), Model oligomers 1078
- Conformational transitions**  
Linear flexible polymers, Viscometry 4638
- Conformationally mobile phones**  
Glassy polymers, Molecular mobility 2591
- Conformations**  
<sup>1</sup>H n.m.r., Poly(vinyl alcohol/acetate) 3398  
Inclusion compounds, Molecular modelling 573  
Polycyanurate, Short-range interactions 3735  
Poly(ethylene terephthalate), Modulus 4259  
Polyion complex, Helix formation 3492

- Contact angle hysteresis**  
Poly(ethylene terephthalate), Surface orientation 262
- Contact angles**  
Vinyl alcohol oligomers, Solubility 444
- Continuity**  
Phase, Fracture toughness 1658
- Controlled release**  
Thermal degradation, Polyester 1222
- Convergence acceleration**  
Series expansions, Stable-law density 1880
- Conversion**  
Sulfonium, Poly(phenylene vinylene) 1561
- Co-oligomerization**  
Copolymerization, Thermal polymerization 4168
- Coordination complexes**  
Lewis acid, Properties 4313
- Copolyamides**  
Biodegradability,  $\alpha$ -amino acids 4678
- Copolyesters**  
Fibres, Hydrolysis 2587  
Molecular mobility, Deuteron n.m.r. 3816  
Polyurethane networks, Homopolyesters 830  
Random copolymers, Cocrystallization 117
- Copolymer blends**  
Glycidyl methacrylate, Interaction energies 3513  
Miscibility, Segmental interaction 786
- Copolymer composition**  
Solid-state  $^{13}\text{C}$  n.m.r., Water-soluble polymers 935
- Copolymeric hydrogel**  
Drug release, Diffusion coefficient 3487
- Copolymerization**  
Co-oligomerization, Thermal polymerization 4168  
Furfuryl methacrylate, *N*-vinylpyrrolidone 2390  
Molecular orbital calculations, *Q*-*e* scheme 1258  
Organosilyl methacrylates, Kinetics 4392  
Reactivity ratios, Methacrylamide 3579  
Redox initiation, Dental composite 3285
- Copolymerization parameters**  
Binary copolymerization, *N*-antipyril acrylamide 3329
- Copolymers**  
Blends, Terpolymer 1473  
Diethyl vinyl phosphonate, Flame retardance 3470  
Glass transition temperature, Poly(vinyl chloride) 348  
Melting point depression, Miscibility 1044  
Methyl methacrylate, Methyl vinyl ketone 451  
Miscibility, Isomeric effects 3055  
Morphology, Melt polymerization 1831  
N.m.r. analysis, Reactivity ratio 3703  
Optical activity, Circular dichroism 5758  
Poly(ether sulfone)s, Trifluoromethylation 2432  
Polybenzobisthiazole, Rigid-rod polymers 3091  
Ternary blends, Flory-Huggins theory 5518  
Transesterification, Alcohols 3082  
Vinyl acetate, Thermogravimetric analysis 3348
- Core-shell acrylic rubber**  
Polyamide-6 blends, Impact behaviour 3658
- Core-shell impact modifiers**  
Poly(butylene terephthalate), copolymer 5586
- Core-shell latex**  
Poly(butyl methacrylate), Poly(methacrylic acid) 1779
- Core-shell microspheres**  
Arm length, Aggregation 2329  
Binary Blend, AB diblock copolymer 1580
- Core-shell morphology**  
Microsphere, Diblock copolymer 1747
- Corrosion inhibition**  
Poly(vinylimidazole), Silane modification 4780
- Cosolvent**  
Cloud-point curve, Hydrogen bonding 3272
- Counterion binding**  
Weak polyelectrolyte,  $^{23}\text{Na}$  n.m.r. 3268
- Coupling**  
Liquid crystal polymers, Mean-field model 2952
- Coupling reaction**  
Block copolymers, Phase behaviour 1115
- $\text{Cp}_2\text{TiCl}_2$**   
Methylaluminoxane, Ethylene polymerization 187
- Crack-tip craze**  
Poly(vinyl chloride), Rubber-elastic behaviour 5678
- Craze**  
Cellulose acetate-propionate, Shear yielding 667
- Craze initiation**  
Fatigue, Polycarbonate 3604
- Creep**  
Bisphenol A polycarbonate, Orientation 2084  
Fibre, Polypropylene 2226  
Physical ageing, Poly(vinyl chloride) 4376
- Critical behaviour**  
Polymer blend solution, Three-dimensional Ising model 1038
- Critical concentration**  
Coil shrinkage, Polystyrene 3127
- Critical conversion**  
Gelation, Crosslinking polymerization 2613
- Critical overlap concentration**  
Diffusional behaviour, Pulsed field gradient n.m.r. 509
- Crosslink density**  
Inverse gas chromatography, Polydimethylsiloxane 3230  
IPNs, Hydrogen bonding 5529  
Model networks, Toughness 2793  
Poly(vinyl chloride) fibres, Thermal shrinkage 3217
- Crosslinking**  
Benzoic acid, Rearrangement 1339  
Benzocyclobutene, Polyaramid 5123  
Cure, Epoxy 2683  
Cyano-substituted polyamides, Thermal stability 839  
Polyethylene, Draw ratio 2044  
Polymer synthesis, Polymeric support 4250  
Polyolefins, Catalyst 438  
PTFE, Radiation 2881  
Sulfur vulcanization, Microbial polyester 4368
- Crosslinking polymerization**  
Gelation, Critical conversion 2613
- Crosslinks**  
PVA hydrogels, Thermodynamics 5737
- Crystal growth rate**  
Polystyrene, Blend 5699
- Crystal modification**  
Strain, Poly(tetramethylene succinate) 3338
- Crystal/molecular structure**  
Polycyanoarylether, X-ray diffraction 18
- Crystal packing**  
Poly(vinylidene fluoride), VDF-TFE
- Crystal polymorphism**  
Poly(1-butene), Epitaxy 908, 916
- Crystal structure**  
High modulus polyether-ester, Model compound 5179  
Isotactic poly(methyl methacrylate), X-ray analysis 2028  
WAXD, Polyamides 878  
X-ray, Imide 2265
- Crystal transformation**  
Styrene-butadiene, Block copolymer 4238
- Crystal unit cell**  
Polyimide, Morphology 4048
- Crystalline defects**  
Ethylene-butane copolymers, Chain kink 2049
- Crystalline form**  
Propylene copolymers,  $\beta$ -Nucleator 5067
- Crystallinity**  
Cellulose, Hydroxyl accessibility 4717  
PEEK, Modulus 110  
Polypropylene, Molecular orientation 3480
- Crystallization**  
Antichiral crystal, Syndiotactic polypropylene 1884  
Diblock copolymer, Microphase structure 3479  
Dielectric relaxation, PET 2600  
Glass transition, Graft copolymer 3122  
Nylon 66, Spherulites 5293  
Nylon-6,6, Brill transition 2483  
Phase separation, Morphology 3060  
Poly( $\beta$ -hydroxyoctanoate), Characterization 1059  
Poly(ethylene terephthalate), Rheological kinetics 2828  
Poly(hydroxybutyrate), Toughening 4598  
Poly(*p*-oxybenzoate), Lamellae 1863  
Poly(tetrahydrofuran), Network 2944  
Poly(vinylidene fluoride), Blends 706  
Polypropylene, Morphology 899  
Random copolymers, D.s.c. 1322  
Thermotropic polyesters, Unit sequences 4545
- Crystallization behaviour**  
Dynamic mechanical method, Blends 1680
- Crystallization kinetics**  
Isotactic poly(1-hexadecene), Comb-like polymers 3039  
Poly( $\beta$ -hydroxybutyrate), Blends 3984  
Poly(ethylene terephthalate), Draw temperature 771  
Polyphosphazenes, Mechanical properties 4813  
Small-angle X-ray scattering, Linear polyethylene 1809
- Cure**  
Crosslinking, Epoxy 2683
- Cure chemistry**  
Thermostat, Network 291
- Cure kinetics**  
Gravimetric analysis, Cyanated oligomer 2822
- Cure monitoring**  
Epoxy resins, Fluorescence 687
- Curing**  
Phase transformation, Liquid crystalline epoxy 2679  
Polyimide, Oligomers 4865  
Unsaturated polyester resins, Thickening 5259
- Curing behaviour**  
Epoxy Resins, Sol-gel-glass transformations 5269
- Curved edges**  
Polymer crystallization, Generalized Eden model 2937
- Cyanated oligomer**

## Keyword index

- Cure kinetics, Gravimetric analysis 2822
- Cyano**  
Polyarylether, Alternating copolymer 5355
- Cyanoethylated PVA**  
Impedance spectroscopy, Dielectric properties 2691
- Cyano-substituted polyamides**  
Electrical conductivity, Pyrolysis 2705  
Modified polyamides, Thermally stable polymers 630  
Thermal stability, Crosslinking 839
- Cyclic damage**  
Near-tip stress fields, Fatigue crack propagation 3221
- Cyclic oligocarbonates**  
X-ray structures, Steric strain 4707
- Cyclic oligomers**  
Miscibility, Carbonate 209
- Cyclic polyester**  
Catenated polymers, Polymer supports 1542
- Cyclocopolymerization**  
Allyl cinnamate monomers, Kinetics 5349
- Cyclohexene oxide**  
Charge-transfer complexes, Cationic polymerization 2428
- Cyclopolymerization**  
Ether dimers, Substituent effect 3317
- Cyclotrimerization**  
Alpha-organotin alcohols, Quaternary ammonium halides 5146
- 2D-INADEQUATE**  
<sup>13</sup>C n.m.r., Ethylene- $\alpha$ -methylstyrene 2523
- D.s.c.**  
Crystallization, Random copolymers 1322  
Phenol-formaldehyde resins, Degree of resin cure 5685
- Damping**  
Polycarbonate, Mechanical deageing 4734
- Deformability**  
Poly(ethylene terephthalate), Draw conditions 1329
- Deformation**  
Characterization, Processing 3831  
Multilayered tapes, Network Density 2783  
Poly(ethylene terephthalate), Fibres 3844  
Poly(ethylene terephthalate), Films 1210  
Toughness, Diluted entanglement networks 2991  
Toughness, Network density 2774  
Toughness, Rubber cavitation stress 2995
- Deformation behaviour**  
Fibres, Raman spectroscopy 2335
- Degradation**  
Ethylene-propylene copolymers, Thermal ageing 3795  
Microline focus spectrometry, Poly(vinyl chloride) 1654  
Polyethylene, Pro-oxidants 995  
Thermal properties, Glass transition temperature 4474
- Degree of crystallinity**  
Lamellar thickness, Polyethylene 4537
- Degree of resin cure**  
Phenol-formaldehyde resins, D.s.c. 5685
- Degree of segregation**  
Segmented polyurethanes, Microphase separation 3069
- Dendrimers**  
Comb, Ion exchange 3343  
Poly([1.1.1]propellane)s, Poly(*p*-phenylene)s 4496  
Segregation, Monte Carlo calculations 1827
- Dendritic polyesters**  
Hyperbranched polyesters, Linear polyesters 4489
- Density**  
Poly(ethylene terephthalate), Raman 3184
- Dental composite**  
Copolymerization, Redox initiation 3285
- Deuteration**  
Polyacetylene, Polystyrene 1952
- Deuterium labelling**  
Small-angle neutron scattering, Polyethylene 1846
- Deuteron n.m.r.**  
Molecular mobility, Copolyester 3816  
Polyethylene, Molecular dynamics 2307
- Dextran functionalization**  
Chloroacetate groups, Bioactive carboxylic acids 2651
- Diacetylene copolyurethane**  
Opto-mechanical behaviour, Raman spectroscopy 80
- Diacrylates**  
Kinetics, Photopolymerization 1004
- Dialdehyde styarch**  
Kinetic model, Periodate oxidation 5091
- Dialkyl propanediols**  
PET copolymer, Characterization 1274
- Diamino(diaryl)methanes**  
PMR-type polyamide resins, Structure-property relations 2378
- Diblock copolymers**  
Gas permeability, Model 1229  
Lamellar microdomain, Pyrrole 4901  
Microphase structure, Crystallization 3479  
Microsphere, Core-shell morphology 1747  
Synthesis, Morphology 5024
- $\alpha,\beta$ -Dicarboxylatopolybutadiene**  
N.m.r., Telechelics 3811
- Dichloroethane**  
Butadiene, Rare earth 2897
- Dielectric constant**  
Poly(imide-pyridazine-amide)s, Fluorinated copolymers 4209
- Dielectric loss**  
Microwave frequency, High temperature 47
- Dielectric performance**  
Grain boundary capacitors, Polymer/ceramic composites 4088
- Dielectric properties**  
Amorphous polymers, Liquid crystalline polymers 1915  
Blends, Interphase 475  
Impedance spectroscopy, Cyanoethylated PVA 2691
- Dielectric relaxation**  
Aromatic polyester, Molecular motion 2364  
Linear polyethylene, Beta process 1797  
PDMPs, Thermally stimulated currents 151  
PET, Crystallization 2600  
PHEMA, Hydration 227  
Poly(*n*-alkyl methacrylate)s, *p*-Nitroaniline 1705  
Poly(propylene oxide), Time-domain reflectometry 1166  
Thermally stimulated currents, Liquid crystal polymer 3561, 5170  
Viscoelastic relaxation, Poly(chloroalkyl methacrylate) 3449
- Dielectric spectroscopy**  
Complex permittivity, Anaerobic adhesive 939
- Diethyl vinyl phosphonate**  
Copolymer, Flame retardance 3470
- Differential scanning calorimetry**  
Hydrogel, Water sorption 1997  
Multiple melting, Melt recrystallization 5672
- Diffusion**  
Peeling, Adhesion 271
- Diffusion and concentration effects**  
Polymolecularity, Sedimentation boundary 2133
- Diffusion coefficient**  
Copolymeric hydrogel, Drug release 3847
- Diffusional behaviour**  
Critical overlap concentration, Pulsed field gradient n.m.r. 509
- Dilute polymer solution**  
Light scattering, Shear flow 3156
- Diluted entanglement networks**  
Deformation, Toughness 2991
- Dimethylsiloxanes**  
Polymerization, Propagation 1764
- Di-*n*-butyl itaconate**  
Free-radical polymerization, Kinetics 4437
- Dipolar relaxation**  
Thermally stimulated current, Poyl(vinyl acetate) 1253
- Direct esterification**  
Phosphorous compounds, Transesterification 4006
- Dispersant**  
Poly(vinyl alcohol), Suspension polymerization 2201
- Dispersion polymerization**  
Polyaniline, Hydrolysis 3102  
Polypyrrole, Stabilizer 377  
Polystyrene, Steric stabilization 5366
- Disubstituted acetylene**  
Thermoset polyimide, Thermal stability 4874
- Dodecylbenzenesulfonate**  
Polyaniline fibrils, Electron diffraction 1142
- Domain structure**  
Polyurethane, Liquid crystalline polymers 4690  
Polyurethanes, Electron microscopy 3178
- Donor-acceptor electron transfer**  
Photochemical hole burning, Two-colour irradiation 3915
- Double orientation**  
X-ray modulus, Meridional peaks 2063
- Draw conditions**  
Poly(ethylene terephthalate), Deformability 1329
- Draw efficiency**  
Planar deformation, Isotactic polypropylene 540
- Drawing**  
Poly(ethylene terephthalate), Films 2554
- Drawn films**  
Poly(ethylene terephthalate), Morphology 4092
- Draw ratio**  
Polyethylene, Crosslinking 2044
- Draw temperature**  
Poly(ethylene terephthalate), Crystallization kinetics 771
- Drug release**  
Copolymeric hydrogel, Diffusion coefficient 3487
- Drug transport**  
Silk fibroin membrane, Permeability 2853
- Dual detection**  
Size exclusion chromatography, Molecular weight distribution 4799
- Dynamic mechanical analysis**  
Composition, Blends 956  
Graft copolymers, Polyurethanes 5782
- Dynamic mechanical behaviour**  
Aromatic polyester, Molecular motion 2359
- Dynamic mechanical method**  
Crystallization behaviour, Blends 1680
- Dynamic mechanical properties**  
Poly(vinyl chloride), Ageing 2800
- Dynamic mechanical relaxations**  
Phase behaviour, Thermotropic

