

Classified contents

- ABA poly(styrene-*b*-isoprene)** films, tensile strength at joints bonded with, 995
- Absorption spectrum** of PTFE in the near mm region by an untuned cavity, 20
- Acids**, supported solid, as polymerization catalysts, 859
- Acrylic esters**, 2-propioxy- and 2-isobutyroxy-, 560
- Active sites**, concentration of, in supported Ziegler-Natta catalysts, 226
- Addition**, degradative, to monomer in the non-classical free-radical polymerization of 1-vinylimidazole, 1227
- , non-solvent, fractional precipitation of polyisobutylene from binary solvent induced by, 461
- Adhesion** to polyethylene and polypropylene, 7
- Adsorption** of a synthetic tanning agent and a sulphonated phenol-formaldehyde novolac by nylon-6, 1439
- , of poly(dimethyl siloxanes) from solution on silica, 56
- , preferential, and viscometric behaviour of poly(4-*tert*-butylphenyl methacrylate) in tetrahydrofuran/chloroform, 1045
- Ageing**, physical, of PMMA and polycarbonate in the region of secondary relaxation, 1199
- Aggregate model** of modulus anisotropy of low-density cellular plastics, 882
- Alicyclic polyformals**, random-coil-configurations of, 465
- Aliphatic epoxy polymers**, diamine cured, ultrasonic properties of some, 736
- Alkyl benzenes**, monosubstituted, a force field for, in normal coordinate analysis of isotactic PS, 1629
- Alternating**, completely-, block polymers, synthesis of, 1299
- Amide group formation** during oxidation of poly(oxyalkylene) derivatives of ethylenediamine, 956
- Amines**, reactions of polyTHF with: 3. Secondary amines, 1081
- , tertiary, reactions with living polytetrahydrofuran, 101, 108
- Aminosulphur compounds**, polymorphic transitions of isotactic PP caused by, 562
- Aminotelechelic polymers**, synthesis of, with the redox system $\text{TiCl}_3/\text{NH}_2\text{OH}$ in hydrochloric aqueous phase: 3. Polymerization of methyl methacrylate. Relation functionality/molecular weight/yield, 513
- Amorphous phase** and fold surface of a semicrystalline polymer, modelling the, the Gambler's Ruin method, 1466
- , polymers, molecular interpretation of T_g , the rubbery-viscous 'transition' temperature of, 774
- Analysis**, end group, determination of crosslink density by, after partial degradation: 1. Theory, 1214
- , end group, determination of crosslink density by, after partial degradation: 2. Experimental application to keratin, 1219
- , normal coordinate, of isotactic PS: 1. A force field for monosubstituted alkyl benzenes, 1629
- , normal coordinate, of isotactic PS: 2. The normal modes and dispersion curves of the polymer, 1633
- Anisotropy**, modulus, of low-density cellular plastics: an aggregate model, 882
- , optical and disclinations in a mesomorphic copolyester, observation of, 437
- , of poly(vinyl alcohol) films in the u.v. and i.r. regions of the spectrum, 1655
- Annealing behaviour**, solution, and solution crystallization behaviour of nylon-6,6 crystals, 43
- , induced morphological changes in segmented elastomers, 1428
- , isothermal and swelling studies on PE from dilute solution by SAXS, 1590
- , of nodular linear PE crystallized from the glass, 701
- Aromatic polymers**, transient decay studies of photophysical processes in; intramolecular excimer formation in homopolymers of 1-vinylnaphthalene, 2-vinylnaphthalene and 1-naphthylmethacrylate, 427
- Artefacts**, potential, in the determination of the optical anisotropy of macromolecules by light scattering, 1301
- Asphalt**, melted, copolymerization reaction in, investigations on, 1415
- Association of stereoregular PMMA**: 5. Stereo-complex formation in dilute solutions, 1705
- Ball-milling** polyethylene powder with nitrosobenzene, detection and identification of spin-trapped radical produced by, 132
- Battery**, an all-polymeric solid state, 1454
- β phase** of poly(vinylidene fluoride), crystallization of the, from the melt, 412
- Biodegradable polymers** for use in surgery: poly(glycolic)/poly(lactic acid) homo and copolymers: 2. *In vitro* degradation, 494