- polydibenzoates 3686  
Poly(ether ether ketone), Semicrystalline morphology 1157
- Dynamic properties**  
Monte Carlo simulation, Ring polymer 3792
- Dynamic structure**  
PPTA, Macroscopic accessibility 1123
- Dynamic viscoelasticity**  
End-linking polymer, Gelation 3005  
Liquid crystalline polymers, Nematic state 2422
- Dynamic viscoelastic property**  
Substituted polyacetylene, Tensile property 3456
- Dynamic vulcanization**  
Poly(butylene terephthalate), Ethylene rubber 4618
- Dynamically vulcanized blends**  
Mechanical damping, Butyl rubber/polypropylene 2579
- Dynamics**  
N.m.r., Blends 57
- EPDM rubber**  
Silicone rubber, Functionalization 3423
- E.p.r.**  
Spin probes, Molecular motions 2725
- Effective charge density**  
Poly(vinyl alcohol) membrane, Modelling 5098
- Elastic modulus**  
Polyacrylamide-glyoxal, Gel kinetics 2148
- Elastic response**  
Thermoreversible gel, Syndiotactic polystyrene 4243
- Elastomers**  
Polydimethylsiloxane, Networks 740  
Rubber theory, Strain energy 1819
- Electrical conductivity**  
Cyano-substituted polyamide, Pyrolysis 2705  
Emulsion polymerization, Polyaniline 2902  
Phenylenevinylene copolymers, Ordered structure 480  
Polypyrrole, Filled composite 5256
- Electrical properties**  
Anionic polymerization, Block copolymer 1556  
Poly(thienylene vinylene), Iodine doping 4573
- Electro-optical coefficient**  
Poly( $\gamma$ -benzyl-L-glutamate), Refractive index 23
- Electroactivity**  
Electrochromism, Graft copolymer 565
- Electrochemical preparation**  
Matrix-fibre composites, Characterization 1306
- Electrochemical properties**  
Thermal treatment, Conducting polymers 2372
- Electrochemical synthesis**  
Polyaniline, Molecular weight 5104
- Electrochromic device**  
Polymer electrolyte, Smart window 3592
- Electrochromic properties**  
Poly(3,4-ethylenedioxythiophene), Synthesis 1347  
Polyindole, Conducting polymer 2010
- Electrochromism**  
Electroactivity, Graft copolymer 565
- Electromagnetic shielding**  
Ultrasound, Membranes 430
- Electron beam irradiation**  
Linear LDPE, Melt rheology 2186
- Electron diffraction**  
Imaging plate, Potential map 1132  
Morphology, Liquid crystal polymer 1869  
Polyaniline fibrils,
- Dodecylbenzenesulfonate 1142
- Electron hopping**  
Spirol[2,4]hepta-4,6-diene, Conducting polymers 2467
- Electron microscopy**  
Polyurethanes, Domain structure 3178  
Thermoplastic polyimide, Morphology 5618
- Electron spin resonance**  
Radical formation, Ethylene-propylene copolymer 1382
- Electronic spectra**  
Polymer complexes, Metal salts 647
- Electropolymerization**  
Chiral polyaniline, Optical activity 3113  
Conducting polymer colloids, Polypyrrole 3801  
Poly(*N*-vinylcarbazole), Raman spectroscopy 2495  
Polypyrrole, Stabilizer 1754
- Ellipsometry**  
Immiscible blends, Reactive processing 1182
- Elongational viscosity**  
Graft-copolymerized structure, Temperature dependence 4472  
Ionomer, Ionic interaction 5722
- Emulsifiers**  
Semicrystalline polyurethanes, Microphase 173
- Emulsion-cast film**  
Polyurethane, Molecular weight 1095
- Emulsion polymerization**  
Polyaniline, Electrical conductivity 2902  
Vinyl propionate, Kinetics 2859
- End-capping**  
Polyimide, Oligomers 4857
- End-functionalized polystyrene**  
Polymer brush, Kinetics 4065
- End-group modification**  
Telechelic, Polyisobutylene 1774
- End-groups**  
Polyacrylonitrile, Persulfate/bisulfite 4659  
Polyacrylonitrile, Persulfate/metabisulphite 250
- End-linking polymer**  
Dynamic viscoelasticity, Gelation 3005
- Energy transfer**  
Amorphous, Polyethylene 5057
- Enhanced extrudability**  
Capillary extrusion, Melt flow rheology 3863
- Entanglements**  
Polymer solutions, Rheology 1187
- Enthalpy relaxation**  
Physical ageing, Poly(ethylene terephthalate) 2117
- Epitaxial growth**  
Secondary nucleation, Template model 3373
- Epitaxy**  
Poly(1-butene), Crystal polymorphism 908, 916
- Epoxy**  
Cure, Crosslinking 2683
- Epoxy curing**  
Thermal conductivity, Gel point 5369
- Epoxy glasses**  
Rejuvenation, Physical ageing 5279
- Epoxy homopolymerization**  
Phenyl glycidyl ether, Piperidine 857
- Epoxy resins**  
Blends, Miscibility 2619  
Cure monitoring, Fluorescence 687  
Curing behaviour, Sol-gel-glass transformations 5269
- Intractable polymers, Reactive solvent 4349  
Poly(ether sulfone), Blends 353  
Siloxane modifier, Linear thermal expansion 179  
Two-dimensional networks, Ammonium salts 3635
- Epoxy-thermoplastic blend**  
Modified epoxy resin, Toughness improvement 558
- Equation-of-state parameters**  
Polymer-solvent interaction, Theta temperature 3356
- Equibiaxial deformation**  
Isotactic polypropylene, Wide-angle X-ray scattering 1359
- Equilibrium water content**  
Polymer networks, Morphology of hydrogels 2167  
Space, Hydrophilic character 4247
- Essential work method**  
Fracture toughness, Polymeric films 1666
- Ester substituents**  
Polyphosphazene, Poly(methylphenyl phosphazene) 4985
- Ether dimers**  
Cyclopolymerization, Substituent effect 3317
- Etherification**  
Silicon, High-molecular-weight polyethers 1739
- Ethylene- $\alpha$ -methylstyrene**  
<sup>13</sup>C.n.m.r., 2D-INADEQUATE 2523
- Ethylene dimethacrylate**  
Macroporous polymer, Graft copolymer 1195
- Ethylene polymerization**  
Cp<sub>2</sub>TiCl<sub>2</sub>, Methylaluminoxane 187
- Ethylene rubber**  
Poly(butylene terephthalate), Dynamic vulcanization 4618
- Ethylene-butene copolymers**  
Crystalline defects, Chain kink 2049
- Ethylene-propylene copolymers**  
Chemical inversion, Random copolymer 1336  
Radical formation, Electron spin resonance 1382  
Thermal ageing, Degradation 3795
- Exchange reaction**  
Redox polymer, Lipoamide-amine 360
- Excimer**  
Pyrene, Aggregation 3920
- Expanded coil**  
Glass transition, Polystyrene 892
- External donor**  
Two-site model, Polypropylene 339
- FTi.r. spectroscopy**  
Poly(vinyl phenol), Orientation 2078  
Sorbed water, Solid polymers 5637  
Wavy maize starch, Glycerol 4722
- Face-centred cubic lattice**  
Star copolymer, Microphase separation 4712
- Fast theory**  
Tracer diffusion coefficient, Mutual diffusion coefficient 5706
- Fatigue**  
Craze initiation, Polycarbonate 3604
- Fatigue crack propagation**  
Near-tip stress fields, Cyclic damage 3221
- Fatigue craze initiation**  
Polycarbonate, Small-angle X-ray scattering 4287
- Ferroelectric phase transition**  
VDF-TrFE copolymers, Semicrystalline polymers 34
- Fibre-matrix interface**  
Glass-epoxy composite, Hygrothermal ageing 4766
- Fibres**  
Creep, Polypropylene 2226  
Hydrolysis, Copolyester 2587  
Polyester, Grafting 1084  
Poly(ethylene terephthalate),

Keyword index

- Deformation 3844  
Raman spectroscopy, Deformation behaviour 2335  
Stress relaxation, Non-linear viscoelasticity 2108
- Fibroin**  
Silk, Moulding 2355
- Fibroin gel**  
Water content, Molecular structure 2197
- Filled composite**  
Electrical conductivity, Polypyrrole 5256
- Filler rubber interactions**  
Styrene-butadiene rubber, Solid-state <sup>1</sup>H n.m.r. 4293
- Film structure**  
Polyaniline, Protonation behaviour 2899
- Films**  
Poly(ethylene terephthalate), Deformation 1210  
Poly(ethylene terephthalate), Drawing 2554
- Finite element analysis**  
Rolled high-density polyethylene, Anisotropy 1442
- Flame retardance**  
Copolymer, Diethyl vinyl phosphonate 3470
- Flexible chains**  
Molecular mobility, Semicrystalline polymers 4397
- Flexible junctions**  
Polyamide networks, Liquid crystal 1298
- Flory interaction parameter**  
Forward recoil spectrometry, Interfacial excess 157
- Flory-Huggins parameter**  
Interfacial tension, Polymer solutions 5743
- Flory-Huggins theory**  
Ternary blends, Copolymers 5518
- Fluorescence**  
Cure monitoring, Epoxy resins 687  
Liposomes, Poly(4-vinylpyridine) 4627  
Luminescence, Polyelectrolyte 1942  
PBO, Amorphous nylon 1090  
PBO, Pressure 4235  
Polybenzoxazole, Poly(ether ether ketone) 1576  
Poly(ether ether ketone), Terbium salt 1092
- Fluorescence dynamics**  
Poly(*N*-vinylcarbazole), Charge-transfer complex 3149
- Fluorescence spectra**  
Poly(ether imide), Aggregation phenomena 2730
- Fluorescence spectroscopy**  
Alginate, Intermolecular associations 3557
- Fluoride**  
Polyvinylphenol, Hydrogen bonding 5597
- Fluorinated copolymers**  
Poly(imide-puridazine-amide)s, Dielectric constant 4209
- Fluorinated diamine**  
Fluorinated polyimide, Semicrystalline polyimide 5018
- Fluorinated polybenzoxazoles**  
Acid catalyst, Solution cyclization 5046
- Fluorinated polyimide**  
Fluorinated diamine, Semicrystalline polyimide 5018
- Fluorine-containing polymers**  
Polymethacrylates, Miscibility 1482
- Fluoroalkylated**  
Allyl alcohol oligomers, Radical process 4028
- Folded chains**  
Polyethylene, Lamellar crystals 1909
- Formylated Novolacs**  
Photoreaction, Microlithography 2040
- Forward recoil spectrometry**  
Interfacial excess, Flory interaction parameter 157
- Fractionation**  
Isotactic polypropylene, Tacticity 1673  
Poly(methyl methacrylate), Characterization 367  
Tacticity distribution, Polypropylene 580
- Fracture**  
Compressive yield stress, Morphology 752  
Interpenetrating polymer networks, Mechanical properties 5073
- Fracture toughness**  
Nylon 6,6, Glass fibres 306  
Phase, Continuity 1658  
Polymeric films, Essential work method 1666  
Polymer networks, Additives 5041  
Poly(methyl methacrylate), Poly(styrene-*co*-acrylonitrile) 1332
- Free induction decay**  
<sup>1</sup>H n.m.r., Polypropylene 4083
- Freely suspended films**  
Poly(3-nonylthiophene), Photo-oxidation 468
- Free-radical copolymerization**  
Kinetic modelling, Post-gelation period 796  
Kinetics, Method of moments 1714
- Free-radical polymerization**  
Di-*n*-butyl itaconate, Kinetics 4437  
Peroxydisulfate, Phase-transfer catalysis 4896  
Water-soluble cyclopolymers, Ammonium salts 3503
- Free-radical reaction**  
Semi-empirical calculation, Activation energy 5364
- Free volume**  
Gelatin, Self-diffusion 2411  
PEEK, Positron annihilation 925  
Polymer melt, Mobility 5551
- Functionality distribution**  
OH-terminated polybutadiene, Modelling 4555
- Functionalization**  
Montmorillonite, Methyl methacrylate polymers 3296  
Silicone rubber, EPDM rubber 3423
- Furfuryl methacrylate**  
Copolymerization, *N*-vinylpyrrolidone 2390
- Gamma irradiation**  
Poly( $\gamma$ -benzyl-L-glutamate), Macromolecular structure 2278
- Gas permeability**  
Diblock copolymers, Model 1229  
Poly(ether imide), Nitro displacement 4215
- Gas separation**  
Rolltrusion, Polypropylene 949  
Si-containing polyimides, Membrane 590  
Spinning rheology, Hollow-fibre membranes 5327
- Gas sorption**  
Liquid crystalline polymer, Biphasic region 2808
- Gelatin**  
Self-diffusion, Free volume 2411
- Gelation**  
Atactic polystyrene, Viscoelastic properties 2180  
Brillouin scattering, Polymerizing microemulsion 2701  
Crosslinking polymerization, Critical conversion 2613  
Dynamic viscoelasticity, End-linking polymer 3005
- Gel kinetics**  
Polyacrylamide-glyoxal, Elastic modulus 2148
- Gel permeation chromatography**  
Grafting efficiency, Graft copolymerization 5693
- Viscometric constants, Molecular-weight standards 2385
- Gel points**  
Epoxy curing, Thermal conductivity 5369  
Networks, Modulus 4521
- Gels**  
Poly(vinyl alcohol), Ageing 2573
- Gel-spun polyethylene**  
<sup>13</sup>C n.m.r., Monoclinic phase 4728
- Generalized Eden model**  
Polymer crystallization, Curved edges 2937
- Glass-epoxy composite**  
Fibre-matrix interface, Hygrothermal ageing 4766
- Glass fibre filler**  
Polymer blends, Composites 3679
- Glass fibres**  
Nylon 6,6, Fracture toughness 306  
Polyamide-6,6, Composite 5241  
Poly(ethylene terephthalate), Composite 514
- Glass transition**  
Crystallization, Graft copolymer 3122  
Polyamide, Water absorption 136  
Polymer glass, Vogel-Fulcher 3827  
Polystyrene, Expanded coil 892
- Glass transition temperature**  
Poly(vinyl chloride), Copolymers 348  
Silicon-containing copolymer, Oxygen permeability 1268  
Structural relaxation, Amorphous polymer blends 1688  
Tacticity, Steric copolymer 5555  
Thermal properties, Degradation 4474
- Glassy polymer matrix**  
Reorientational relaxation, Photochromic dopant 4465
- Glassy polymers**  
Molecular mobility, Conformationally mobile phones 2591  
Plastic deformation, ADC resin 2985  
Relaxation, Transition 791
- Glycerol**  
Wavy maize starch, FTIR spectroscopy 4722
- Glycidyl methacrylate**  
Copolymer blends, Interaction energies 3513
- Glycine**  
Polyamides, Nylon 1291
- Graft copolymerization**  
Gel permeation chromatography, Grafting efficiency 5693  
Lignocellulosic fibres, PMMA grafting 383  
Microstructure, Statistical copolymers 1535
- Graft-copolymerized structure**  
Elongational viscosity, Temperature dependence 4472
- Graft copolymers**  
Blend, Miscibility window 2229  
Cellulose, Polyacrylonitrile 168  
Dynamic mechanical analysis, Polyurethanes 5782  
Electroactivity, Electrochromism 565  
Glass transition, Crystallization 3122  
Interface, Polymer blend 4240  
Macroporous polymer, Ethylene dimethacrylate 1195  
Polydimethylsiloxane, Polyhydroxyether 977  
SANS, Neutron reflectivity 3116
- Grafting**  
Chain transfer, Butyl acrylate 2888  
Microstructure, Polybutadiene 1636, 1648  
Polyester, Fibres 1084  
Polypropylene, Poly(acrylic acid) 5342  
Surface functionalization, Medical devices 2844
- Grafting efficiency**  
Gel permeation chromatography, Graft

- copolymerization 5693
- Graft polymerization**  
Heterogeneous polymerization, Radical polymerization 606
- Graft rigid-rod copolymer**  
Molecular composite, Wide-angle X-ray scattering 675
- Grain boundary capacitors**  
Dielectric performance, Polymer/ceramic composites 4088
- Gravimetric analysis**  
Cure kinetics, Cyanated oligomer 2822
- HDPE**  
Texture evolution, Shear deformation 3427
- Heat capacity**  
Alternating copolymer, Sequence length distribution 3698  
Polyamide, Ordered regions 5748
- Heat of mixing**  
Calorimetry, Polystyrene 2893
- Heat resistance**  
Thermal polymerization, Polyimide 3305
- Heat treatment**  
Poly(hexafluoro-1,3-butadiene), Structural changes 3474
- Helical conformation**  
Poly( $\alpha$ -n-alkyl-L-aspartate)s, Anionic polymerization 4502
- Helix formation**  
Polyion complex, Conformation 3492
- Heteroaromatic N-oxide**  
Bismaleimide, Azine 653
- Heterogeneous polymerization**  
Graft polymerization, Radical polymerization 606
- Hexagonal polymorph**  
Polyacrylonitrile, X-ray diffraction 4035
- High conversion**  
Monomer reactivity ratios, Modelling 3525
- High-density polyethylene**  
Slow crack growth, Molecular orientation 1948
- High modulus polyether-ester**  
Model compound, Crystal structure 5179
- High-molecular-weight polyethers**  
Etherification, Silicon 1739
- High performance polymers**  
Aromatic polyamides, Transformation 2218  
Membrane separation, Permselectivity 4970  
Particle, Composite 4949
- High pressure crystallization**  
Linear low-density polyethylene, Short-chain branching 4140  
Polyethylene, Solid-state n.m.r. 1171
- High pressure polymerization**  
Aromatic dicyanates, Polycyanurates 1203
- High resolution n.m.r**  
Hydrogen bonds, Polyurethane 2510
- High temperature**  
Dielectric loss, Microwave frequency 47
- High-conversion polymerization**  
Kinetic mechanism, Initiator efficiency 3899, 3908
- Hittorf electrolysis**  
Pruitt-Baggett catalyst, Propylene oxide 1518
- Hollow-fibre membranes**  
Spinning rheology, Gas separation 5327
- Homogeneous Wurtz coupling**  
Polysilanes, Synthesis 4924
- Homopolyesters**  
Polyurethane networks, Copolyesters 830
- Homopolymer-copolymer blends**  
Acrylonitrile copolymers, Phase behaviour 1487
- Hybrid**  
Hydroxypropyl cellulose, Silica 5565
- Hydration**  
PHEMA, Dielectric relaxation 227
- Hydrocarbon**  
Macrocyclic, Synthesis 1109
- Hydrogel**  
Differential scanning calorimetry, Water sorption 1997  
Nuclear magnetic resonance, NOESY 888  
Sodium polyacrylate gel, Bound water 5626  
Xanthan, Junction zones 1248
- Hydrogen bonding**  
Blends, Thermal analysis 4423  
Cosolvent, Cloud-point curve 3272  
Intermacromolecular complex, Polymer blends 5084  
Interpolymer complexes, Polymer miscibility 2174  
IPNs, Crosslink density 5529  
IPNs, Miscibility 5523  
Polyvinylphenol, Fluoride 5597
- Hydrogen bonds**  
Blends, Ternary systems 5379  
High resolution n.m.r., Polyurethane 2510  
Molecular interactions, Polyurethane 2315
- Hydrogen-transfer polyaddition**  
Modified silicone rubber, Poly(ester thioether amine) 5571
- Hydrolysis**  
Fibres, Copolyester 2587  
Polyaniline, Dispersion polymerization 3102
- Hydrolytic degradation**  
Poly(3-hydroxybutyrate), Blends 268  
Poly( $\beta$ -hydroxybutyrate), Kinetics 4156
- Hydroperoxidation**  
Thermooxidation, LLDPE 433
- Hydrophilic character**  
Space, Equilibrium water content 4247
- Hydrophobic association**  
Amphiphilic terpolymers, Micellar polymerization 4429
- Hydroxyalkanoate copolyester**  
Poly(3-hydroxybutyrate), Molecular mechanics 193
- Hydroxycinnamate pendants**  
Light-sensitive polymers, Photochemistry 692
- Hydroxy end groups**  
Poly(propylene glycol), Infra-red spectroscopy 4842, 4848
- Hydroxyl accessibility**  
Cellulose, Crystallinity 4717
- Hydroxyl termination**  
Polybutadiene, Thermal ageing 2568
- Hydroxylated polypropylene**  
Polypropylene/glass laminates, Interfacial adhesion 2980
- Hydroxypropyl cellulose**  
Silica, Hybrid 5565
- Hydroxypropyl chitin**  
Chitin, Thermal properties 3212
- 11-Hydroxyundecanoic acid**  
Condensation polymerization, Lipase 3576
- Hygrothermal ageing**  
Glass-epoxy composite, Fibre-matrix interface 4766
- Hyperbranched polyesters**  
Dendritic polyesters, Linear polyesters 4489
- IPNs**  
Hydrogen bonding, Crosslink density 5529  
Hydrogen bonding, Miscibility 5523  
Poly(zinc acrylate), Polyacrylonitrile 3769
- I.r. technique**  
Mixed crystal, Polyethylene 4578
- Imaging plate**  
Electron diffraction, Potential map 1132
- Imide**  
X-ray, Crystal structure 2265
- Imide-arylene ether copolymers**  
Thiophene-based polymers, Synthesis 3782
- Imidized acrylic**  
Nylon/ABS blend, Morphology 5453
- Imidized acrylic polymers**  
Polyamide blends, Morphology 4263
- Immiscible blends**  
Ellipsometry, Reactive processing 1182  
Poly(methacrylate)s, Spin labelling 3384
- Impact behaviour**  
Nylon-rubber blend, Molecular weight effects 332  
Nylon-rubber blend, Strain-rate effects 315  
Nylon-rubber blend, Temperature-time effects 323  
Polyamide-6 blends, Core-shell acrylic rubber 3658
- Impact toughness**  
Phase segregation, LLDPE 3893  
Polycarbonate, Microcellular foams 3978
- Impedance spectroscopy**  
Cyanoethylated PVA, Dielectric properties 2691
- Impression creep**  
ABS polymers, Steady-state strain 4103
- Imprinted polymer**  
Catalyst, Molecular recognition 5372
- In situ composites**  
Liquid crystalline polymer, Polycarbonate 3463
- In situ polymerization**  
Blend, Morphology 3643
- Inclusion compounds**  
Conformations, Molecular modelling 573
- Infra-red dichroism**  
Liquid crystalline polymers, Orientation 1419  
Polydimethylsiloxane, Orientation 2538
- Infra-red spectroscopy**  
Raman spectroscopy, Poly(ether ether ketone) 1326  
Poly(propylene glycol), Hydroxy end groups 4842, 4848  
Poly(vinyl chloride), Orientation 3411  
VDR/TrFE copolymers, Poling 3612
- Inhomogeneous hydrogels**  
Swelling, Phase transition 4416
- Initiator**  
Polymerization, L-lactide 4175
- Initiator complex**  
Radical copolymerization, Kinetics 642
- Initiator efficiency**  
High-conversion polymerization, Kinetic mechanism 3899, 3908
- Injection moulding**  
Orientation, Nylon-6,6/Kevlar composites 1409  
PEN, Morphology 5651
- Interaction energies**  
Copolymer blends, Glycidyl methacrylate 3513
- Interaction parameters**  
Blend miscibility, Phase behaviour 162  
Phenoxy/PVME blend, Inverse gas chromatography 2128  
Phase separation, Semicrystalline polymer 4404  
Polymer blends, Miscibility 2417  
Polymer mixtures, Molecular configuration 1722  
Poly(vinyl methyl ether), Small-angle neutron scattering 2284
- Intercalation**