- , for use in surgery — poly(ethylene oxide)/poly(ethylene terephthalate) (PEO/PET) copolymers: 2. *In vitro* degradation, 499
- Bisphenol A polycarbonate**, extruded at high shear stress, degradational effects on, 836
- Birefringence**, intrinsic flow, of a rigid rod, the effect of hydrodynamic interaction of the, 1441
- Blends**, polymer, Poisson ratio of, effects of adhesion and correlation with the Kerner packed grains model, 619
- , PVC—polyester, miscibility in, 918
- Block**, SBS, copolymers, concentrated solutions of, in solvent mixtures, 395
- Bonds**, backbone triple, photocrosslinkable polymers containing, 434
- Calibration** in g.p.c.: primary, universal and empirical methods, 505
- Calorimetric study** of rubber elasticity, 75
- Caprolactam** (ϵ -), kinetics of hydrolytic polymerization of, formation of cyclic dimer, 273
- Catalysis**, phase transfer, polyester synthesis by, 558
- , phase transfer, polymerization involving *m*-xylylene in polyester synthesis, 272
- Catalyst**, magnesium-reduced titanium chloride system used in polymerization of styrene, 255
- system $\text{ZnEt}_2/\text{CoCl}_2$ -pyridine, stereospecific polymerization of *N*-vinyl carbazole by, 1319
- system, $\text{Ti}(\text{OC}_4\text{H}_9)_4/\text{Al}_2(\text{C}_2\text{H}_5)_3\text{Cl}_3$ obtained PPs, M.wt. distribution and stereoregularity of, 469
- Catalysts**, highly active coordination, for polymerization of α -olefins: 2. Thermal investigations of the support system anhydrous magnesium chloride—ethyl benzoate, 818
- , polymer-supported phase transfer, substrate selectivity effects involving, 431
- , polymerization, supported solid acids as, 859
- , polymerization, titanium chloride—alkylmagnesium, effects of transformation to violet allotropes, 1558
- Cellulose acetate**, diffusion of water vapour in: 1. Differential transient sorption kinetics and equilibria, 768
- acetate, diffusion of water vapour in: 2. Permeation and integral sorption kinetics, 1058
- nitrate, grafting of methyl methacrylate onto, initiated by benzoyl peroxide, 491
- nitrates, partial degrees of substitution in, determined by means of ^{13}C magnetic resonance studies, 1112
- wet, and its derivatives, dielectric studies of proton migration and relaxation in, 1048
- Chain addition**, batch, polymerizations, minimum end time policies in, 1593
- conformation and phase structure of polyacrylonitrile, a broad-line n.m.r. investigation of, 1649
- conformational defects in polyvinylidene fluoride, 1612
- contour concentration and the entanglement interactions in polymers, 1329
- dimensions, excluded, and network size in g.p.c., 1561
- end radicals, spin-trapped, located on the PE surface, e.s.r. study of annealing and melting effects on the molecular motion of, 896
- entanglements, trapped, experimental evidence for: their influence on macroscopic behaviour of networks, 1504
- flexibility of the polythiolmethacrylates: poly(phenyl thiolmethacrylate) and poly(*o*-methyl phenyl thiolmethacrylate), 63
- folding in melt crystallized PE?, 718
- folding in melt crystallized PE: 2. Low molecular weight polymers, 1003
- form factors, measurements of, by SANS from PS blends containing high concentrations of labelled molecules, 886
- macromolecular, dynamics of, ^{13}C spin relaxation study of short-chain polystyrenes in deuterio-chloroform solution, 321
- motion, single, observation in a polymer melt, 163
- structure, extended-, for isotactic PS: additional X-ray diffraction and calorimetric results, 1161
- trajectory in bulk-crystallized isotactic PS, neutron scattering investigations on the effect of crystallization temperature and thermal treatment on, 313

Classified contents

- Chains, macromolecular, excimer formation of poly(α -methylstyrenes) in solution, 235**
- , persistence lengths and unperturbed dimensions of, of maleic anhydride and maleic acid copolymers in dilute solution, 231
 - , polymer, orientational distribution of, studied by ^2H n.m.r. line shapes, 1516