## Keyword index

- Nylon 6, Iodine 3797
- Interchain diffusion**  
N-alkanes, Rotator phase 3340
- Interface**  
Graft copolymer, Polymer blend 4240  
Phase size, Blends 1552
- Interfacial adhesion**  
Hydroxylated polypropylene, Polypropylene/glass laminates 2980
- Interfacial bonding**  
Blends, Toughening 988
- Interfacial excess**  
Forward recoil spectrometry, Flory interaction parameter 157
- Interfacial tension**  
Flory-Huggins parameter, Polymer solutions 5743  
Polymer blends, Compatibilizers 281
- Interlayer diffusion**  
Real-time monitoring, Numerical modelling 929
- Intermacromolecular complex**  
Polymer blends, Hydrogen bonding 5084
- Intermolecular associations**  
Alginate, Fluorescence spectroscopy 3557
- Intermolecular interaction**  
Nylon-11, Polyepichlorohydrin 4280
- Interpenetrating networks**  
Kinetics, Network interlock 594
- Interpenetrating polymer networks**  
Fracture, Mechanical properties 5073
- Interphase**  
Dielectric properties, Blends 475
- Interpolymer complexes**  
Polymer miscibility, Hydrogen bonding 2174
- Interspherulitic limited**  
Spherulitic growth, PEO-resorcinol complex 1586
- Intractable polymers**  
Epoxy resins, Reactive solvent 4349
- Intrinsic viscosity**  
Inverse tangent function, Long-chain branching frequency 4163
- Inverse gas chromatography**  
Liquid crystalline polymers, Transition temperatures 584  
Phenoxy/PVME blend, Interaction parameters 2128  
Polydimethylsiloxanes, Crosslink density 3230
- Inverse tangent function**  
Intrinsic viscosity, Long-chain branching frequency 4163
- Iodine**  
Nylon 6, Complex crystal 2665  
Nylon 6, Intercalation 3797
- Iodine doping**  
Poly(thienylene vinylene), Electrical properties 4573
- Ion beam irradiation**  
Optical waveguides, Structural modification 2447
- Ion conduction**  
Poly(crown ether), Alkali metal ions 5753
- Ion conductivity**  
Viscosity, Polydimethylsiloxanes 4823, 4834
- Ion exchange**  
Dendrimer, Comb 3343
- Ion-dipole interactions**  
Polymer/salt solid complexes, Modified polyamides 3691
- Ionic association**  
Polyether, Triflate 235
- Ionic conductivity**  
Polymer electrolyte, Oxyethylene macromer 3740
- Ionic diol**  
Ionomer, Polyurethane 398
- Ionic effects**  
Cellulose derivatives, Moisture adsorption 5729
- Ionic interaction**  
Elongational viscosity, Ionomer 5722
- Ionization**  
Poly(*p*-phenylene terephthalamide), Tensile properties 1216
- Ionomers**  
Elongational viscosity, Ionic interaction 5722  
PET/LLDPE blends, Compatibilization 3624  
Polycondensation, Temperature 1769  
Polyurethane, Ionic diol 398  
Sulfonated polystyrene, Mechanical behaviour 5478
- Isolated spherulite**  
Polymer-free solidification, Radial growth 5434
- Isomeric effects**  
Miscibility, Copolymers 3055
- Isomerism**  
Polyimide, Poly(amic acid) 4881
- Isomerization**  
Liquid crystalline polymer, Nematic state 2528
- Isomorphism**  
Random copolyester, Solid-state n.m.r. 1931
- Isoprene**  
Multiblock copolymers, Styrene 246
- Isotactic poly(1-hexadecene)**  
Comb-like polymers, Crystallization kinetics 3030
- Isotactic poly(methyl methacrylate)**  
Crystal structure, X-ray analysis 2028
- Isotactic polypropylene**  
Atomic force microscopy, Molecular orientation 461  
Equibiaxial deformation, Wide-angle X-ray scattering 1359  
Fractionation, Tacticity 1673  
Molecular orientation, X-ray diffraction 3927  
Planar deformation, Draw efficiency 540  
Planar deformation, Morphology 551  
Planar deformation, Smectic phase 545  
Ziegler-Natta catalysts, Microstructural analysis 2636
- Isothermal crystallization**  
Phase separation, Multiblock copolymers 4146
- Isothermal spherulitic growth**  
Poly(pivalolactone), Poly(vinylidene fluoride) 1896
- Izod impact strength**  
Rubber toughening, Particle size 4760
- Junction zones**  
Xanthan, Hydrogel 1248
- Ketals**  
Spiropolymers, Transketalization 5765
- Kevlar**  
Sorption, Small-angle X-ray scattering 496
- Kinetic mechanism**  
High-conversion polymerization, Initiator efficiency 3899, 3908
- Kinetic model**  
Periodate oxidation, Dialdehyde starch 5091
- Kinetic modelling**  
Post-gelation period, Free-radical copolymerization 796
- Kinetics**  
Cyclocopolymerization, Allyl cinnamate monomers 5349  
Diacylates, Photopolymerization 1004  
Emulsion polymerization, Vinyl propionate 2859  
End-functionalized polystyrene, Polymer brush 4065  
Free-radical copolymerization, Method of moments 1714
- Free-radical polymerization, Di-*n*-butyl itaconate 4437
- Interpenetrating networks, Network interlock 594
- Membranes, Piperazine-modified PVC 2141
- Organosilyl methacrylates, Copolymerization 4392
- PEEK, Sulfonation 3237
- Phenol-formaldehyde resins, Reaction mechanisms 3046
- Poly( $\beta$ -hydroxybutyrate), Hydrolytic degradation 4156
- Radical copolymerization, Initiator complex 642
- Vinyl carbonates, Radical polymerization 4819
- LC association chain polymers**  
Synthesis, Characterization 4550
- LCTT behaviour**  
Polydimethylsiloxanes, Thermodynamics 3075
- L-Lactide**  
Polymerization, Initiator 4175
- LLDPE**  
Hydroperoxidation, Thermooxidation 433  
Impact toughness, Phase segregation 3893
- Lamellae**  
Poly(*p*-oxybenzoate), Crystallization 1863
- Lamellar crystals**  
Polyethylene, Folded chains 1909
- Lamellar microdomain**  
Diblock copolymer, Pyrrole 4901
- Lamellar structure**  
Polystyrene-polybutadiene blend, Thin film 2019
- Lamellar thickness**  
Degree of crystallinity, Polyethylene 4537
- Langmuir-Blodgett films**  
Polymeric multilayers, Nuclear magnetic resonance 885
- Lewis acid**  
Coordination complexes, Properties 4313
- Light scattering**  
Blends, Miscibility 1242  
Block copolymer, Micellization 5309  
Poly(methyl methacrylate), Block copolymers 3377  
Poly(*p*-*t*-butylstyrene), Solution properties 600  
Shear flow, Dilute polymer solution 3156
- Light-sensitive polymers**  
Hydroxycinnamate pendants, Photochemistry 692
- Lignin**  
Block copolymers, Cellulose propionate 1977
- Lignin filler**  
Chemorheology, Phenol-formaldehyde resins 1280
- Lignocellulosic fibres**  
Graft copolymerization, PMMA grafting 383
- Limited oxygen index**  
Poly(arylene ether)s, Oxygen plasma resistance 2689
- Limiting oxygen index**  
Polymer blend, Poly(vinyl chloride) 5595
- Linear crystal growth rate**  
Morphology, Syndiotactic polypropylene 5194
- Linear epoxy system**  
Torsional angles, Conformational analysis 4326
- Linear flexible polymers**  
Conformational transitions, Viscometry 4638
- Linear LDPE**  
Electron beam irradiation, Melt rheology 2186
- Linear low-density polyethylene**

- High pressure crystallization,  
Short-chain branching 4140
- Linear polyesters**  
Dendritic polyesters, Hyperbranched polyesters 4489
- Linear polyethylene**  
Dielectric relaxation, Beta process 1797  
Small-angle X-ray scattering, Crystallization kinetics 1809
- Linear thermal expansion**  
Epoxy resins, Siloxane modifier 179
- Lineshape analysis**  
Carboxymethyl cellulose, N.m.r. relaxation 2749
- Lipase**  
Condensation polymerization, 11-Hydroxyundecanoic acid 3576
- Lipoamide-amine**  
Redox polymer, Exchange reaction 360
- Liposomes**  
Fluorescence, Poly(4-vinylpyridine) 4627
- Liquid crystal**  
Polyamide networks, Flexible junctions 1298
- Liquid crystalline copolymers**  
Phase transition, Microphase separation 2815
- Liquid crystalline epoxides**  
Ordered networks, Photoinitiated polymerization 622
- Liquid crystalline epoxy**  
Phase transformation, Curing 2679
- Liquid crystalline P8MB**  
Phase transitions, Monotropic transition 4794
- Liquid crystalline polymers**  
Dielectric properties, Amorphous polymers 1915  
Domain structure, Polyurethane 4690  
Gas sorption, Biphasic region 2408  
*In situ* composites, Polycarbonate 3463  
Inverse gas chromatography, Transition temperatures 584  
Isomerization, Nematic state 2528  
Nematic state, Dynamic viscoelasticity 2422  
Orientation, Blends 104  
Orientation, Infra-red dichroism 1419  
Poly(ethylene terephthalate), Blend sheet 5138  
Poly(vinyl ether), Mesogen group orientation 2056  
Polyblends, Microstructure 5061  
Reflectance *FT* i.r. microscopy, Molecular orientation 2970  
Side-chain mesogens, Molecular simulation 5441  
Side-chain poly(vinyl ether)s, Structural characterization 4041
- Liquid crystal polymers**  
Coupling, Mean-field model 2952  
Morphology, Electron diffraction 1869  
Orientation, Surface 207  
Phase behaviour, Blends 3706  
Thermally stimulated currents, Dielectric relaxation 3561, 5170
- Liquid-liquid phase separation**  
Polyethylene blends, Melt mixing 2452
- Lithium battery**  
Solid polymer electrolytes, Thiodipropionic acid polyesters 845
- Lithium triflate**  
Polymer gel electrolyte, Poly(vinylidene fluoride) 3363
- Living cationic polymerization**  
Tetrahydrofuran, Pyridinium ions 4443
- Living character**  
*t*-Butyl acrylate, Block copolymer 4011
- Living polymerization**  
Ring closure, Macrocyclic polymer 4562
- Local mobility**  
Polyester, <sup>13</sup>C n.m.r. 3402
- Long-chain branching frequency**  
Intrinsic viscosity, Inverse tangent function 4163
- Loss modulus**  
Oscillatory shear flow, Storage modulus 93
- Low profile additives**  
Unsaturated polyester resins, Rheokinetics 2397  
Unsaturated polyester resin, Shrinkage control 3011
- Luminescence**  
Fluorescence, Polyelectrolyte 1942
- Macrocyclic polymer**  
Hydrocarbon, Synthesis 1109
- Macrocyclic polymer**  
Living polymerization, Ring closure 4562
- Macromolecular structure**  
Poly( $\gamma$ -benzyl-L-glutamate), Gamma irradiation 2278
- Macromonomer**  
Radical polymerization, Segment density 2205  
Siloxanes, Styrene copolymers 4181, 4190  
Star copolymer, Microphase separation 4907
- Macroporous polymer**  
Ethylene dimethacrylate, Graft copolymer 1195
- Macroscopic accessibility**  
PPTA, Dynamic structure 1123
- Magnesium chloride**  
Titanium-*n*-butoxide, Magnesium-titanium catalyst 1287
- Magnesium-titanium catalyst**  
Magnesium chloride, Titanium-*n*-butoxide 1287
- Magnetic field**  
Block copolymerization, Poly(ethylene glycol) 1105
- Maleic anhydride copolymers**  
Blends, Acrylonitrile copolymers 3351
- Masked disilene**  
Polysilylene, Anionic polymerization 4990
- Matrix-fibre composites**  
Electrochemical preparation, Characterization 1306
- Mean-field model**  
Liquid crystal polymers, Coupling 2952
- Mechanical behaviour**  
Sulfonated polystyrene, Ionomers 5478
- Mechanical damping**  
Dynamically vulcanized blends, Butyl rubber/polypropylene 2579
- Mechanical deageing**  
Polycarbonate, Damping 4734
- Mechanical fatigue**  
Polyurethanes, Microdomains 532
- Mechanical properties**  
Interpenetrating polymer networks, Fracture 5073  
Nylon/ABS blend, Morphology 5468  
Poly(vinyl chloride) blends, Plasticized membranes 3966  
Polyimide, Composite 4956  
Polyphosphazenes, Crystallization kinetics 4813  
Poly(*p*-phenylene), Biphenyl 300  
PVDC/PBMA composites, Concentrated emulsions 4343  
Ternary epoxy blends, Morphology 5283
- Mechanical spectroscopy**  
Amorphous polyurethane, Small-angle X-ray scattering 2737
- Medical devices**  
Surface functionalization, Grafting 2844
- Melt**  
Poly(propylene oxide), Rouse model 140
- Melt crystallization**  
Polypivalolactone, Polymorphism 2607
- Melt flow rheology**  
Capillary extrusion, Enhanced extrudability 3863
- Melt mixing**  
Polyethylene blends, Liquid-liquid phase separation 2452
- Melt polymerization**  
Morphology, Copolymer 1831
- Melt recrystallization**  
Multiple melting, Dynamic scanning calorimetry 5672
- Melt rheology**  
Linear LDPE, Electron beam irradiation 2186
- Melt structure**  
UHMMPPE, Pressure annealing 5210
- Melting point depression**  
Copolymer, Miscibility 1044
- Membranes**  
Kinetics, Piperazine-modified PVC 2141  
Poly(L-lactic acid), Porosity 1068  
Transport, Amino acid 204  
Si-containing polyimides, Gas separation 590  
Ultrasound, Electromagnetic shielding 430
- Membrane separation**  
High performance polymers, Permselectivity 4970
- Meridional peaks**  
X-ray modulus, Double orientation 2063
- Mesogen group orientation**  
Liquid crystalline polymers, Poly(vinyl ether) 2056
- Metal salts**  
Polymer complexes, Electronic spectra 647
- Metalloporphyrinic catalysis**  
Polybutadiene polyepoxide, Polyalcohols and polyethers 2857
- Metathesis polymerization**  
Poly(diarylacetylene), Tantalum catalyst 4920
- Methacrylamide**  
Copolymerization, Reactivity ratios 3579
- Methacrylates**  
Acrylates, Photopolymerization 3243
- Method of moments**  
Free-radical copolymerization, Kinetics 1714
- Methylaluminoxane**  
CP<sub>2</sub>TiCl<sub>2</sub>, Ethylene polymerization 187  
Zirconocene, Polyethylene 808
- Methyl methacrylate**  
Aryl vinyl ketones, Photolysis 4079  
Methyl vinyl ketone, Copolymer 451  
Poly(ethylene-*co*-vinyl acetate), Spinodal decomposition 4015
- Methyl methacrylate polymers**  
Montmorillonite, Functionalization 3296
- Methyl vinyl ketone**  
Methyl methacrylate, Copolymer 451
- Micellar polymerization**  
Amphiphilic terpolymers, Hydrophobic association 4429
- Micelle**  
Anionic polymerization, Block copolymer 1759
- Micellization**  
Block copolymer, Light scattering 5309
- Microbial cellulose**  
Cellulose-brightener complexes, CP/MAS <sup>13</sup>C n.m.r. 75
- Microbial polyester**  
Peroxide crosslinking, *Pseudomonas oleovorans* 4358

## Keyword index

- Sulfur vulcanization, Crosslinking 4368
- Microcellular foams**  
Polycarbonate, Impact toughness 3978
- Microdomains**  
Polyurethanes, Mechanical fatigue 532
- Microemulsions**  
Composites, Surfactants 4606  
Polystyrene, Nanoparticles 2659
- Microencapsulation**  
Coacervation, Phase diagrams 777
- Microhardness**  
Poly(ethylene terephthalate), Anabarc crystallization 4775
- Microline focus spectrometry**  
Poly(vinyl chloride), Degradation 1654
- Microolithography**  
Chemical amplification, Negative resist 5  
Formylated Novolacs, Photoreaction 2040
- Micromechanical modelling**  
Composites, Performance 5035
- Microphase**  
Semicrystalline polyurethanes, Emulsifiers 173
- Microphase-separated structure**  
Poly(THF) viologen ionene, Thermal/mechanical properties 2672
- Microphase separation**  
Liquid crystalline copolymers, Phase transition 2815  
Macromonomer, Star copolymer 4907  
Multiblock copolymers, Segmented copolymer 4527  
Segmented polyurethanes, Degree of segregation 3069  
Star copolymer, Face-centred cubic lattice 4712
- Microphase structure**  
Chain diffusion, Block copolymers 145  
Diblock copolymer, Crystallization 3479
- Microsphere**  
Block copolymer, Blend 866  
Core-shell morphology, Diblock copolymer 1747
- Microstructural analysis**  
Isotactic polypropylene, Ziegler-Natta catalysts 2636
- Microstructural deformation**  
Compatible blend, Polystyrene 2256
- Microstructure**  
Graft copolymerization, Statistical copolymers 1535  
Grafting, Polybutadiene 1636, 1648  
Non-aqueous, Photopolymerization 4072  
Polyblends, Liquid crystalline polymers 5061
- Microvoid**  
 $\beta$ -form polypropylene, Phase transformation 3442
- Microwave dielectrometry**  
Polymeric photoinitiators, U.v. curing of acrylic coatings 5413
- Microwave frequency**  
Dielectric loss, High temperature 47
- Microwave plasma**  
Polytetrafluoroethylene, Surface modification 2472
- Miniemulsion polymerization**  
Molecular-weight distribution, Oil-soluble initiator 3758
- Miscibility**  
Blends, epoxy resin 2619  
Blends, Light scattering 1242  
Copolymer blends, Segmental interaction 786  
Copolymers, Isomeric effects 3055  
Cyclic oligomers, Carbonate 209  
Fluorine-containing polymers, Polymethacrylates 1482  
IPNs, Hydrogen bonding 5523
- Melting point depression, Copolymer 1044  
Orientation, Polymer blends 3260  
Poly(ethylene oxide), Poly(methyl acrylate) 3719  
Poly(ethylene oxide), Poly(methyl methacrylate) 3278  
Poly(styrene-co-methacrylonitrile), Polymethacrylates 1477  
Polymer blends, Polystyrene 5785  
Polymer blends, Interaction parameter 2417
- Miscibility window**  
Graft copolymer, Blend 2229
- Mixed crystal**  
I.r. technique, Polyethylene 4578  
Neutron scattering, Polyethylene 4590
- Mobility**  
Polymer melt, Free volume 5551
- Model**  
Gas permeability, Diblock copolymers 1229
- Model compounds**  
High modulus polyether-ester, Crystal structure 5179  
Poly(aryl ether ketone)s, Poly(aryl ether sulfone)s 423
- Modelling**  
Monomer reactivity ratios, High conversion 3525  
OH-terminated polybutadiene, Functionality distribution 4555  
Polyethylene, Ternary phase diagram 4408  
Polymerization pathway, Polyxylylenes 4656  
Poly(vinyl alcohol) membrane, Effective charge density 5098
- Model networks**  
Crosslink density, Toughness 2793
- Model oligomers**  
Poly(methyl methacrylate), Conformational analysis 1078
- Modified epoxy resin**  
Epoxy-thermoplastic blend, Toughness improvement 558
- Modified polyamides**  
Cyano-substituted polyamides, Thermally stable polymers 630  
Polymer/salt solid complexes, Ion-dipole interactions 3691
- Modified polyisophthalamides**  
Aromatic polyamides, Thermally stable polymers 1986
- Modified silicone rubber**  
Poly(ester thioether amine), Hydrogen-transfer polyaddition 5571
- Modulus**  
Gel points, Networks 4521  
PEEK, Crystallinity 110  
Poly(ethylene terephthalate), Conformation 4259
- Moisture adsorption**  
Cellulose derivatives, Ionic effects 5729
- Molecular chains**  
Polymer deformation, Stress transfer 3848
- Molecular composite**  
Graft rigid-rod copolymer, Wide-angle X-ray scattering 675
- Molecular configuration**  
Polymer mixtures, Interaction parameters 1722
- Molecular dynamics**  
Deuteron n.m.r., Polyethylene 2307  
PBZT fibres, Relaxation 53  
Poly( $\alpha$ -isobutyl-L-aspartate), Molecular mechanics 2596  
RIS theory, Polystyrene 4511
- Molecular interactions**  
Hydrogen bonds, Polyurethane 2315
- Molecular mass determination**  
Size exclusion chromatography, PEEK-carbon fibre composite 5498  
Sulfonated PEEK, Size exclusion chromatography 5491
- Molecular mechanics**  
Poly(3-hydroxybutyrate), Hydroxyalkanoate copolyester 193  
Polymer miscibility, Computer modelling 3251  
Poly( $\alpha$ -isobutyl-L-aspartate), Molecular dynamics 2596
- Molecular mobility**  
Copolyester, Deuteron n.m.r. 3816  
Glassy polymers, Conformationally mobile 2591  
Semicrystalline polymers, Flexible chains 4397
- Molecular modelling**  
Inclusion compounds, Conformations 573  
Thermotropic copolyester, X-ray diffraction 5603
- Molecular motions**  
Aromatic polyester, Dielectric relaxation 2364  
Aromatic polyester, Dynamic mechanical behaviour 2359  
E.p.r., Spin probes 2725  
Vinylidene fluoride, Trifluoroethylene 2072
- Molecular orbital calculations**  
 $Q-e$  scheme, Copolymerization 1258
- Molecular orientation**  
Atomic force microscopy, Isotactic polypropylene 561  
High-density polyethylene, Slow crack growth 1948  
Isotactic polypropylene, X-ray diffraction 3927  
Liquid crystalline polymers, Reflectance  $F$  i.r. microscopy 2970  
Poly(phenylene vinylene), Conduction mechanism 4569  
Polypropylene, Crystallinity 3480  
PVA/PVP blends, Optical anisotropy 1452
- Molecular recognition**  
Imprinted polymer, Catalyst 5372
- Molecular simulation**  
Side-chain mesogens, Liquid crystalline polymers 5441
- Molecular structure**  
Fibroin gel, Water content 2197
- Molecular weight**  
Polyaniline, Electrochemical synthesis 5104  
Polyurethane, Emulsion-cast film 1095
- Molecular weight distribution**  
Alkyl acrylates, Polymerization 862  
Chain transfer to polymer, Poly(vinyl acetate) 3032  
Miniemulsion polymerization, Oil-soluble initiator 3758  
Non-linear polymerization, Branching density distribution 3023  
Size exclusion chromatography, Dual detection 4799
- Molecular weight effects**  
Nylon-rubber blend, Impact behaviour 332
- Molecular weight standards**  
Viscometric constants, Gel permeation chromatography 2385
- Molten polyethylene**  
Polymer structure, Neutron scattering 5398
- Monoclinic phase**  
Gel-spun polyethylene,  $^{13}\text{C}$  n.m.r. 4728
- Monoclinic polypropylene**  
Quenched polypropylene, Synchrotron radiation 1352
- Monomer conversion**  
Poly(vinyl chloride), Suspension polymerization 1526
- Monomer reactivity ratios**  
Modelling, High conversion 3525
- Monomer synthesis**  
Pendant groups, Benzoxazole 1317
- Monomolecular film**  
Polycondensation, Polyamide 1103
- Monotropic transition**

- Phase transitions, Liquid crystalline  
P8MB 4794
- Monte-Carlo calculations**  
Dendrimers, Segregation 1827
- Monte-Carlo simulation**  
Ring polymer, Dynamic properties 3792
- Montmorillonite**  
Methyl methacrylate polymers, Functionalization 3296
- Morphology**  
Atomic force microscopy, Block copolymer 5778  
Binary blend, Ordering 2296  
Blend, *In situ* polymerization 3643  
Block copolymers, Selective solvents 490  
Block copolymers, Tetragonal structure 3786  
Compatibilized blends, Rheology 128  
Compatibilizing effect, Blends 212  
Composite, Poly(ether imide) 519  
Copolymer, Melt polymerization 1831  
Diblock copolymers, Synthesis 5024  
Fracture, Compressive yield stress 752  
Linear crystal growth rate, Syndiotactic polypropylene 5194  
Liquid crystal polymers, Electron diffraction 1869  
Nylon 6, ABS 3164  
Nylon/ABS blend, Mechanical properties 5468  
Nylon/ABS blend, Imdized acrylic 5453  
PEN, Injection moulding 5651  
Phase separation, Crystallization 3060  
Planar deformation, Isotactic polypropylene 551  
Poly(ethylene terephthalate), Drawn films 4092  
Poly(vinylidene fluoride), Spherulitic size 5202  
Polyamide blends, Imdized acrylic polymers 4263  
Polycarbonate, Solid state polycondensation 3789  
Polyimide, Crystal unit cell 4048  
Polypropylene, Crystallization 899  
Preparation, Star-shaped block copolymers 2862  
Semicrystalline blends, SAXS 3936  
Ternary epoxy blends, Mechanical properties 5283  
Ternary polymer blends, Spinodal decomposition 2243  
Thermoplastic polyimide, Electron microscopy 5618  
Thermotropic LC polyesters, Two-dimensional mesogens 699
- Morphology control**  
Polymer whiskers, Aromatic polyester 123
- Morphology development**  
Polymer blend, Phase size distribution 5422
- Morphology of hydrogels**  
Polymer networks, Equilibrium water content 2167
- Moulding**  
Silk, Fibroin 2355
- Multiblock copolymers**  
Isothermal crystallization, Phase separation 4146  
Polyolefin, Polyester 4120  
Segmented copolymer, Microphase separation 4527  
Styrene, Isoprene 246
- Multilayered tapes**  
Deformation, Network density 2783
- Multiple melting**  
Melt recrystallization, Differential scanning calorimetry 5672  
Poly( $\beta$ -hydroxybutyrate), Blends 3990
- Mutual diffusion coefficient**  
Tracer diffusion coefficient, Fast theory 5706
- N-alkanes**  
Interchain diffusion, Rotator phase 3340
- N-antipyril acrylamide**  
Copolymerization parameters, Binary copolymerization 3329
- N-based polyelectrolytes**  
Solvation behaviour, Synthesis 2874
- N-butyl acrylate**  
Zwitterionemers, Radical copolymerization 4669
- N.m.r.**  
 $\alpha,\beta$ -dicarboxylatopolybutadiene, Telechelics 3811  
Blend, Dynamics 57  
Gel-spun polyethylene, Monoclinic phase 4728  
Polyester, Local mobility 3402  
Polyimide, Chemical shift 4300
- <sup>13</sup>C n.m.r.**  
Ethylene- $\alpha$ -methylstyrene, 2D-INADEQUATE 2523  
Gel-spun polyethylene, monoclinic phase 4728  
Polyester, Local mobility 3402  
Polyimide, Chemical shift 4300
- <sup>23</sup>Na n.m.r.**  
Counterion binding, Weak polyelectrolyte 3268
- <sup>29</sup>Si n.m.r.**  
Siloxane copolymers, Polydiethylsiloxane 5109, 5118
- <sup>1</sup>H n.m.r.**  
Polypropylene, Free induction decay 4083  
Poly(vinyl alcohol/acetate), Conformations 3398
- N.m.r. analysis**  
Copolymer, Reactivity ratio 3703
- NOESY**  
Hydrogel, Nuclear magnetic resonance 888
- N-vinylpyrrolidone**  
Copolymerization, Furfuryl methacrylate 2390
- Nanoparticles**  
Polystyrene, Microemulsion 2659
- Nanophase droplets**  
Polystyrene-grafted mica, Scanning electron microscopy 1571
- Napthalene**  
Polyesters, Quinoline 2007
- Natural rubber**  
Solvent diffusion, Vulcanizing systems 5504
- Natural rubber latex**  
Phase transfer technique, Cationic surfactant 5144
- Near-tip stress fields**  
Cyclic damage, Fatigue crack propagation 3221
- Neck propagation**  
Self-excited oscillation, Period doubling 3638
- Necking**  
Polycarbonate, Yielding 3883
- Needle-like polymer crystals**  
Poly(4-mercaptobenzoyl), Polymer whisker 3311
- Negative Poisson ratio**  
Poly(tetrafluoroethylene), Spectroscopy 5130
- Negative resist**  
Chemical amplification, Microlithography 5
- Nematic state**  
Liquid crystalline polymers, Dynamic viscoelasticity 2422  
Liquid crystalline polymers, Isomerization 2528
- Network density**  
Deformation, Multilayered tapes 2783  
Deformation, Toughness 2774
- Network interlock**  
Interpenetrating networks, Kinetics 594
- Networks**  
Gel points, Modulus 4521  
Polydimethylsiloxane, Elastomers 740  
Poly(tetrahydrofuran), Crystallization 2944  
Thermostat, Cure chemistry 291
- Neutron reflectivity**  
Graft copolymer, SANS 3116
- Neutron scattering**  
Mixed crystal, Polyethylene 4590  
Polymer structure, Molten polyethylene 5398  
Poly(tetrafluoroethylene), Structure refinement 3139
- New polymer materials**  
Synthesis, Applications 4484
- Nitrotriacetic acid**  
Cerium (IV) redox initiators, Aqueous polymerization 849
- Nitro displacement**  
Poly(ether imide), Gas permeability 4215
- N.m.r.**  
Silica, Polydimethylsiloxanes 2962
- N.m.r. characterization**  
Polyacrylonitrile, Ternary solutions 1629  
Poly(glycidyl methacrylate), Vinylpyrrolidone copolymers 3530
- N.m.r. imaging**  
Poly(vinyl chloride), Acetone diffusion 2744
- N.m.r. relaxation**  
Carboxymethyl cellulose, Lineshape analysis 2749
- N.m.r. spectroscopy**  
Polymeric drugs, Acrylic copolymers 2501  
Sulfobetaine, Cationic polymer 2210  
Synthesis, Oligoethers 2867
- Non-aqueous**  
Microstructure, Photopolymerization 4072
- Non-linear polymerization**  
Molecular weight distribution, Branching density distribution 3023
- Non-linear viscoelasticity**  
Stress relaxation, Fibres 2108
- Novolac phenol-formaldehyde**  
Beta relaxation, T.s.d.c. measurements 5536
- Nuclear magnetic resonance**  
Hydrogel, NOESY 888  
Langmuir-Blodgett films, Polymeric multilayers 885
- Numerical modelling**  
Real-time monitoring, Interlayer diffusion 929
- Nylon**  
Compatibility, Polyhydroxy ether of bisphenol-A 2764  
Glycine, Polyamides 1291
- Nylon-6**  
ABS, Morphology 3164  
Computer simulation, Semibatch reactor 3722  
Iodine, Complex crystal 2665  
Iodine, Intercalation 3797  
Phase behaviour, Polystyrene ionomers 1963  
Solid phase reaction, Sulfonation 2012
- Nylon-6,6**  
Crystallization, Brill transition 2483  
Glass fibres, Fracture toughness 306
- Nylon-66**  
Crystallization, Spherulites 5293  
Spherulites, Aggregate 5300
- Nylon-7**  
Characterization, Structure 66
- Nylon-11**  
Polyepichlorohydrin, Intermolecular interaction 4280
- Nylon-6,6/Kevlar composites**  
Injection moulding, Orientation 1409
- Nylon-rubber blend**

## Keyword index

- Impact behaviour, Molecular weight effects 332  
 Impact behaviour, Strain-rate effects 315  
 Impact behaviour, Temperature-time effects 323
- Nylon/ABS blend**  
 Imidized acrylic, Morphology 5453  
 Mechanical properties, Morphology 5468
- OH-terminated polybutadiene**  
 Functionality distribution, Modelling 4555
- Odd-even effect**  
 Aromatic-aliphatic polyesters, Synthesis 4677
- Oil-soluble initiator**  
 Molecular weight distribution, Miniemulsion polymerization 3758
- Oligomerization**  
 Polyureas, Thermolysis 3766
- Oligoethers**  
 Synthesis, N.m.r. spectroscopy 2867
- Oligomers**  
 Polyamide, End-capping 4857
- Open-circuit potentials**  
 Conducting polymers, Polyaniline 3572
- Optical activity**  
 Chiral polyaniline, Electropolymerization 3113  
 Copolymers, Circular dichroism 5758  
 Polynorbornene derivatives, ROMP 616
- Optical anisotropy**  
 PVA/PVP blends, Molecular orientation 1452
- Optical properties**  
 Poly(sec-butyl crotonate), Anionic polymerization 441
- Optical quality**  
 Rigid-rod polymer, PBZT 3673
- Optical transparency**  
 Soluble polyimides, Alicyclic dianhydride 4203
- Optical waveguides**  
 Ion beam irradiation, Structural modification 2447
- Opto-mechanical behaviour**  
 Diacetylene copolyurethane, Raman spectroscopy 80
- Ordered networks**  
 Liquid crystalline epoxides, Photoinitiated polymerization 622
- Ordered regions**  
 Polyamide, Heat capacity 5748
- Ordered structure**  
 Phenylenevinylene copolymers, Electrical conductivity 480
- Ordering**  
 Morphology, Binary blend 2296
- Organosilyl methacrylates**  
 Copolymerization, Kinetics 4392
- Orientation**  
 Bisphenol A polycarbonate, Creep 2084  
 Blends, Light crystalline polymers 104  
 Injection moulding, Nylon-6,6/Kevlar composites 1409  
 Liquid crystal polymers, Surface 207  
 Liquid crystalline polymers, Infra-red dichroism 1419  
 Miscibility, Polymer blends 3260  
 PET films, Relaxation 3200  
 PMMA-SAN blends, Relaxation 681  
 Poly(vinyl chloride), Infra-red spectroscopy 3411  
 Poly(vinyl phenol), FTi.r. spectroscopy 2078  
 Polydimethylsiloxane, Infra-red dichroism 2538  
 Raman spectroscopy, Birefringence 3119  
 Shrinkage stress, Poly(ethylene terephthalate) 2560
- Oriented films**  
 Polyethylene, Surface morphology 2458
- Oscillatory shear flow**  
 Storage modulus, Loss modulus 93
- Overoxidation**  
 Polypyrrole, X.p.s. 504
- Oxidative doping**  
 Polyenes, Poly(vinyl chloride) 2840
- Oxyethylene macromer**  
 Polymer electrolyte, Ionic conductivity 3740
- Oxygen permeability**  
 Silicon-containing copolymer, Glass transition temperature 1268
- Oxygen plasma resistance**  
 Poly(arylene ether)s, Limited oxygen index 2689
- P(VDCN/VFo)**  
 Alternating copolymer, Piezoelectricity 718
- PAAm-g-PEO/PPO**  
 Reversible gelation, Rheology 2644
- p.a.i.s.**  
 Semicrystalline PET, Positronium formation 14
- PBO**  
 Amorphous nylon, Fluorescence 1090  
 Fluorescence, Pressure 4235
- PBO fibre**  
 Small-angle X-ray scattering, Rigid-rod polymers 5408
- PBZT**  
 Rigid-rod polymer, Optical quality 3673
- PBZT fibres**  
 Molecular dynamics, Relaxation 53
- PC/ABS blends**  
 Polycarbonate, Rheological properties 2631
- P2CS/PVME blends**  
 Chemical labelling, Phase behaviour 1236
- PDMPs**  
 Dielectric relaxation, Thermally stimulated currents 151
- PE/EPDM blends**  
 Vulcanization, Thermoplastic elastomer 3985
- PEEK**  
 Blends, PET-PHB 60  
 Crystallinity, Modulus 110  
 PES, Block copolymer 3549  
 Positron annihilation, Free volume 925  
 Sulfonation, Kinetics 3237  
 Synchrotron radiation, Time resolved 3875
- PEEK-carbon fibre composite**  
 Molecular mass determination, Size exclusion chromatography 5948
- PEN**  
 Injection moulding, Morphology 5651
- PEO-resorcinol complex**  
 Spherulitic growth, Interspherulitic limited 1586
- PES**  
 PEEK, Block copolymers 3549
- PET**  
 Dielectric relaxation, Crystallization 2600
- PET copolymer**  
 Dialkyl propanediols, Characterization 1274
- PET films**  
 Biaxial orientation, Refractive indices 2192  
 Orientation, Relaxation 3200
- PET/LLDPE blends**  
 Ionomer, Compatibilization 3624
- PET-PHB 60**  
 Blends, PEEK 1994
- PHEMA**  
 Dielectric relaxation, Hydration 227
- PMMA grafting**  
 Graft copolymerization, Lignocellulosic fibres 383
- PMMA/PVDF blends**  
 Rheology, PMMA/PSAN blends 1503
- PMMA/SAN blends**  
 Orientation, Relaxation 681  
 Rheology, PMMA/PVDF blends 1503
- PMR-type polyimide resins**  
 Structure-property relations, Diamino(diaryl)methanes 2378
- p-Nitroaniline**  
 Poly(n-alkyl methacrylate)s, Dielectric relaxation
- PPTA**  
 Dynamic structure, Macroscopic accessibility 1123
- PTFE**  
 Radiation, Crosslinking 2881
- PVA hydrogels**  
 Crosslinks, Thermodynamics 5737
- PVA/PVP blends**  
 Molecular orientation, Optical anisotropy 1452
- PVC/MBS blends**  
 Rubber toughening, Particle size 4750
- PVDC/PBMA composites**  
 Concentrated emulsions, Mechanical properties 4343
- PVDF**  
 Surface modification, Spectroscopy 5560
- PVF<sub>2</sub>**  
 VF<sub>2</sub>-VF<sub>4</sub> copolymers, Cocrystallization 4804
- Paraffin**  
 Surface stress, Polyethylene 1923
- Particle**  
 High performance polymers, Composite 4949
- Particle size**  
 Rubber toughening, Izod impact strength 4760  
 Rubber toughening, PVC/MBS blends 4760  
 Rubber toughening, Rubber cavitation 4743
- Peeling**  
 Adhesion, Diffusion 271
- Pendent groups**  
 Monomer synthesis, Benzoxazole 1317
- Penultimate effect**  
 Radical copolymerization, Rate constants 1375
- Performance**  
 Composites, Micromechanical modelling 5035
- Periodate oxidation**  
 Kinetic model, Dialdehyde starch 5091
- Period doubling**  
 Neck propagation, Self-excited oscillation 3638
- Permeability**  
 Drug transport, Silk fibroin membrane 2853  
 Polystyrene films, Antiplasticization 2549
- Permselectivity**  
 High performance polymers, Membrane separation 4970
- Peroxide**  
 Polyethylene, Silane 5447
- Peroxide crosslinking**  
*Pseudomonas oleovorans*, Microbial polyester 4358
- Peroxydisulfate**  
 Phase-transfer catalysis, Free-radical polymerization 4896
- Persulfate/bisulfite**  
 Polyacrylonitrile, End-groups 4659
- Persulfate/metabisulfite**  
 Polyacrylonitrile, End-groups 250
- Phase**  
 Fracture toughness, Continuity 1658
- Phase behaviour**  
 Blend Miscibility, Interaction parameter 162