 - , randomly crosslinked, hydrodynamic radius and dynamic scattering from, 1621
 - , recrystallized, refolding of, in block copolymers, use of freeze-fracture electron microscopy to study, 1129
- Characterization and synthesis of tetramethyl-*p*-silphenylenesiloxane/dimethylsiloxane, 1607**
- of polyurethane elastomers by ^{13}C n.m.r. spectroscopy, 1205
 - of the phase structure of an amine-cured rubber-modified epoxy, 87
- Charge and discharge of organic dye-doped polymeric matrix, 765**
- transfer complex between maleic anhydride and pyridine, 129
- Chemical modification of chloromethylated crosslinked PS via phase transfer catalysed Wittig reactions, 1153**
- Chiroptical properties, synthesis and fluorescence emission spectra of copolymers of *N*-vinylcarbazole and optically active fumarates, 1088**
- Chitin membranes, preparation and permeation characteristics of, 1155**
- Circular dichroism and optical rotary dispersion and protonation of amide-containing polymers in strong acid media: poly(—)1,2-diaminopropane sebacamide, an optically active nylon-type polyamide, 1683**
- CNDO/2 calculation of the conformational stability of poly(trimethylene oxide), 624**
- Concentration and temperature dependence of diffusion coefficient in dilute solutions, 1169**
- dependence of diffusion coefficient at various molecular weights and temperatures, 1165
- Conditioning procedure, rapid, of hygroscopic test pieces by humidity cycling, 1136**
- Conductivity, electron induced (surface), of fluorinated ethylene-propylene, 865**
- , thermal, of polymers: a new correlation, 867
- Conformation, local, of PMMA from WAXS, 175**
- Conformational analysis of poly(MDI-butandiol) hard segment in polyurethane elastomers, 202**
- and X-ray diffraction analysis of MDI-propandiol and MDI-ethylene glycol hard segments, structure of polyurethane elastomers, 1534
 - effects on melting point depression of atactic PP and ethylene-propylene copolymers, 647
 - stability of poly(trimethylene oxide) by the CNDO/2 calculation, 624
- Compliance, steady-state shear, of regular star polymers, 1603**
- Complex, charge transfer, between maleic anhydride and pyridine, 129**
- formation between poly(vinyl alcohol) and borate ion, 1456
- Complexes, copper(II), polystyryl-1,5-naphthyridine and polystyryl-pyrido [2,3-*b*] pyrazine and some of their, preparation of, 1007**
- , polyvinylpyrrolidone-syndiotactic polymethacrylic acid, formation of, in dimethylformamide, 1709
 - , some alkali metal ion-poly(ethylene oxide), a double helical model for, 1305
- Complex bases: 12. Application to the anionic polymerization of diene monomers, 1425**
- , new application to solution anionic polymerizations of vinyl monomers, 347
 - , solid, application to the bulk anionic polymerizations of vinyl monomers, 356
- Composite, PVC-Cu, dilatometric studies on, 142**
- Compressional behaviour of Kevlar fibres, 960**
- Copolyamides, crystallization of, under elevated pressure, 792**
- Copolyester, mesomorphic, observation of disclinations and optical anisotropy in a, 437**
- Copolyesters, aliphatic-aromatic: synthesis and crystallization studies, 1522**
- Copolymer, alternating, of ethylene and chlorotrifluoroethylene, molecular dynamics of, of a crystal-crystal phase transition in, using the Raman active longitudinal acoustical mode (LAM), 890**
- , block, synthesis, new perfectly difunctional organolithium initiators for: Synthesis of dilithium initiators in the absence of polar additives, 1724
 - latex, cationic, preparation and characterization of: 2. Copolymerization of styrene with 4-vinylpyridine in an emulsifier-free aqueous medium, 658
 - , multiblock, tetramethyl-*p*-silphenylene siloxane/dimethylsiloxane, synthesis and characterization of, 1607
 - of *n*-butyl isocyanate and *n*-nonyl isocyanate, rigid backbone polymers, dielectric relaxation of isotropic and lyotropic solutions of a, 1361
 - PE-styrene, grafted, structural changes in the, 590