- Blend miscibility, Ternary polymer blends 1051  
 Blends, Liquid crystal polymers 3706  
 Chemical labelling, P2CS/PVME blends 1236  
 Coupling reaction, Block copolymers 1115  
 Dynamic mechanical relaxations, Thermotropic polydibenzoates 3686  
 Homopolymer-copolymer blends, Acrylonitrile copolymers 1487  
 Nylon-6, Polystyrene ionomers 1963  
 Polyelectrolyte, Salt-effect 3499  
 Syndiotactic polystyrene, Xylene 1694
- Phase diagrams**  
 Blends, Association model 3712  
 Microencapsulation, Coacervation 777  
 Ternary blends, Closed loop 1033
- Phase homogeneity**  
 Solubilization, Polymer blends 4334
- Phase modification**  
 Polymorphism, Block copolymers 3943
- Phase morphology**  
 Segmented polyurethane-ureas, Thermoelasticity 1730
- Phase segregation**  
 Binary blends, Polyethylenes 1991  
 Crystallization, Morphology 3060  
 Impact toughness, LLDPE 3893  
 Interaction parameter, Semicrystalline polymer 4404  
 Isothermal crystallization, Multiblock copolymers 4146  
 Poly(hydroxybutyrate), Blends 86  
 Poly(methyl methacrylate), 1-Butanol 5141  
 Polyethylene blends, Ternary phase diagrams 1802  
 Polymer blends, U.v. spectroscopy 882  
 Polymeric materials, Supercritical fluid 3998  
 Rubber-modified thermosets, Polydispersity 5541  
 Structure development, Blends 257
- Phase size**  
 Interface, Blends 1552
- Phase size distribution**  
 Polymer blend, Morphology development 5422
- Phase transfer technique**  
 Natural rubber latex, Cationic surfactant 5144
- Phase transformation**  
 $\beta$ -form polypropylene, Microvoid 3442  
 Liquid crystalline epoxy, Curing 2679
- Phase transitions**  
 Inhomogeneous hydrogels, Swelling 4416  
 Liquid crystalline copolymers, Microphase separation 2815  
 Liquid crystalline P8MB, Monotropic transition 4794
- Phase-transfer catalysis**  
 Peroxydisulfate, Free-radical polymerization 4896
- Phenol-formaldehyde resins**  
 Chemorheology, Lignin filler 1280  
 D.s.c., Degree of resin cure 5685  
 Reaction mechanisms, Kinetics 3046
- Phenolphthalins**  
 Polyurethane, Anionomer 3107
- Phenoxy/PVME blend**  
 Inverse gas chromatography, Interaction parameters 2128
- Phenyl glycidyl ether**  
 Epoxy homopolymerization, Piperidine 857
- Phenylenevinylene copolymers**  
 Electrical conductivity, Ordered structure 480
- 2-Phenyl-1,3-indandione**  
 Photoresponsive polymers, Photochromism 1549
- Phosphoranimines**  
 Polyphosphazenes, Staudinger reaction 5005
- Phosphorus compounds**  
 Transesterification, Direct esterification 4006
- Photo-oxidation**  
 Freely suspended films, Poly(3-nonylthiophene) 468
- Photoacoustic FT i.r.**  
 Polyamide-6,6, Structural analysis 2321
- Photochemical hole burning**  
 Two-colour irradiation, Donor-acceptor electron transfer 3915
- Photochemistry**  
 Light-sensitive polymers, Hydroxycinnamate pendants 692
- Photochromic dopant**  
 Reorientational relaxation, Glassy polymer matrix 4465
- Photochromism**  
 Photoresponsive polymers, 2-Phenyl-1,3-indandione 1549
- Photocrosslinking**  
 Silicon-containing oligomer, Anionic polycondensation 4228
- Photoelectron spectroscopy**  
 Poly(tetrahydrofuran), Characterization 5185
- Photoinitiated polymerization**  
 Ordered networks, Liquid crystalline epoxides 622
- Photoinitiator**  
 Cationic polymerization, Pyridinium salt 4694
- Photolysis**  
 Methyl methacrylate, Aryl vinyl ketones 4079
- Photon tunnelling microscopy**  
 Single crystals, Polyethylene 1137
- Photopolymerization**  
 Cationic initiators, Vinyl ether 217  
 Kinetics, Diacrylates 1004  
 Methacrylates, Acrylates 3243  
 Non-aqueous, Microstructure 4072
- Photoreaction**  
 Formylated Novolacs, Microlithography 2040
- Photoresponsive polymers**  
 Photochromism, 2-Phenyl-1,3-indandione 1549
- Photosensitive polyimide**  
 Polyimide, Poly(amic acid) 1148
- Physical ageing**  
 Enthalpy relaxation, Poly(ethylene terephthalate) 2117  
 Epoxy glasses, Rejuvenation 5279  
 Poly(vinyl chloride), Creep 4376
- Physical properties**  
 Poly( $\beta$ -hydroxybutyrate), Poly( $\epsilon$ -caprolactone) 2233  
 Polyolefins, Preparation 4979
- Piezoelectricity**  
 P(VDCN/VFo), Alternating copolymer 718
- Piperazine-modified PVC**  
 Kinetics, Membranes 2141
- Piperidine**  
 Epoxy homopolymerization, Phenyl glycidyl ether 857
- Pivalolactone**  
 Poly(ether ester)s, Processing 5483
- Planar deformation**  
 Draw efficiency, Isotactic polypropylene 540  
 Isotactic polypropylene, Morphology 551  
 Smectic phase, Isotactic polypropylene 545
- Plasma polymerization**  
 Allyl alcohol, Trifluoroacetic anhydride 4382
- Plasma treatment**  
 Polyethylene, Adhesion 2098  
 Polypropylene, Spectroscopy 5590
- Plastic deformation**  
 Glassy polymer, ADC resin 3985  
 UHMWPE, Transmission electron microscopy 5217
- Platicized membranes**  
 Poly(vinyl chloride) blends, Mechanical properties 3966
- Poling**  
 VDR/TrFE copolymers, Infra-red spectroscopy 3612
- Poly(acrylic acid)**  
 Polypropylene, Grafting 5342
- Poly(allylamine)**  
 Schiff base, Complexation 2153
- Poly(allylammonium) chloride**  
 Sodium 1-octanesulfonate, Aggregate 2004
- Poly(allyltrimethylsilane)**  
 Synthesis, Characterization 4648
- Poly(amic acid)**  
 Polyimide, Isomerism 4881  
 Polyimide, Photosensitive polyimide 1148
- Poly(amide-ester)**  
 Tyrosine-leucine, Polyamides 663
- Poly(aryl ether ketone)s**  
 Poly(aryl ether sulfone)s, Model compounds 423  
 Poly(aryl ether sulfone)s, Synthesis 415  
 Polymorphism, X-ray diffraction 2290  
 Synthesis, Reactions 1111
- Poly(arylene ether)s**  
 Oxygen plasma resistance, Limited oxygen index 2689
- Poly(aryl ether sulfone)s**  
 Poly(aryl ether ketone)s, Model compounds 423  
 Poly(aryl ether ketone)s, Synthesis 415
- Poly( $\beta$ -hydroxybutyrate)**  
 Blends, Crystallization kinetics 3984  
 Blends, Multiple melting 3990  
 Hydrolytic degradation, Kinetics 4156  
 Poly( $\epsilon$ -caprolactone), Physical properties 2233
- Poly(BTDA-DAB)**  
 Semi-aliphatic polyimides, Semicrystalline polyimides 4889
- Poly(butylene terephthalate)**  
 Core-shell impact modifiers, Polycarbonate 3665  
 Ethylene rubber, Dynamic vulcanization 4618  
 Poly(ether ester), Blend 5247  
 Polyisobutylene, Segmented block copolymer 636
- Poly(butyl methacrylate)**  
 Poly(methacrylic acid), Core-shell latex 1779
- Poly( $\epsilon$ -caprolactone)**  
 Poly( $\beta$ -hydroxybutyrate), Physical properties 2233  
 Polyurethane, Poly(methyl methacrylate) 2123
- Poly(chloroalkyl methacrylate)**  
 Viscoelastic relaxation, Dielectric relaxation 3449
- Poly(crown ether)**  
 Ion conduction, Alkali metal ions 5753
- Poly(diarylacetylene)**  
 Metathesis polymerization, Tantalum catalyst 4920
- Poly(diarylsiloxane)s**  
 Synthesis, Characterization 4197
- Poly(dithiocarbonate)s**  
 Poly(thiocarbonate)s, Refractive index 1564
- Poly(ester thioether amine)**  
 Modified silicon rubber, Hydrogen-transfer polyaddition 5571
- Poly(ether ester)s**  
 Pivalolactone, Processing 5483  
 Poly(butylene terephthalate), Blend 5247
- Poly(ether ether ketone)**  
 Dynamic mechanical relaxation, Semicrystalline morphology 1157

Keyword index

- Fluorescence, Polybenzoxazole 1576  
 Infra-red spectroscopy, Raman spectroscopy 1326  
 Terbium salt, Fluorescence 1092  
 Trifluoromethylated PEEK, Amorphous PEEL 5124
- Poly(ether imide)s**  
 Aggregation phenomena, Fluorescence spectra 2730  
 Catechol, Bis(ether anhydride) 5148  
 Composite, Morphology 519  
 Nitro displacement, Gas permeability 4215  
 Synthesis, Thermotropic behaviour 5577
- Poly(ether sulfone)s**  
 Epoxy resin, Blends 353  
 Trifluoromethylation, Copolymers 2432
- Poly(ethylene-co-vinyl acetate)**  
 Methyl methacrylate, Spinodal decomposition 4015
- Poly(3,4-ethylenedioxythiophene)**  
 Synthesis, Electrochromic properties 1347
- Poly(ethylene glycol)**  
 Magnetic field, Block copolymerization 1105
- Poly(ethylene oxide)**  
 Miscibility, Poly(methyl methacrylate) 3278  
 Poly(methyl acrylate), Miscibility 3719
- Poly(ethylene terephthalate)**  
 Conformation, Modulus 4259  
 Crystallization kinetics, Draw temperature 771  
 Deformation, Films 1210  
 Density, Raman 3184  
 Draw conditions, Deformability 1329  
 Drawing, Films 2554  
 Drawn films, Morphology 4092  
 Fibres, Deformation 3844  
 Glass fibre, Composite 514  
 Liquid crystalline polymer, Blend sheet 5138  
 Microhardness, Anabarc crystallization 4775  
 Physical ageing, Enthalpy relaxation 2117  
 Rheological kinetics, Crystallization 2828  
 Shrinkage stress, Orientation 2560  
 Surface energy, Wettability 4611  
 Surface orientation, Contact angle hysteresis 262
- Poly(ethylene terephthalate) fibres**  
 Blends, Thermotropic liquid crystalline polymers 4303
- Poly(ethyl methacrylate)**  
 Shear modulus, Poly(n-butyl methacrylate) 4127
- Poly(2-ethyl-2-oxazoline)**  
 Poly(2-methyl-2-oxazoline), Static light scattering 3587
- Poly( $\gamma$ -benzyl-L-glutamate)**  
 Electro-optical coefficient, Refractive index 23  
 Macromolecular structure, Gamma irradiation 2278  
 Structure, Spin coating 5611
- Poly(glycidyl methacrylate)**  
 Vinylpyrrolidinone copolymers, N.m.r. characterization 3530
- Poly(haloalkyl methacrylate)s**  
 Blend miscibility, Aliphatic polyesters 3290
- Poly(hexafluoro-1,3-butadiene)**  
 Heat treatment, Structural changes 3474
- Poly(hydroxyalkanoate)**  
 Biopolymer, Biodegradation 2090
- Poly(hydroxyalkylglutamine)s**  
 Aminolysis, Chain scission 2443
- Poly(hydroxybutyrate)**  
 Blends, Phase separation 86  
 Crystallization, Toughening 4598  
 Poly(methyl methacrylate), Blends 2884
- Poly(3-hydroxybutyrate)**  
 Hydrolytic degradation, Blends 286  
 Hydroxyalkanoate copolyester, Molecular mechanics 193  
 Poly(3-hydroxyoctanoate), Artificial granules 3079
- Poly(3-hydroxyoctanoate)**  
 Poly(3-hydroxybutyrate), Artificial granules 5079
- Poly( $\beta$ -hydroxyoctanoate)**  
 Characterization, Crystallization 1059
- Poly(1-butene)**  
 Crystal polymorphism, Epitaxy 908, 916
- Poly(imide-pyridazine-amide)s**  
 Fluorinated copolymers, Dielectric constant 4209
- Poly( $\alpha$ -isobutyl-L-aspartate)**  
 Molecular mechanics, Molecular dynamics 2596
- Poly(L-lactic acid)**  
 Membranes, Porosity 1068
- Poly(4-mercaptobenzoyl)**  
 Polymer whicker, Needle-like polymer crystals 3311
- Poly(methacrylate)s**  
 Immiscible blends, Spin labelling 3384
- Poly(methacrylic acid)**  
 Poly(butyl methacrylate), Core-shell latex 1779
- Poly(methyl acrylate)**  
 Poly(ethylene oxide), Miscibility 3719
- Poly( $\gamma$ -methyl-L-glutamate)**  
 Polyurethane elastomer, Thermal properties 3804
- Poly(methyl methacrylate)**  
 1-Butanol, Phase separation 5141  
 Fractionation, Characterization 367  
 Light scattering, Block copolymers 3377  
 Miscibility, Poly(ethylene oxide) 3278  
 Model oligomers, Conformational analysis 1078  
 Poly(hydroxybutyrate), Blends 2884  
 Poly(styrene-co-acrylonitrile), Fracture toughness 1332  
 Polyurethane, Poly( $\epsilon$ -caprolactone) 2123
- Poly(2-methyl-2-oxazoline)**  
 Poly(2-ethyl-2-oxazoline), Static light scattering 3587
- Poly(4-methylpentene-1)**  
 Spherulites, Annealing 1855
- Poly(methylphenyl phosphazene)**  
 Polyphosphazene, Ester substituents 4985
- Poly(methylphenylsiloxane)**  
 Polydimethylsiloxanes, Polymer blends 4623
- Poly( $\alpha$ -n-alkyl-L-aspartate)s**  
 Anionic polymerization, Helical conformation 4502
- Poly(n-alkyl methacrylate)s**  
 Dielectric relaxation, *p*-Nitroaniline 1705
- Poly(n-butyl methacrylate)**  
 Shear modulus, Poly(ethyl methacrylate) 4127
- Poly(N-isopropyl acrylamide)**  
 Sulfonic acid, Spin labelling 4852
- Poly(3-nonylthiopene)**  
 Freely suspended films, Photo-oxidation 468
- Poly(N-vinylcarbazole)**  
 Carbon black, Conductive composite 4470  
 Charge-transfer complex, Fluorescence dynamics 3149  
 Electropolymerization, Raman spectroscopy 2495
- Poly(phenylene methylene)**  
 Bismaleimide, Polystyrene 658
- Poly(phenylene vinylene)**  
 Conduction mechanism, Molecular orientation 4569
- Sulfonium, Conversion 1561
- Poly(pivalolactone)**  
 Poly(vinylidene fluoride), Isothermal spherulitic growth 1896
- Poly(*p*-oxybenzoate)**  
 Crystallization, Lamellae 1863
- Poly(*p*-phenylene)s**  
 Mechanical properties, Biphenyl 4133  
 Poly([1.1.1]propellane)s, Dendrimers 4496  
 Size exclusion chromatography, Aromatization 4133
- Poly(*p*-phenylene terephthalamide)**  
 Ionization, Tensile properties 1216
- Poly(*p*-phenylene vinylene)**  
 Block copolymer, Synthesis 391  
 Polyelectrolyte, Asymmetric substitution 1312
- Poly([1.1.1] propellane)s**  
 Poly(*p*-phenylene)s, Dendrimers 4496
- Poly(propylene glycol)**  
 Infra-red spectroscopy, Hydroxy end-groups 4842, 4848
- Poly(propylene oxide)**  
 Dielectric relaxation, Time-domain reflectometry 1166  
 Melt, Rouse model 140
- Poly(*p*-*t*-butylstyrene)**  
 Solution properties, Light scattering 600
- Poly(pyridinium salt)s**  
 Rigid-rod polymers, Aromatic ionenes 4940
- Poly(sec-butyl crotonate)**  
 Anionic polymerization, Optical properties 441
- Poly(styrene-co-acrylonitrile)**  
 Poly(methyl methacrylate), Fracture toughness 1332
- Poly(styrene-co-methacrylonitrile)**  
 Miscibility, Polymethacrylates 1477
- Poly(tetrafluoroethylene)**  
 Negative Poisson ratio, Spectroscopy 5130  
 Neutron scattering, Structure refinement 3139
- Poly(tetrahydrofuran)**  
 Characterization, Photoelectron spectroscopy 5185  
 Crystallization, Network 2944
- Poly(tetramethylene succinate)**  
 Crystal modification, Strain 3338
- Poly(THF) viologen ionene**  
 Microphase-separated structure, Thermal/mechanical properties 2672
- Poly(thienylene vinylene)**  
 Iodine doping, Electrical properties 4573
- Poly(thiocarbonate)s**  
 Poly(dithiocarbonate)s, Refractive index 1564
- Poly(vinyl acetate)**  
 Molecular weight distribution, Chain transfer to polymer 3032  
 Thermally stimulated currents, Dipolar relaxation 1253
- Poly(vinyl alcohol)**  
 Blend, Syndiotacticity 1970  
 Dispersant, Suspension polymerization 2201  
 Gels, Ageing 2573  
 Solid structure, Single crystals 2516  
 Vinyl chloride, Suspension polymerization 5773  
 Viscosity, Polymer-ion complex 5716
- Poly(vinyl alcohol/acetate)**  
<sup>1</sup>H n.m.r., Conformations 3398
- Poly(vinyl alcohol) fibre**  
 X-ray diffraction, Amorphous scattering 1369
- Poly(vinyl alcohol) membrane**  
 Effective charge density, Modelling 5098
- Poly(vinyl chloride)**  
 ABS, Char formation 343

- Crack-tip craze, Rubber-elastic behaviour 5678  
 Dynamic mechanical properties, Ageing 2800  
 Glass transition temperature, Copolymers 348  
 Limiting oxygen index, Polymer blend 5595  
 Microline focus spectrometry, Degradation 1654  
 N.m.r.imaging, Acetone diffusion 2744  
 Orientation, Infra-red spectroscopy 3411  
 Physical ageing, Creep 4376  
 Polyenes, Oxidative doping 2840  
 Size exclusion chromatography, Universal calibration 765  
 Small-angle scattering, X-ray 2272  
 Suspension polymerization, Monomer conversion 1526  
 Thermal degradation, Stabilization 336
- Poly(vinyl chloride) blends**  
 Plasticized membranes, Mechanical properties 3966
- Poly(vinyl chloride) fibres**  
 Thermal shrinkage, Crosslink density 3217
- Poly(vinyl ether)**  
 Liquid crystalline polymers, Mesogen group orientation 2056
- Poly(vinyl halide)s**  
 Acrylic acid copolymers, Polybutadiene 1787
- Poly(vinylidene fluoride)**  
 Crystallization, Blends 706  
 Morphology, Spherulitic size 5202  
 Polyblends, Conducting polymer systems 3752  
 Polymer gel electrolyte, Lithium triflate 3363  
 Poly(pivalolactone), Isothermal spherulitic growth 1896  
 VDF-TFE copolymer, Crystal packing 5586
- Poly(vinylimidazole)**  
 Silane modification, Corrosion inhibition 4780
- Poly(vinyl methyl ether)**  
 Blends, Polystyrene 2716  
 Interaction parameter, Small-angle neutron scattering 2284  
 Polystyrene, Polymer blend 5630
- Poly(vinyl phenol)**  
 Orientation, FT.i.r. spectroscopy 2078
- Poly(4-vinylpyridine)**  
 Fluorescence, Liposomes 4627  
 Polydimethylsiloxane, Block copolymers 243
- Poly(zinc acrylate)**  
 Polyacrylonitrile, IPNs 3769
- Polyacetylene**  
 Polystyrene, Deuteration 1952  
 Rhodium (I) complexes, *Cis/trans* content 5235  
 Structure, Precursor 403
- Polyacrylamide-glyoxal**  
 Gel kinetics, Elastic modulus 2148
- Polyacrylates**  
 Stereochemical structures, Two-dimesnional n.m.r. 3389
- Polyacrylonitrile**  
 Cellulose, Blends 3565  
 Cellulose, Graft copolymer 168  
 Hexagonal polymorph, X-ray diffraction 4035  
 Persulfate/bisulfite, End-groups 4659  
 Persulfate/metabisulfite, End-groups 250  
 Poly(zinc acrylate), IPNs 3769  
 Ternary solutions, N.m.r. characterization 1629  
 Water plasticization, Solvated crystallites 967
- Polyalcohols and polyethers**  
 Polybutadiene polyepoxide, Metalloporphyrinic catalysis 2857
- Polyalkanoates**  
 Bacterial polyesters, Spreading 435
- Polyamide**  
 Ordered regions, Heat capacity 5748  
 Polycondensation, Monomolecular film 1103  
 Structure, Polymorphism 3568  
 Water absorption, Glass transition 136
- Polyamide-3**  
 Anionic polymerization, Block copolymers 2438
- Polyamide-6**  
 Reactive extrusion, Viscometry 3799
- Polyamide-6,6**  
 Glass fibre, Composite 5241  
 Photoacoustic FT.i.r., Structural analysis 2321
- Polyamide-66**  
 Compatibilization, Polypropylene 3948
- Polyamide blends**  
 Imidized acrylic polymers, Morphology 4263
- Polyamide-6 blends**  
 Core-shell acrylic rubber, Impact behaviour 3658
- Polyamide networks**  
 Liquid crystal, Flexible junctions 1298
- Polyamides**  
 Blends, Block copolymers 1386  
 Block copolymers, Rubber toughening 1399  
 Crystal structure, WAXD 878  
 Glycine, Nylon 1291  
 Tyrosine-leucine, Poly(amide-ester) 663
- Polyaniline**  
 Conducting polymers, Open-circuit potentials 3572  
 Dispersion polymerization, Hydrolysis 3102  
 Electrochemical synthesis, Molecular weight 5104  
 Emulsion polymerization, Electrical conductivity 2902  
 Protonation behaviour, Film structure 2899  
 Reaction mechanism, Catalytic action of acid 2915
- Polyaniline fibrils**  
 Dodecylbenzenesulfonate, Electron diffraction 1142
- Polyaniline films**  
 X-ray photoelectron spectra, Protonation by polymeric acids 3193
- Polyaramid**  
 Crosslinking, Benzocyclobutene 5123
- Polyarylether**  
 Alternating copolymer, Cyano 5355
- Polybenzobisthiazole**  
 Rigid-rod polymers, Copolymers 3091
- Polybenzoxazole**  
 Fluorescence, Poly(ether ether ketone) 1576
- Polybisoxazoles**  
 Synthesis, Characterization 198
- Polyblends**  
 Liquid crystalline polymers, Microstructure 5061  
 Poly(vinylidene fluoride), Conducting polymer systems 3752
- Polybutadiene**  
 Acrylic acid copolymers, Poly(vinyl halide)s 1787  
 Grafting, Microstructure 1636, 1648  
 Hydroxyl termination, Thermal ageing 2568
- Polybutadiene polyepoxide**  
 Metalloporphyrinic catalysis, Polyalcohols and polyethers 2587
- Polycarbonate**  
 Bisphenol-A, Telechelic 371  
 Core-shell impact modifiers, Poly(butylene terephthalate) 3665  
 Fatigue, Craze initiation 3604
- Fatigue craze initiation, Small-angle X-ray scattering 4287  
*In situ* composites, Liquid crystalline polymers 3463  
 Mechanical deageing, Damping 4734  
 Microcellular foams, Impact toughness 3978  
 PC/ABS blends, Rheological properties 2631  
 Solid state polycondensation, Morphology 3789  
 Yielding, Necking 3883
- Polycondensation**  
 Ionomer, Temperature 1769  
 Polyamide, Monomolecular film 1103
- Polycyanoarylether**  
 X-ray diffraction, Crystal/molecular structure 18
- Polycyanurates**  
 High pressure polymerization, Aromatic dicyanates 1203  
 Short-range interactions, Conformation 3735
- Polydiacetylene**  
 Solution, Chain conformation 4787
- Polydiethylsiloxane**  
 Siloxane copolymers, <sup>29</sup>Si n.m.r. 5109, 5118
- Polydimethylsiloxanes**  
 Elastomers, Networks 740  
 Graft copolymer, Polyhydroxyether 977  
 Inverse gas chromatography, Crosslink density 3204  
 Orientation, Infra-red dichroism 2538  
 Poly(4-vinylpyridine), Block copolymers 243  
 Poly(methylphenylsiloxane), Polymer blends 4623  
 Silica N.m.r. 2962  
 Softening effect, Thermal ageing 3206  
 Surface dynamics, Surface morphology 3173  
 Thermodynamics, LCTT behaviour 3075  
 Viscosity, Ion conductivity 4823, 4834
- Polydispersity**  
 Rummer-modified thermosets, Phase separation 5541
- Polyelectrolyte**  
 Luminescence, Fluorescence 1942  
 Phase behaviour, Salt-effect 3499  
 Poly(*p*-phenylene vinylene), Asymmetric substitution 1312
- Polyenes**  
 Poly(vinyl chloride), Oxidative doping 2840
- Polyepichlorohydrin**  
 Nylon-11, Intermolecular interaction 4280
- Polyesters**  
<sup>13</sup>C n.m.r., Local mobility 3402  
 Fibres, Grafting 1084  
 Multiblock copolymer, Polyolefins 4120  
 Quinoline, Napthalene 2007  
 Side-chain ordering, Rigid-rod structure 5225  
 Thermal degradation, Controlled release 1222
- Polyether**  
 Ionic association, Triflate 235
- Polyethylene**  
 Crosslinking, Draw ratio 2044  
 Degradation, Pro-oxidants 995  
 Degree of crystallinity, Lamellar thickness 4537  
 Deuteron n.m.r., Molecular dynamics 2307  
 Energy transfer, Amorphous 5057  
 High-pressure crystallization, Solid-state n.m.r. 1171  
 I.r. technique, Mixed crystal 4578  
 Lamellar crystals, Folded chains



## Keyword index

- 1909  
Neutron scattering, Mixed crystal 4590  
Oriented films, Surface morphology 2458  
Phase separation, Binary blends 1991  
Photon tunnelling microscopy, Single crystals 1137  
Plasma treatment, Adhesion 2098  
Polymer alloy, Polyoxymethylene 3598  
Polypropylene, Blends 3332  
Silane, Peroxide 5447  
Slow crack growth, Blends 3619  
Small-angle neutron scattering, Deuterium labelling 1846  
Surface stress, Paraffin 1923  
Ternary phase diagram, Modelling 4408  
*Trans*-1,4-polybutadiene, Blends 729  
Zirconocene, Methylaluminoxane 808
- Polyethylene blends**  
Liquid-liquid phase separation, Melt mixing 2452  
Phase separation, Ternary phase diagrams 1802  
Styrene-butadiene, Styrene-isoprene 2542
- Polyhydroxyalkanoates**  
Blend miscibility, Biodegradability 5155
- Polyhydroxyether**  
Graft copolymer, Polydimethylsiloxanes 977
- Polyhydroxy ether of bisphenol-A**  
Compatibility, Nylon 2764
- Polyimide**  
<sup>13</sup>C n.m.r., Chemical shift 4300  
Composite, Mechanical properties 4956  
Crystal unit cell, Morphology 4048  
Oligomers, End-capping 4857  
Photosensitive polyimide, Poly(amic acid) 1148  
Poly(amic acid), Isomerism 4881  
Thermal polymerization, Heat resistance 3305
- Polyimide oligomers**  
Curing 4865
- Polyindole**  
Conducting polymer, Electrochromic properties 2010
- Polyion complex**  
Helix formation, Conformation 3492
- Polyisobutylene**  
Poly(butylene terephthalate), Segmented block copolymer 636  
Telechelic, End-group modification 1774
- Polyisoimide**  
Adhesive properties, Surface morphology 4022
- Polylactones**  
Synthesis, Telechelic polyesters 4998
- Polymer alloy**  
Polyoxymethylene, Polyethylene 3598
- Polymer blends**  
Compatibilizer, Reactive copolymer 5641  
Composites, Glass fibre filler 3679  
Interface, Graft copolymer 4240  
Interfacial tension, Compatibilizers 281  
Intermacromolecular complex, Hydrogen bonding 5084  
Limiting oxygen index, Poly(vinyl chloride) 5595  
Miscibility, Interaction parameter 2417  
Miscibility, Polystyrene 5785  
Morphology development, Phase size distribution 5422  
Orientation, Miscibility 3260  
Phase separation, U.v. spectroscopy 882
- Polydimethylsiloxanes, Poly(methylphenylsiloxane) 4623  
Polystyrene, Poly(vinyl methyl ether) 5630  
Spinodal decomposition, Computer simulation 3744  
Solubilization, Phase homogeneity 4334  
Transesterification, Compatibilization 758  
Yield strength, Box models 3631
- Polymer blend solution**  
Critical behaviour, Three-dimensional Ising model 1038
- Polymer brush**  
End-functionalized polystyrene, Kinetics 4065
- Polymer/ceramic composites**  
Grain boundary capacitors, Dielectric performance 4088
- Polymer complexes**  
Metal salts, Electronic spectra 647
- Polymer crystallization**  
Curved edges, Generalized Eden model 2937
- Polymer deformation**  
Molecular chains, Stress transfer 3848
- Polymer-drug interaction**  
Bovine serum albumin, Binding position 1512
- Polymer electrolyte**  
Ionic conductivity, Oxyethylene macromer 3740  
Smart window, Electrochromic device 3592
- Polymer-free solidification**  
Isolated spherulite, Radial growth 5434
- Polymer gel electrolyte**  
Poly(vinylidene fluoride), Lithium triflate 3363
- Polymer glass**  
Glass transition, Vogel-Fulcher 3827
- Polymeric drugs**  
Acrylic copolymers, N.m.r. spectroscopy 2501
- Polymeric films**  
Fracture toughness, Essential work method 1666
- Polymeric materials**  
Phase separation, Supercritical fluid 3998
- Polymeric multilayers**  
Langmuir-Blodgett films, Nuclear magnetic resonance 885
- Polymeric photoinitiators**  
U.v. curing of acrylic coatings, Microwave dielectrometry 5413
- Polymeric support**  
Polymer synthesis, Crosslinking 4250
- Polymer-ion complex**  
Poly(vinyl alcohol), Viscosity 5716
- Polymerization**  
Alkyl acrylates, Molecular weight distribution 862  
Dimethyl siloxanes, Propagation 1764  
L-lactide, Initiator 4175
- Polymerization pathway**  
Polyxylylenes, Modelling 4656
- Polymerizing microemulsion**  
Brillouin scattering, Gelation 2701
- Polymer melt**  
Mobility, Free volume 5551  
Stress-Optical law, Birefringence 734
- Polymer-metal interface**  
Adsorption, Catalysis 2488
- Polymer miscibility**  
Computer modelling, Molecular mechanics 3251  
Interpolymer complexes, Hydrogen bonding 2174
- Polymer mixtures**  
Interaction parameters, Molecular configuration 1722
- Polymer networks**  
Equilibrium water content, Morphology of hydrogels 2167  
Fracture toughness, Additives 5041  
Stress-strain curves, Relaxation glass transition 2348
- Polymer/salt solid complexes**  
Modified polyamides, Ion-dipole interactions 3691
- Polymer solutions**  
Interfacial tension, Flory-Huggins parameter 5743  
Rheology, Entanglements 1187
- Polymer-solvent interaction**  
Equation-of-state parameters, Theta temperature 3356
- Polymer structure**  
Molten polyethylene, Neutron scattering 5398
- Polymer supports**  
Cyclic polyester, Catenated polymers 1542
- Polymer synthesis**  
Polymeric support, Crosslinking 4250
- Polymer whiskers**  
Aromatic polyester, Morphology control 123  
Poly(4-mercaptobenzoyl), Needle-like polymer crystals 3311
- Polymethacrylates**  
Fluorine-containing polymers, Miscibility 1477  
Miscibility, Poly(styrene-co-methacrylonitrile) 1477
- Polymolecularity**  
Sedimentation analysis, Carboxymethyl cellulose 2137  
Sedimentation boundary, Diffusion and concentration effects 2133
- Polymorphism**  
Phase modification, Block copolymers 3943  
Polyamide, Structure 3568  
Poly(aryl ether ketone)s, X-ray diffraction 2290  
Polypivalolactone, Melt crystallization 2607
- Polynorbornene derivatives**  
Optical activity, ROMP 616
- Polyolefins**  
Crosslinking, Catalyst 438  
Multiblock copolymer, Polyester 4120  
Physical properties, Preparation 4979
- Polyoxymethylene**  
Polymer alloy, Polyethylene 3598
- Polyphenylquinoxaline**  
Conducting films, Proton doping 2977
- Polyphosphazenes**  
Crystallization kinetics, Mechanical properties 4813  
Ester substituents, Poly(methylphenyl phosphazene) 4985  
Solution properties, Characterization 819  
Staudinger reaction, Phosphoranimes 5005
- Polypivalolactone**  
Polymorphism, Melt crystallization 2607
- Polypropylene**  
<sup>1</sup>H n.m.r., Free induction decay 4083  
Compatibilization, Polyamide-66 3949  
Creep, Fibre 2226  
Molecular orientation, Crystallinity 3480  
Morphology, Crystallization 899  
Plasma treatment, Spectroscopy 5590  
Poly(acrylic acid), Grafting 5342  
Polyethylene, Blends 3332  
Rolltrusion, Gas separation 949  
Tacticity distribution, Fractionation 580  
Two-site model, External donor 339

- Polypropylene/glass laminates**  
Hydroxylated polypropylene, Interfacial adhesion 2980
- Polypyrrole**  
Dispersion polymerization, Stabilizer 377  
Electrical conductivity, Filled composite 5256  
Electropolymerization, Conducting polymer colloids 3801  
Electropolymerization, Stabilizer 1754  
Overoxidation, X.p.s. 504
- Polysilanes**  
Synthesis, Homogeneous Wurtz coupling 4924
- Polysiloxanes**  
Rheology, Solution properties 3282
- Polysilsesquioxanes**  
Tetrahydropyranyl, Synthesis 3131
- Polysilylene**  
Masked disilene, Anionic polymerization 4990
- Polystyrene**  
Bismaleimide, Poly(phenylene methylene) 658  
Blend, Crystal growth rate 5699  
Blends, Poly(vinyl methyl ether) 2716  
Compatible blend, Microstructural deformation 2256  
Critical concentration, Coil shrinkage 3127  
Dispersion polymerization, Steric stabilization 5366  
Glass transition, Expanded coil 892  
Heat of mixing, Calorimetry 2893  
Nanoparticles, Microemulsion 2659  
Poly(vinyl methyl ether), Polymer blend 5630  
Polyacetylene, Deuteration 1952  
Polymer blend, Miscibility 5785  
RIS theory, Molecular dynamics 4511  
Styrene-butadiene copolymer, Blend morphology 5051
- Polystyrene films**  
Permeability, Antiplasticization 2549
- Polystyrene-grafted mica**  
Nanophase droplets, Scanning electron microscopy 1571
- Polystyrene ionomers**  
Phase behaviour, Nylon-6 1963
- Polystyrene macromonomers**  
ROMP, Comb graft copolymers 3542
- Polystyrene microgels**  
Concentrated solutions, Self-diffusion 1936
- Polystyrene-polybutadiene blend**  
Thin film, Lamellar structure 2019
- Polytetrafluorethylene**  
Microwave plasma, Surface modification 2472
- Polythiophene derivatives**  
Synthesis, Conducting polymers 4057
- Polyureas**  
Oligomerization, Thermolysis 3766
- Polyurethane**  
Anionomer, Phelolphthalins 3107  
Domain structure, Liquid crystalline polymers 4690  
Hydrogen bonds, High resolution n.m.r. 2510  
Hydrogen bonds, Molecular interactions 2315  
Ionomer, Ionic diol 398  
Molecular weight, Emulsion-cast film 1095  
Poly( $\epsilon$ -caprolactone), Poly(methyl methacrylate) 2123
- Polyurethane elastomer**  
Poly( $\gamma$ -methyl-L-glutamate), Thermal properties 3804
- Polyurethane methacrylate**  
Radiation curing, Adhesive 2001
- Polyurethane networks**  
Homopolyesters, Copolyesters 830
- Polyurethanes**  
Dynamic mechanical analysis, Graft copolymers 5782  
Electron microscopy, Domain structure 3178  
Mechanical fatigue, Microdomains 532
- Polyvinylphenol**  
Fluoride, Hydrogen bonding 5597
- Polyxylylenes**  
Polymerization pathway, Modelling 4656
- Polyzwitterion**  
Solubility properties, Temperature effects 1462
- Porosity**  
Poly(L-lactic acid), Membranes 1068
- Positron annihilation**  
PEEK, Free volume 925  
Thermoplastic-thermoset resin, Amine-cured epoxy resin 5319
- Positronium formation**  
p.a.l.s., Semicrystalline PET 14
- Post-gelation period**  
Kinetic modelling, Free-radical copolymerization 796
- Potential map**  
Imaging plate, Electron diffraction 1132
- Precursor**  
Polyacetylene, Structure 403
- Preparation**  
Morphology, Star-shaped block copolymers 2862  
Polyolefins, Physical properties 4979
- Pressure**  
Fluorescence, PBO 4235
- Pressure annealing**  
UHMMPE, Melt structure 5210
- Processing**  
Characterization, Deformation 3831  
Pivalolactone, Poly(ether ester)s 5483
- Pro-oxidants**  
Degradation, Polyethylene 995
- Propagation**  
Polymerization, Dimethyl siloxanes 1764
- Properties**  
Lewis acid, Coordination complexes 4313
- Propylene copolymers**  
Crystalline form,  $\beta$ -Nucleator 5067
- Propylene oxide**  
Pruitt-Baggett catalyst, Hittorf electrolysis 1518
- Proton doping**  
Polyphenylquinoxaline, Conducting films 2977
- Protonation**  
Rigid-rod polymers, Semiempirical calculation 3745
- Protonation behaviour**  
Polyaniline, Film structure 2899
- Protonation by polymeric acids**  
X-ray photoelectron spectra, Polyaniline films 3193
- Pruitt-Baggett catalyst**  
Propylene oxide, Hittorf electrolysis 1518
- Pseudomonas oleovorans**  
Peroxide crosslinking, Microbial polyester 4358
- Pullulan**  
Succinic anhydride, Structural analysis 2656
- Pulsed field gradient n.m.r**  
Critical overlap concentration, Diffusional behaviour 509
- Pyrene**  
Aggregation, Excimer 3920
- Pyridinium ions**  
Living cationic polymerization, Tetrahydrofuran 4443
- Pyridinium salt**  
Cationic polymerization, Photoinitiator 4694
- Pyrolysis**  
Cyano-substituted polyamide, Electrical conductivity 2705
- Pyrrole**  
Diblock copolymer, Lamellar microdomain 4901
- Q-e scheme**  
Molecular orbital calculations, Copolymerization 1258
- Quaternary ammonium halides**  
Alpha-organotin alcohols, Cyclotrimerization 5146
- Quenched polypropylene**  
Monoclinic polypropylene, Synchrotron radiation 1352
- Quinoline**  
Polyesters, Naphthalene 2007
- RIS theory**  
Polystyrene, Molecular dynamics 4511
- ROMP**  
Optical activity, Polynorborene derivatives 616  
Polystyrene macromonomers, Comb graft copolymers 3542
- Radial growth**  
Polymer-free solidification, Isolated spherulite 5434
- Radiation**  
PTFE, Crosslinking 2881  
Triblock copolymer, Tensile strength 3345
- Radiation curing**  
Adhesive, Polyurethane methacrylate 2001
- Radical copolymerization**  
Initiator complex, Kinetics 642  
Rate constants, Penultimate effect 1375  
Styrene, Citraconic anhydride 2302  
Zwitterionomers, *N*-butyl acrylate 4669
- Radical formation**  
Ethylene-propylene copolymer, Electron spin resonance 1382
- Radical polymerization**  
Graft polymerization, Heterogeneous polymerization 606  
Macromonomer, Segment density 2205  
Vinyl carbonates, Kinetics 4819
- Radical process**  
Fluoroalkylated, Allyl alcohol oligomers 4028
- Raman**  
Poly(ethylene terephthalate), Density 3184
- Raman spectroscopy**  
Fibres, Deformation behaviour 2335  
Infra-red spectroscopy, Poly(ether ether ketone) 1326  
Opto-mechanical behaviour, Diacytelene copolyurethane 80  
Orientation, Birefringence 3119  
Poly(*N*-vinylcarbazole), Electropolymerization 2495
- Random copolyester**  
Isomorphism, Solid-state n.m.r. 1931
- Random copolymers**  
Copolyesters, Cocrystallization 117  
Crystallization, D.s.c. 1322  
Ethylene-propylene copolymer, Chemical inversion 1336
- Random crosslinking**  
Random scission, Reactive processing 1012
- Random scission**  
Random crosslinking, Relative processing 1012
- Rare earth**  
Butadiene, Dichloroethane 2897
- Rate constants**  
Radical copolymerization, Penultimate effect 1375
- Reaction mechanisms**  
Phenol-formaldehyde resins, Kinetics 3046