 - , poly(methyl methacrylate-ethyl acrylate), stress cracking behaviour of, 539
 - , polystyrene/poly(ethylene oxide) diblock, pulsed n.m.r. relaxation study of, evidence for interaction at phase boundary, 221
 - reactivity ratios, use of n.m.r. data to calculate, 740
 - , SBR, determination of sequence length distribution in, by ozonolysis-g.p.c. method, 1721
- Copolymers and homopolymers, poly(glycolic)/poly(lactic acid), biodegradable polymers for use in surgery: 2. *In vitro* degradation, 494**
- , binary, from solution non-solvent mixtures in relation to copolymer structure and polymer-solvent interactions, phase separation of, 1391
 - , block, of styrene and isoprene in the solid state, SANS investigation of, 581
 - , block, polysulphone-arylate, 3
 - , block, prepared by anion to free radical transformation process: 2. Homolytic scission of the C-Pb bond of lead trialkyl-terminated polymers both thermally and by transition metal salts, 1076
 - , block, synthesis via anionic to Ziegler-Natta transformation reaction, 1316
 - , block, use of freeze-fracture electron microscopy to study the refolding of crystallized chains in, 1129
 - , concentrated SBS block, solutions in solvent mixtures, 395
- , ethylene-propylene, and atactic PP, conformational effects on melting point depression of, 647
 - , graft and mixtures of PS-poly(2,6-dimethyl-1,4-phenyleneoxide), pyrolysis of, 1236
 - , graft, vinyl polymer-poly(α -amino acid), synthesis and structure of, 1407
 - , maleic acid, in aqueous solutions, viscosity and osmotic second virial coefficient of, 1500
 - , multiblock, containing poly(dimethyl siloxane) blocks, synthesis and characterization, 663
 - , narrow composition range, produced from comonomers of widely differing reactivities by a monomer feed system, 342
 - of (—)-methyl acrylate and *N*-methacryloylhydroxylamine versus chiral esters, stereoselectivity of, studies with microgels as matrices for molecular receptor and catalytic sites, 946
 - of poly(epichlorohydrin-*g*-styrene), living anionic synthesis and characterization of, 1104
 - of tetrafluoroethylene and hexafluoropropylene, disorder in the crystal structures of phases (I) and (II), 1496
 - of *N*-vinylcarbazole and optically active fumarates, synthesis, fluorescence emission spectra and chiroptical properties of, 1088
 - of 1-vinyl naphthalene and methyl acrylate, intramolecular excimer formation in, transient decay studies of photophysical studies of, 293
 - , PEO/PET, biodegradable polymers for use in surgery: 2. *In vitro* degradation, 499
 - , random, of methyl methacrylate-acrylonitrile, application of various viscosity theories to the viscosity data of, 924
 - , random vinylidene fluoride-trifluoroethylene, structural study on ferroelectric phase transition of, 1312
 - , styrene-isoprene two-block, optical properties of, 29
- Copolymerization, cationic, existence of a penultimate effect, of 1-isopropenyl naphthalene with styrene, 844**
- , free radical bulk, of styrene-methyl methacrylate, kinetic study of, 488
 - of styrene with methyl methacrylate in the presence of zinc chloride, kinetic study, 391
 - of styrene with 4-vinylpyridine in an emulsifier-free aqueous medium, preparation and characterization of cationic copolymer latex, 658
 - , radical, of methyl methacrylate and styrene, effect of solvent on the termination step for the, 951
 - reaction in melted asphalt, investigations on, 1415
 - reactions, binary and ternary, of tributyltin acrylate and methacrylate with vinyl acetate and *N*-vinylpyrrolidone, forming organotin polymers, 807
- Correlations, theory of, in partly labelled homopolymer melts, 195**
- Cosolvency and temperature, comparison between the effects of, coil expansion, association and phase separation of PMMA in poor solvents acetonitrile and chlorobutane, 1147**
- Cosolvent systems, PMMA—, depression of the critical temperature in, 783**
- Crack growth rate and fracture mode transitions in LDPE, correlation between, 575**

- Cracking**, environmental stress, in HDPE, kinetics of, 682