## Keyword index

- Polyaniline, Catalytic action of acid  
 2915  
 Urea-formaldehyde resins, <sup>13</sup>C CP/MAS  
 n.m.r. 1602  
**Reactive copolymer**  
 Compatibilizer, Polymer blends  
 5641  
**Reactive extrusion**  
 Polyamide-6, Viscometry 3799  
**Reactive processing**  
 Immiscible blends, Ellipsometry  
 1182  
 Random scission, Random  
 crosslinking 1012  
**Reactive solvent**  
 Intractable polymers, Epoxy resin  
 4349  
**Reactivity ratios**  
 Copolymerization, Methacrylamide  
 3579  
 Copolymer, N.m.r. analysis 3703  
**Real-time monitoring**  
 Interlayer diffusion, Numerical  
 modelling 929  
**Rearrangement**  
 Benzoic acid, Crosslinking 1339  
**Redox initiation**  
 Copolymerization, Dental composite  
 3285  
**Redox polymer**  
 Lipoamide-amine, Exchange reaction  
 360  
**Reflectance FTi.r. microscopy**  
 Liquid crystalline polymers, Molecular  
 orientation 2970  
**Refractive index**  
 Poly( $\gamma$ -benzyl-L-glutamate),  
 Electro-optical coefficient 23  
 Poly(thiocarbonate)s,  
 Poly(dithiocarbonate)s 1564  
**Refractive indices**  
 Biaxial orientation, PET films 2192  
**Rejuvenation**  
 Epoxy glasses, Physical ageing 5279  
**Relaxation**  
 Molecular dynamics, PBZT fibres 53  
 PET films, Orientation 3200  
 PMMA-SAN blends, Orientation  
 681  
 Transition, Glassy polymer 791  
**Relaxation glass transition**  
 Stress-strain curves, Polymer  
 networks 2348  
**Reorientational relaxation**  
 Photochromic dopant, Glassy polymer  
 matrix 4465  
**Reversible gelation**  
 PAAm-*g*-PEO/PPO, Rheology 2644  
**Rheokinetics**  
 Unsaturated polyester resins,  
 Low-profile additives 2397  
**Rheological kinetics**  
 Poly(ethylene terephthalate),  
 Crystallization 2828  
**Rheological properties**  
 Polycarbonate, PC/ABS blends  
 2631  
**Rheology**  
 Compatibilized blends, Morphology  
 128  
 PAAm-*g*-PEO/PPO, Reversible  
 gelation 2644  
 PMMA/PVDF blends, PMMA/PSAN  
 blends 1503  
 Polymer solutions, Entanglements  
 1187  
 Polysiloxanes, Solution properties  
 3282  
**Rhodium (I) complexes**  
 Polyacetylene, *Cis/trans* content  
 5235  
**Rietveld technique**  
 Bacterial polymer, X-ray diffraction  
 4595  
**Rigid-rod polymers**  
 PBO fibre, Small-angle X-ray  
 scattering 5408  
 PBZT, Optical quality 3673  
 Polybenzobisthiazole, Copolymers  
 3091  
 Poly(pyridinium salt)s, Aromatic  
 ionenes 4940  
 Protonation, Semiempirical  
 calculation 3745  
**Rigid-rod structure**  
 Polyester, Side-chain ordering  
 5225  
**Ring closure**  
 Living polymerization, Macrocyclic  
 polymer 4562  
**Ring polymer**  
 Monte-Carlo simulation, Dynamic  
 properties 3792  
**Roll-casting**  
 Block copolymers, Thermal expansion  
 coefficient 4115  
**Rolled high-density polyethylene**  
 Finite element analysis, Anisotropy  
 1442  
**Rolltrusion**  
 Polypropylene, Gas separation 949  
**Rotator phase**  
 N-alkanes, Interchain diffusion 3340  
**Rouse model**  
 Poly(propylene oxide), Melt 140  
**Rubber**  
 Bulk modulus, Compressibility 2759  
**Rubber cavitation**  
 Rubber toughening, Particle size  
 4743  
**Rubber cavitation stress**  
 Deformation, Toughness 2995  
**Rubber theory**  
 Elastomers, Strain energy 1819  
**Rubber toughening**  
 Particle size, Izod impact strength  
 4760  
 Particle size, PVC/MBS blends 4750  
 Particle size, Rubber cavitation 4743  
 Polyamides, Block copolymers 1399  
**Rubber-elastic behaviour**  
 Poly(vinyl chloride), Crack-tip craze  
 5678  
**Rubber-modified thermosets**  
 Phase separation, Polydispersity  
 5541  
**SANS**  
 Graft copolymer, Neutron reflectivity  
 3116  
**SAXS**  
 Semicrystalline blends, Morphology  
 3936  
**Saccharification**  
 Cellulose, Sulfuric acid 50  
**Salt-effect**  
 Polyelectrolyte, Phase behaviour  
 3499  
**Scanning electron microscopy**  
 Nanophase droplets, Polystyrene-grafted  
 mica 1571  
**Schiff base**  
 Poly(allylamine), Complexation  
 2153  
**Secondary nucleation**  
 Epitaxial growth, Template model  
 3373  
**Sedimentation analysis**  
 Polymolecularity, Carboxymethyl  
 cellulose 2137  
**Sedimentation boundary**  
 Polymolecularity, Diffusion and  
 concentration effects 2133  
**Segment density**  
 Macromonomer, Radical  
 polymerization 2205  
**Segmental interaction**  
 Miscibility, Copolymer blends 786  
**Segmented block copolymer**  
 Polyisobutylene, Poly(butylene  
 terephthalate) 636  
**Segmented copolymer**  
 Multiblock copolymers, Microphase  
 separation 4527  
**Segmented polyurethanes**  
 Microphase separation, Degree of  
 segregation 3069  
**Segmented polyurethane-ureas**  
 Phase morphology, Thermoelasticity  
 1730  
**Segregation**  
 Dendrimers, Monte-Carlo  
 calculations 1827  
**Selective solvents**  
 Block copolymers, Morphology 490  
**Self-diffusion**  
 Gelatin, Free volume 2411  
 Polystyrene microgels, Concentrated  
 solutions 1936  
**Self-excited oscillation**  
 Neck propagation, Period doubling  
 3638  
**Semi-aliphatic polyimides**  
 Poly(BTDA-DAB), Semicrystalline  
 polyimides 4889  
**Semibatch reactor**  
 Computer simulation, Nylon-6 3722  
**Semicrystalline blends**  
 Morphology, SAXS 3936  
**Semicrystalline morphology**  
 Poly(ether ether ketone), Dynamic  
 mechanical relaxation 1157  
**Semicrystalline PET**  
 p.a.l.s., Positronium formation 14  
**Semicrystalline polyimides**  
 Fluorinated diamine, Fluorinated  
 polyimide 5018  
 Semi-aliphatic polyimides,  
 Poly(BTDA-DAB) 4889  
**Semicrystalline polymers**  
 Interaction parameter, Phase  
 separation 4404  
 Molecular mobility, Flexible chains  
 4397  
 VDF-TrFE copolymers, Ferroelectric  
 phase transition 34  
**Semicrystalline polyurethanes**  
 Emulsifiers, Microphase 173  
**Semi-empirical calculation**  
 Activation energy, Free radical  
 reaction 5364  
 Protonation, Rigid-rod polymers  
 3745  
**Sequence length distribution**  
 Heat capacity, Alternating copolymer  
 3698  
**Series expansions**  
 Convergence acceleration, Stable-law  
 density 1880  
**Shear deformation**  
 Texture evolution, HDPE 3427  
**Shear flow**  
 Light scattering, Dilute polymer  
 solution 3156  
**Shear modulus**  
 Poly(*n*-butyl methacrylate), Poly(ethyl  
 methacrylate) 4127  
**Shear yielding**  
 Cellulose acetate-propionate, Craze  
 667  
**Short-chain branching**  
 Linear low-density polyethylene, High  
 pressure crystallization 4140  
**Short range interactions**  
 Polycyanurate, Conformation 3735  
**Shrinkage control**  
 Unsaturated polyester resin, Low profile  
 additive 3011  
**Shrinkage stress**  
 Poly(ethylene terephthalate),  
 Orientation 2560  
**Si-containing polyimides**  
 Gas separation, Membrane 590  
**Side chain mesogens**  
 Liquid crystalline polymers, Molecular  
 stimulation 5441  
**Side-chain ordering**  
 Polyester, Rigid-rod structure 5225  
**Side-chain poly(vinyl ether)s**  
 Liquid crystalline polymers, Structural  
 characterization 4041  
**Silane**  
 Polyethylene, Peroxide 5447  
**Silane modification**  
 Poly(vinylimidazole), Corrosion  
 inhibition 4780  
**Silica**

- Hydroxypropyl cellulose, Hybrid 5565  
 Polydimethylsiloxane, N.m.r. 2962
- Silicon**  
 Etherification, High-molecular-weight polyethers 1739
- Silicon-containing copolymer**  
 Oxygen permeability, Glass transition temperature 1268
- Silicon-containing oligomer**  
 Anionic polycondensation, Photocrosslinking 4228
- Silicone rubber**  
 EPDM rubber, Functionalization 3423
- Silk**  
 Fibroin, Moulding 2355
- Silk fibroin membrane**  
 Drug transport, Permeability 2853
- Siloxane copolymers**  
<sup>29</sup>Si n.m.r., Polydiethylsiloxane 5109  
 Polydiethylsiloxane, <sup>29</sup>Si n.m.r. 5118
- Siloxane modifier**  
 Epoxy resins, Linear thermal expansion 179
- Siloxanes**  
 Macromonomer, Styrene copolymers 4181, 4190
- Silver**  
 Surface enhanced Raman scattering, Acrylonitrile 723
- Single crystals**  
 Photon tunnelling microscopy, Polyethylene 1137  
 Poly(vinyl alcohol), Solid structure 2516
- Size distribution**  
 Topological disorder, Additive sorption centres 1031
- Size exclusion chromatography**  
 Aromatization, Poly (*p*-phenylene) 4133  
 Dual detection, Molecular weight distribution 4799  
 Molecular-mass determination, PEEK-carbon fibre composite 5498  
 Poly(vinyl chloride), Universal calibration 765  
 Sulfonated PEEK, Molecular-mass determination 5491  
 Universal calibration, Steric partition coefficient 1957
- Slow crack growth**  
 Blends, Polyethylene 3619  
 High-density polyethylene, Molecular orientation 1948
- Small-angle neutron scattering**  
 Deuterium labelling, Polyethylene 1846  
 Interaction parameter, Poly(vinyl methyl ether) 2284
- Small-angle scattering**  
 Poly(vinyl chloride), X-ray 2272
- Small-angle X-ray scattering**  
 Amorphous polyurethane, Mechanical spectroscopy 2737  
 Fatigue craze initiation, Polycarbonate 4287  
 Linear polyethylene, Crystallization kinetics 1809  
 PBO fibre, Rigid-rod polymers 5408  
 Sorption, Kevlar 496
- Smart window**  
 Polymer electrolyte, Electrochromic device 3592
- Smectic phase**  
 Planar deformation, Isotactic polypropylene 545
- Sodium 1-octanesulfonate**  
 Poly(allylammonium) chloride, Aggregate 2004
- Sodium polyacrylate gel**  
 Hydrogel, Bound water 5626
- Softening effect**  
 Polydimethylsiloxanes, Thermal ageing 3206
- Sol-gel-glass transformations**  
 Epoxy resins, Curing behaviour 5269
- Solid phase reaction**  
 Sulfonation, Nylon-6 2012
- Solid polymer electrolytes**  
 Block copolymer, Amphiphilic copolymer 4914  
 Thiodipropionic acid polyesters, Lithium battery 845
- Solid polymers**  
 Soebed water, FTi.r. spectroscopy 5637  
 Solid-state <sup>13</sup>C n.m.r.  
 Copolymer composition, Water-soluble polymers 935
- Solid-state <sup>1</sup>H n.m.r.**  
 Styrene-butadiene rubber, Filler rubber interactions 4293
- Solid-state n.m.r.**  
 High-pressure crystallization, Polyethylene 1171  
 Random copolyester, Isomorphism 1931
- Solid-state polycondensation**  
 Polycarbonate, Morphology 3789
- Solid structure**  
 Poly(vinyl alcohol), Single crystals 2516
- Solubility**  
 Vinyl alcohol oligomers, Contact angles 444
- Solubility properties**  
 Polyzwitterion, Temperature effects 1462
- Solubilization**  
 Phase homogeneity, Polymer blends 4334
- Soluble polyimides**  
 Optical transparency, Alicyclic dianhydride 4203
- Solution**  
 Polydiacetylene, Chain conformation 4787
- Solution cyclization**  
 Fluorinated polybenzoxazoles, Acid catalyst 5046
- Solution properties**  
 Polyphosphazenes, Characterization 819  
 Poly(*p*-*t*-butylstyrene), Light scattering 600  
 Polysiloxanes, Rheology 3282
- Solvated crystallites**  
 Polyacrylonitrile, Water plasticization 967
- Solvation behaviour**  
*N*-based polyelectrolytes, Synthesis 2874
- Solvent diffusion**  
 Natural rubber, Vulcanizing systems 5504
- Sorbed water**  
 Solid polymers, FTi.r. spectroscopy 5637
- Sorption**  
 Small-angle X-ray scattering, Kevlar 496
- Space**  
 Hydrophilic character, Equilibrium water content 4247
- Spectroscopy**  
 Polypropylene, Plasma treatment 5590  
 Poly(tetrafluoroethylene), Negative Poisson ratio 5130  
 Surface modification, PVDF 5560
- Spherulites**  
 Nylon-66, Aggregate 5300  
 Nylon-66, Crystallization 5293  
 Poly(4-methylpentene-1), Annealing 1855
- Spherulitic growth**  
 Interspherulitic limited, PEO-resorcinol complex 1586
- Spherulitic size**  
 Morphology, Poly(vinylidene fluoride) 5202
- Spin coating**  
 Poly( $\gamma$ -benzyl-L-glutamate). Structure 5611
- Spin diffusion**  
 Urea-formaldehyde resins, <sup>15</sup>N CP/MAS n.m.r. spectra 1621
- Spin labelling**  
 Immiscible blends, Poly(methacrylate)s 3384  
 Poly(*N*-isopropyl acrylamide), Sulfonic acid 4852
- Spinning rheology**  
 Hollow-fibre membranes, Gas separation 5327
- Spinodal decomposition**  
 Morphology, Ternary polymer blends 2243  
 Poly(ethylene-*co*-vinyl acetate), Methyl methacrylate 4015  
 Polymer blend, Computer simulation 3774
- Spin probes**  
 E.p.r., Molecular motions 2725
- Spiro[2,4]hepta-4,6-diene**  
 Conducting polymers, Electron hopping 2467
- Spiropolymers**  
 Ketals, Transketalization 5765
- Spreading**  
 Bacterial polyesters, Polyalkanoates 435
- Stabilization**  
 Poly(vinyl chloride), Thermal degradation 336
- Stabilizer**  
 Dispersion polymerization, Polypyrrole 377  
 Polypyrrole, Electropolymerization 1754
- Stable-law density**  
 Convergence acceleration, Series expansions 1880
- Star copolymer**  
 Macromonomer, Microphase separation 4907  
 Microphase separation, Face-centred cubic lattice 4712
- Star-shaped block copolymers**  
 Preparation, Morphology 2862
- Static light scattering**  
 Poly(2-ethyl-2-oxazoline), Poly(2-methyl-2-oxazoline) 3587
- Statistical copolymers**  
 Graft copolymerization, Microstructure 1535
- Staudinger reaction**  
 Polyphosphazenes, Phosphoranimines 5005
- Steady-state strain**  
 Compression creep, ABS polymers 4110  
 Impression creep, ABS polymers 4103
- Stereochemical structures**  
 Polyacrylates, Two-dimensional n.m.r. 3389
- Steric copolymer**  
 Tacticity, Glass transition temperature 5555
- Steric partition coefficient**  
 Size exclusion chromatography, Universal calibration 1957
- Steric stabilization**  
 Polystyrene, Dispersion polymerization 5366
- Steric strain**  
 Cyclic oligocarbonates, X-ray structures 4704
- Storage modulus**  
 Oscillatory shear flow, Loss modulus 93
- Strain**  
 Crystal modification, Poly(tetramethylene succinate) 3338
- Strain energy**  
 Rubber theory, Elastomers 1819
- Strain hardening modulus**  
 Stress-strain curves, Thermoplastics 3858
- Strain-rate effects**  
 Nylon-rubber blend, Impact behaviour 315
- Stress-Optical law**