- , environmental stress, of low molecular weight high density polyethylene, 245
- Crazes**, environmental, stress in, effect of surface tension on, 687
- in oriented PS, microstructure and mechanics of, 691
- Creep** and recovery of ultra high modulus PE, 871
- and recovery of unvulcanized natural rubber, 399
- behaviour, uniaxial tensile, of ultra high molecular weight linear polyethylene, 23
- Cresolic resins**, regular, an attempt to synthesize, through solid-state polycondensation, 1257
- Critical temperature** in PMMA–cosolvent systems, depression of the, 783
- Crosslink density**, determination of, by end group analysis after partial degradation: 1. Theory, 1214
- density, determination of by end group analysis after partial degradation: 2. Experimental application to keratin, 1219
- Crosslinked**, chemically, LDPE, structural investigation of, 1355
- photochromic polymers, photomechanical effects in, 1511
- Crosslinking** in polyethylene initiated by benzoyl peroxide, high pressure effect on, 1400
- of polydimethylsiloxane diol blended with poly(dimethylsiloxane-*b*-styrene-*b*-dimethylsiloxane), 372
- process in polybutadiene modified by epoxidation with dicumyl peroxide, effect of epoxy groups on the, 1073
- Crosslinks**, glass transition elevation of PS by, 1540
- , sequence distribution of, in styrene-cured resins, unsaturated polyesters based on terephthalic acid, 812
- Crystal structure** of the low temperature phase (II) of PTFE, 1480
- structure of the low temperature phase (II) of PTFE, energy calculations of the, 1487
- Crystalline polymers**, fibres made of, from the sonic method, determination of degree of orientation and application of Moseley equation to, 258
- system, liquid poly(γ -butyl-L-glutamate)-butyl acrylate, network polymers from, 117
- Crystallinity** and dual glass transition observations in poly(alkyl itaconates), dialkyl ester series diheptyl to di-eicosyl, 327
- , routine measurements, of polymers by d.s.c., 704
- Crystallization** and melting of isotactic PP, high pressure d.t.a. study on the, 1673
- and morphology of nylon-6,6 crystals. Solution crystallization and solution annealing behaviour, 43
- and synthesis of aliphatic–aromatic copolyesters, 1522
- , eutectic, of poly(L-lactic acid) and pentamethylthiyl tetrabromide, 862
- , flow-induced, production of polyethylene films through, 850
- , inter-lamellar, in poly(tetramethylene oxide), 1349
- kinetics of isotactic PP by i.r. spectroscopy, analysis of the, 1285
- kinetics of isotactic PP, 731
- kinetics of poly(1,3-dioxepane), 477
- of copolyamides under elevated pressure, 792
- of the β phase of poly(vinylidene fluoride) from the melt, 412
- Crystals**, melt-crystallized and solution-grown, of nylon-6 and -6,6, crystalline state extrusion of, 1124
- Cryptates** as counterions, polymerization of ethylene oxide with, 549
- Cyclic and linear polydimethylsiloxanes**, studies of, effect of heat, 377
- Cyclo-octadiene-1,5**, stereoselectivity of the ring-opening polymerization of, 1554
-
- Deconvolution**, spectral, aspects of in structure of PE solid solutions, 907
- Degradation**, partial, determination of crosslink density by end group analysis after: 1. Theory, 1214
- , thermal, of polyacrylamide, adsorbed metal ions as stabilizers for the, 1740
- Degradational effects** on bisphenol A polycarbonate extruded at high shear stress, 836
- Defects**, chain conformational, in polyvinylidene fluoride, 1612
- Deformation**, effect of, on the phase separation in polycapramide-caprolactam system, 1373
- Dialysis** and ultrafiltration characteristics of cellulose nitrate–poly(vinyl pyrrolidone) polymer blend membranes, 829
- Dielectric relaxation** in antiplasticized poly n-butyl methacrylate system, 1211
- relaxation of isotropic and lyotropic solutions of a copolymer of n-butyl isocyanate and n-nonyl isocyanate, rigid backbone polymers, 1361
- studies of proton migration and relaxation in wet cellulose and its derivatives, 1048