## Keyword index

- Birefringence, Polymer melt 734  
**Stress relaxation**  
 Non-linear viscoelasticity, Fibres 2108  
**Stress-strain curves**  
 Polymer networks, Relaxation glass transition 2348  
 Strain hardening modulus, Thermoplastics 3858  
**Stress transfer**  
 Molecular chains, Polymer deformation 3848  
**Structural analysis**  
 Polyamide-6,6, Photoacoustic FTi.r. 2321  
 Succinic anhydride, Pullulan 2656  
**Structural changes**  
 Poly(hexafluoro-1,3-butadiene), Heat treatment 3474  
**Structural characterization**  
 Conducting polypyrrole, <sup>13</sup>C CP/MAS n.m.r. 1593  
 Liquid crystalline polymers, Side-chain poly(vinyl ether)s 4041  
**Structural modification**  
 Optical waveguides, Ion beam irradiation 2447  
**Structural relaxation**  
 Glass transition temperature, Amorphous polymer blends 1688  
**Structure**  
 Characterization, Nylon-7 66  
 Compatibilization, Ternary blends 1433  
 Polyacetylene, Precursor 403  
 Polyamide, Polymorphism 3568  
 Poly( $\gamma$ -benzyl-L-glutamate), Spin coating 5611  
**Structure development**  
 Phase separation, Blends 257  
**Structure-property relations**  
 PMR-type polyimide resins, Diamino(diaryl)methanes 2378  
**Structure refinement**  
 Poly(tetrafluoroethylene), Neutron scattering 3139  
**Styrene**  
 Multiblock copolymers, Isoprene 246  
 Radical copolymerization, Citraconic anhydride 2302  
**Styrene-acrylonitrile**  
 Terpolymerization, Chromium acrylate 4665  
**Styrene-butadiene**  
 Crystal transformation, Block copolymer 4238  
 Polyethylene blends, Styrene-isoprene 2542  
**Styrene-butadiene copolymer**  
 Polystyrene, Blend morphology 5051  
**Styrene-butadiene rubber**  
 Solid-state <sup>1</sup>H n.m.r., Filler rubber interactions 4293  
**Styrene copolymers**  
 Macromonomer, Siloxanes 4181, 4190  
**Styrene-isoprene**  
 Polyethylene blends, Styrene-butadiene 2542  
**Substituent effect**  
 Cyclopolymerization, Ether dimers 3317  
**Substituted polyacetylene**  
 Tensile property, Dynamic viscoelastic property 3456  
**Succinic anhydride**  
 Pullulan, Structural analysis 2656  
**Sulfobetaine**  
 Cationic polymer, N.m.r.spectroscopy 2210  
**Sulfonated PEEK**  
 Molecular-mass determination, Size exclusion chromatography 5491  
**Sulfonated polystyrene**  
 Ionomers, Mechanical behaviour 5478  
**Sulfonation**  
 PEEK, Kinetics 3237  
 Solid phase reaction, Nylon-6 2012  
**Sulfonic acid**  
 Poly(*N*-isopropyl acrylamide), Spin labelling 4852  
**Sulfonyl**  
 Conversion, Poly(phenylene vinylene) 1561  
**Sulfur vulcanization**  
 Crosslinking, Microbial polyester 4368  
**Sulfuric acid**  
 Cellulose, Saccharification 50  
**Supercritical fluid**  
 Phase separation, Polymeric materials 3998  
**Surface**  
 Liquid crystal polymers, Orientation 207  
**Surface dynamics**  
 Polydimethylsiloxanes, Surface morphology 3173  
**Surface enhanced Raman scattering**  
 Silver, Acrylonitrile 723  
**Surface energy**  
 Poly(ethylene terephthalate), Wettability 4611  
**Surface functionalization**  
 Grafting, Medical devices 2844  
**Surface graft polymerization**  
 Aramid fibre, Argon plasma treatment 5336  
**Surface modification**  
 Polytetrafluoroethylene, Microwave plasma 2472  
 PVDF, Spectroscopy 5560  
**Surface morphology**  
 Polyethylene, Oriented films 2458  
 Polydimethylsiloxane, Surface dynamics 3173  
 Polyisoimide, Adhesive properties 4022  
**Surface orientation**  
 Poly(ethylene terephthalate), Contact angle hysteresis 262  
**Surfaces**  
 Blends, Wetting 2160  
**Surface stress**  
 Paraffin, Polyethylene 1923  
**Surfactants**  
 Composites, Microemulsions 4606  
**Suspension polymerization**  
 Poly(vinyl alcohol), Dispersant 2201  
 Poly(vinyl alcohol), Vinyl chloride 5773  
 Poly(vinyl chloride), Monomer conversion 1526  
**Swelling**  
 Inhomogeneous hydrogels, Phase transition 4416  
**Synchrotron radiation**  
 Quenched polypropylene, Monoclinic polypropylene 1352  
 Time resolved, PEEK 3875  
**Syndiotacticity**  
 Blend, Poly(vinyl alcohol) 1970  
**Syndiotactic polypropylene**  
 Antichiral crystal, Crystallization 1884  
 Linear crystal growth rate, Morphology 5194  
**Syndiotactic polystyrene**  
 Thermoreversible gel, Elastic response 4243  
 Xylene, Phase behaviour 1694  
**Synthesis**  
 Acetylene-terminated monomers, Characterization 4462  
 Aromatic-aliphatic polyesters, Odd-even effect 4697  
 Benzothiazole pendent groups, Aromatic polyamides 872  
 Characterization, Comb-shaped polyesters 4449  
 Characterization, Poly(diarylsiloxane)s 4197  
 Diblock copolymers, Morphology 5024  
 LC association chain polymers, Characterization 4550  
 Macrocyclic Hydrocarbon 1109  
 New polymer materials, Applications 4484  
*N*-based polyelectrolytes, Solvation behaviour 2874  
 Oligoethers, N.m.r. spectroscopy 2867  
 Poly(allyltrimethylsilane), Characterization 4648  
 Poly(3,4-ethylenedioxythiophene), Electrochromic properties 1347  
 Poly(aryl ether ketone)s, Poly(aryl ether sulfone)s 415  
 Poly(ether imide)s, Thermotropic behaviour 5577  
 Poly(*p*-phenylene vinylene), Block copolymers 391  
 Poly(lactones), Telechelic polyesters 4998  
 Polybisoxazoles, Characterization 198  
 Polysilanes, Homogenous Wurtz coupling 4924  
 Polysilsequioxanes, Tetrahydropranyl 3131  
 Polythiophene derivatives, Conducting polymers 4057  
 Thermoplastic polyamides, Thermal properties 4456  
 Thiophene-based polymers, Imide-arylene ether copolymers 3782  
**t-Butyl acrylate**  
 Living character, Block copolymer 4011  
**T.s.d.c. measurements**  
 Novolac phenol-formaldehyde, Beta relaxation 5536  
**Tacticity**  
 Isotactic polypropylene, Fractionation 1673  
 Steric copolymer, Glass transition temperature 5555  
**Tacticity distribution**  
 Polypropylene, Fractionation 580  
**Tantalum catalyst**  
 Poly(diarylacetylene), Metathesis polymerization 4920  
**Telechelic**  
 Bisphenol-A, Polycarbonate 371  
 Polyisobutylene, End-group modification 1774  
**Telechelic polyesters**  
 Poly(lactones), Synthesis 4998  
**Telechelics**  
 N.m.r.,  $\alpha,\beta$ -dicarboxylatopolybutadiene 3811  
**Temperature**  
 Polycondensation, Ionomer 1769  
**Temperature dependence**  
 Graft-copolymerized structure, Elongational viscosity 4472  
**Temperature effects**  
 Polyzwitterion, Solubility properties 1462  
**Temperature-time effects**  
 Nylon-rubber blend, Impact behaviour 323  
**Template model**  
 Epitaxial growth, secondary nucleation 3373  
**Tensile properties**  
 Poly(*p*-phenylene terephthalamide), Ionization 1216  
**Tensile property**  
 Substituted polyacetylene, Dynamic viscoelastic property 3456  
**Tensile strength**  
 Triblock copolymer, Radiation 3345  
**Terbium salt**  
 Poly(ether ether ketone), Fluorescence 1092  
**Ternary blends**  
 Closed loop, Phase diagram 1033  
 Compatibilization, Structure 1433  
 Copolymers, Flory-Huggins theory 5518

- Ternary epoxy blends**  
 Mechanical properties, Morphology 5283
- Ternary phase diagrams**  
 Polyethylene blends, Phase separation 1802  
 Polyethylene, Modelling 4408
- Ternary polymer blends**  
 Blend miscibility, Phase behaviour 1051  
 Morphology, Spinodal decomposition 2243
- Ternary solutions**  
 Polyacrylonitrile, N.m.r. characterization 1629
- Ternary systems**  
 Blends, Hydrogen bonds 5379
- Terpolymer**  
 Blends, Copolymer 1473
- Terpolymerization**  
 Styrene-acrylonitrile, Chromium acrylate 4665
- Tetragonal structure**  
 Morphology, Block copolymers 3786
- Tetrahydrofuran**  
 Living cationic polymerization, Pyridinium ions 4443
- Tetrahydropyranil**  
 Polysilsesquioxanes, Synthesis 3131
- Texture evolution**  
 Shear deformation, HDPE 3427
- Thermal ageing**  
 Ethylene-propylene copolymers, Degradation 3795  
 Polybutadiene, Hydroxyl termination 2568  
 Polydimethylsiloxanes, Softening effect 3206
- Thermal analysis**  
 Blends, Hydrogen bonding 4423
- Thermal conductivity**  
 Epoxy curing, Gel point 5369
- Thermal degradation**  
 Polyester, Controlled release 1222  
 Poly(vinyl chloride), Stabilization 336
- Thermal expansion coefficient**  
 Block copolymers, Roll-casting 4115
- Thermally stable polymers**  
 Aromatic polyamides, Modified polyisophthalamides 1986  
 Cyano-substituted polyamides, Modified polyamides 630
- Thermally stimulated currents**  
 Dielectric relaxation, Liquid-crystal polymer 5170  
 Dielectric relaxation, PDMPs 151  
 Liquid crystal polymer, Dielectric relaxation 3561  
 Poly(vinyl acetate), Dipolar relaxation 1253
- Thermal/mechanical properties**  
 Poly(THF) viologen ionene, Microphase-separated structure 2672
- Thermal polymerization**  
 Copolymerization, Co-oligomerization 4168  
 Heat resistance, Polyimide 3305
- Thermal properties**  
 Chitin, Hydroxypropyl chitin 3212  
 Degradation, Glass transition temperature 4474  
 Polyurethane elastomer, Poly( $\gamma$ -methyl-L-glutamate) 3804  
 Thermoplastic polyimides, Synthesis 4456
- Thermal shrinkage**  
 Poly(vinyl chloride)fibres, Crosslink density 3217
- Thermal stability**  
 Cyano-substituted polyamides, Crosslinking 839  
 Thermoset polyimide, Disubstituted acetylene 4874
- Thermal treatment**  
 Electrochemical properties, Conducting polymers 2372
- Thermodynamics**  
 Crosslinks, PVA hydrogels 5737  
 Polydimethylsiloxane, LCST behaviour 3075
- Thermoelasticity**  
 Segmented polyurethane-ureas, Phase morphology 1730
- Thermogravimetric analysis**  
 Copolymers, Vinyl acetate 3348
- Thermolysis**  
 Polyureas, Oligomerization 3766
- Thermo-oxidation**  
 Hydroperoxidation, LLDPE 433
- Thermoplastic elastomer**  
 PE/EPDM blends, Vulcanization 3958
- Thermoplastic polyimides**  
 Morphology, Electron microscopy 5618  
 Synthesis, Thermal properties 4456
- Thermoplastics**  
 Strain hardening modulus, Stress-strain curves 3858
- Thermoplastic-thermoset resin**  
 Positron annihilation, Amine-cured epoxy resin 5319
- Thermoreversible gel**  
 Syndiotactic polystyrene, Elastic response 4243
- Thermoset polyimide**  
 Disubstituted acetylene, Thermal stability 4874
- Thermostat**  
 Network, Cure chemistry 291
- Thermothickening**  
 Associative polymer, Water-soluble polymer 2624
- Thermotropic behaviour**  
 Poly(ether imide)s, Synthesis 5577
- Thermotropic copolyester**  
 Molecular modelling, X-ray diffraction 5603
- Thermotropic LC polyesters**  
 Morphology, Two-dimensional mesogens 699
- Thermotropic liquid crystalline polymers**  
 Blends, Poly(ethylene terephthalate) fibres 4303
- Thermotropic polydibenzoates**  
 Phase behaviour, Dynamic mechanical relaxations 3686
- Thermotropic polyesters**  
 Crystallization, Unit sequences 4545
- Theta temperature**  
 Equation-of-state parameters, Polymer-solvent interaction 3356
- Thickening**  
 Unsaturated polyester resins, Curing 5259
- Thin film**  
 Polystyrene-polybutadiene blend, Lamellar structure 2019
- Thiodipropionic acid polyesters**  
 Solid polymer electrolytes, Lithium battery 845
- Thiophene-based polymers**  
 Imide-arylene ether copolymers, Synthesis 3782
- Three-dimensional Ising model**  
 Polymer blend solution, Critical behaviour 1038
- Time-domain reflectometry**  
 Dielectric relaxation, Poly(propylene oxide) 166
- Time resolved**  
 Synchrotron radiation, PEEK 3875
- Titanium n-butoxide**  
 Magnesium chloride, Magnesium-titanium catalyst 1287
- Topological disorder**  
 Additive sorption centres, Size distribution 1031
- Torsional angles**  
 Linear epoxy system, Conformational analysis 4326
- Toughening**  
 Blends, Interfacial bonding 988  
 Poly(hydroxybutyrate), Crystallization 4598
- Toughness**  
 Deformation, Diluted entanglement networks 2991  
 Deformation, Network density 2774  
 Deformation, Rubber cavitation stress 2995  
 Model networks, Crosslink density 2793
- Toughness improvement**  
 Modified epoxy resin, Epoxy-thermoplastic blend 558
- Tracer diffusion coefficient**  
 Mutual diffusion coefficient, Fast theory 5706
- Transesterification**  
 Copolymers, Alcohols 3082  
 Phosphorous compounds, Direct esterification 4006  
 Polymer blends, Compatibilization 758
- Transformation**  
 High performance polymers, Aromatic polyamides 2218
- Transition**  
 Relaxation, Glassy polymer 791
- Transition temperatures**  
 Inverse gas chromatography, Liquid crystalline polymers 584
- Transketalization**  
 Spiropolymers, Ketals 5765
- Transmission electron microscopy**  
 UHMWPE, Plastic deformation 5217
- Trans-1,4-polybutadiene**  
 Polyethylene, Blends 729
- Transport**  
 Membrane, Amino Acid 204
- Triblock copolymers**  
 Radiation, Tensile strength 3345  
 Viscosity, Aqueous solutions 1100
- Triflate**  
 Ionic association, Polyether 235
- Trifluoroacetic anhydride**  
 Plasma polymerization, Allyl alcohol 4382
- Trifluoroethylene**  
 Vinylidene fluoride, Molecular motion 2072
- Trifluoromethylated PEEK**  
 Poly(ether ether ketone), Amorphous PEEK 5124
- Trifluoromethylation**  
 Poly(ether sulfone)s, Copolymers 2432
- Two-colour irradiation**  
 Photochemical hole-burning, Donor-acceptor electron transfer 3915
- Two-dimensional mesogens**  
 Thermotropic LC polyesters, Morphology 699
- Two-dimensional networks**  
 Epoxy resins, Ammonium salts 3635
- Two-dimensional n.m.r.**  
 Stereochemical structures, Polyacrylates 3389
- Two-site model**  
 Polypropylene, External donor 339
- Tyrosine-leucine**  
 Polyamides, Poly(amide-ester) 663
- UHMWPE**  
 Melt structure, Pressure annealing 5210
- UHMWPE**  
 Plastic deformation, Transmission electron microscopy 5217
- U.v. curing of acrylic coatings**  
 Polymereic photoinitiators, Microwave dielectrometry 5413
- U.v. spectroscopy**  
 Polymer blends, Phase separation 882
- Ultrasonic degradation**  
 Water-soluble polymers, Cavitation 30
- Ultrasound**

## Keyword index

- Membranes, Electromagnetic shielding 430
- Unit sequences**  
Thermotropic polyesters, Crystallization 4545
- Universal calibration**  
Poly(vinyl chloride), Size exclusion chromatography 765  
Size exclusion chromatography, Steric partition coefficient 1957
- $\alpha, \beta$ -Unsaturated esters**  
Chlorodiphenylphosphine, Epoxide 2907
- Unsaturated polyester resins**  
Low-profile additives, Rheokinetics 2397  
Low profile additive, Shrinkage control 3011  
Thickening, Curing 5259
- Urea-formaldehyde resins**  
<sup>13</sup>C CP/MAS n.m.r., Reaction mechanisms 1602  
<sup>15</sup>N CP/MAS n.m.r. spectra, Spin diffusion 1621
- VDF-TrFE copolymers**  
Poly(vinylidene fluoride), Crystal packing 5586
- VDF-TrFE copolymers**  
Infra-red spectroscopy, Poling 3612  
Semicrystalline polymers, Ferroelectric phase transition 34
- VF<sub>2</sub>-VF<sub>4</sub> copolymers**  
PVF<sub>2</sub>, Cocrystallization 4804
- Vinyl acetate**  
Copolymers, Thermogravimetric analysis 3348
- Vinyl alcohol oligomers**  
Solubility, Contact angles 444
- Vinyl carbonates**  
Radical polymerization, Kinetics 4819
- Vinyl chloride**  
Poly(vinyl alcohol), Suspension polymerization 5773
- Vinyl ether**  
Photopolymerization, Cationic initiators 217
- Vinyl propionate**  
Emulsion polymerization, Kinetics 2859
- Vinylidene fluoride**  
Trifluoroethylene, Molecular motion 2072
- Vinylpyrrolidinone copolymers**  
Poly(glycidyl methacrylate), N.m.r. characterization 3530
- Viscoelastic properties**  
Atactic polystyrene, Gelation 2180
- Viscoelastic relaxation**  
Dielectric relaxation, Poly(chloroalkyl methacrylate) 3449
- Viscometric constants**  
Molecular weight standards, Gel permeation chromatography 2385
- Viscometry**  
Linear flexible polymers, Conformational transitions 4638  
Polyamide-6, Reactive extrusion 3799
- Viscosity**  
Aqueous solutions, Triblock copolymers 1100  
Ion conductivity, Polydimethylsiloxane 4823, 4834  
Poly(vinyl alcohol), Polymer-ion complex 5716
- Vogel-Fulcher**  
Glass transition, Polymer glass 3827
- Vulcanization**  
PE/EPDM blends, Thermoplastic elastomer 3958
- Vulcanizing systems**  
Solvent diffusion, Natural rubber 5504
- WAXD**  
Crystal structure, Polyamides 878
- Water absorption**  
Polyamide, Glass transition 136
- Water content**  
Fibroin gel, Molecular structure 2197
- Water plasticization**  
Polyacrylonitrile, Solvated crystallites 967
- Water-soluble polymers**  
Ammonium salts, Free-radical polymerization 3503  
Copolymer composition, Solid-state <sup>13</sup>C n.m.r. 935  
Thermothickening, Associative polymer 2624  
Ultrasonic degradation, Cavitation 30
- Water sorption**  
Hydrogel, Differential scanning calorimetry 1997
- Wavy maize starch**  
FTi.r. spectroscopy, Glycerol 4722
- Weak polyelectrolyte**  
Counterion binding, <sup>23</sup>Na n.m.r. 3268
- Wettability**  
Poly(ethylene terephthalate), Surface energy 4611
- Wetting**  
Surfaces, Blends 2160
- Wide-angle X-ray scattering**  
Graft rigid-rod copolymer, Molecular composite 675  
Isotactic polypropylene, Equibiaxial deformation 1359
- Xanthan**  
Hydrogel, Junction zones 1248
- X.p.s.**  
Polypyrrole, Overoxidation 504
- X-ray**  
Imide, Crystal structure 2265  
Poly(vinyl chloride), Small-angle scattering 2272
- X-ray analysis**  
Isotactic poly(methyl methacrylate), Crystal structure 2028
- X-ray diffraction**  
Bacterial polymer, Rietveld technique 4595  
Molecular modelling, Thermotropic copolyester 5603  
Molecular orientation, Isotactic polypropylene 3927  
Polyacrylonitrile, Hexagonal polymorph 4035  
Polycyanoarylether, Crystal/molecular structure 18  
Polymorphism, Poly(aryl ether ketone)s 2290  
Poly(vinyl alcohol) fibre, Amorphous scattering 1369
- X-ray modulus**  
Meridional peaks, Double orientation 2063
- X-ray photoelectron spectra**  
Polyaniline films, Protonation by polymeric acids 3193
- X-ray structures**  
Cyclic oligocarbonates, Steric strain 4707
- Xylene**  
Syndiotactic polystyrene, Phase behaviour 1694
- Yielding**  
Polycarbonate, Necking 3883
- Yield strength**  
Polymer blends, Box models 3631
- Ziegler-Natta catalysts**  
Isotactic polypropylene, Microstructural analysis 2636
- Zirconocene**  
Methylaluminoxane, Polyethylene 808
- Zwitterionomers**  
Radical copolymerization, *N*-butyl acrylate 4669