- Diffusion coefficient**, concentration dependence of, at various molecular weights and temperature, 1165
- coefficient, temperature and concentration dependence of, in dilute solutions, 1169
- controlled decay of radicals and α -relaxation in PE and polyoxymethylene, relation between, 1377
- in network polymers: model development and evaluation, 1658
- in polyacrylamide gels, 185
- in structured polymers, on the role of penetrant structure in, 1665
- mechanics of the system PMMA–methanol, 627
- of water vapour in cellulose acetate: 1. Differential transient sorption kinetics and equilibria, 768
- of water vapour in cellulose acetate: 2. Permeation and integral sorption kinetics, 1058
- D.s.c.**, routine crystallinity measurements of polymers by, 704
- studies on the T_g of polyhydroxystyrene derivatives containing sorbed water, 473
- D.t.a.**, high pressure, study on the melting and crystallization of isotactic PP, 1673
- Dilatometric studies** on PVC–Cu composite, 142
- Dimensions**, unperturbed, of polyacrylamide in salt–water–methanol mixtures, 609
- Diphant** (10,10'-Diphenyl-bis-9-anthrylmethyloxy), a new and convenient fluorescence molecule for probing molecular motions in bulk polymers, 1309
- Dipole moment** of poly-*p*-chlorostyrene, 1464
- Discharge**, thermally stimulated, and dark current in PS, effect of electrode material on, 1645
-
- Disclinations** and optical anisotropy in a mesomorphic copolyester, observation of, 437
- Disorder** in the crystal structures of phases I and II of copolymers of tetrafluoroethylene and hexafluoropropylene, 1496
- Dispersion curves** and the normal modes in the normal coordinate analysis of isotactic PS, 1633
- , polymer, concentrated, particle interaction in, rheological study of, 847
- Dissociation equilibria**, ion pair, for iodonium and sulphonium salts useful in photoinitiated cationic polymerization, 143
- Double helical model** for some alkali metal ion–poly(ethylene oxide) complexes, 1305
- Drift mobility** determination using surface-charge decay technique in polyvinylidene fluoride (PVF₂), 1642
- Dyeing** of sulphonated PS films by ion exchange with cationic dyes, chemical modification of polymers: 17., 1068
- Dynamic scattering** and hydrodynamic radius from randomly crosslinked chains, 1621
- Dynamic structure factor**, $S(q, \omega)$, of polymers in dilute solution, 1019
- Dynamics** and proton magnetic relaxation of solid poly-L-proline and polyglycine, 715
- , Rouse, of a polymer, self-entanglement effects on the, 1308
-
- Elasticity** of entangled networks, 1010
- , rubber, origin of the pressure variation of front factor in, 1314
- Elastomer**, ethylene propylene, grafting of styrene-co-acrylonitrile polymer to, g.p.c. and viscometric investigation, 529
- , novel, polycarbonate/polystyrene ABCP, 139
- Elastomers**, polyurethane, conformational analysis of poly(MDI-butandiol) hard segment in, 202
- , segmented, annealing-induced morphological changes in, 1428
- Electrical and thermal properties** of polyimides containing tricyclic fused rings, 649
- Electrode material**, effect of, on thermally stimulated discharge and dark current in PS, 1645
- Electron diffraction pattern** of PE single crystal, application of optical transform to, 753
- induced (surface) conductivity of FEP (fluorinated ethylene–propylene), 865
- microscopy, defocus, of multiphase polymers, use and misuse, 333
- microscopy, freeze-fracture, use of to study the refolding of crystallized chains in block copolymers, 1129
- E.p.r.** studies and synthesis of polyacetylene hydrogen sulphate $[\text{CH}(\text{HSO}_4)_y]_x$, 1605
- studies of the thermal polymerization of phenylacetylene, 1462
- E.s.c.a.**, the surface chemistry of double based (nitrocellulose–nitroglycerin) propellants as revealed by, 1303
- E.s.r.** spectra and mobility of alkyl free radicals in irradiated mats of solution-grown PE, 1385
- studies on free radicals generated in poly[*p*-(2-hydroxyethoxy)benzoic acid] fibres at low temperatures, 1267

Classified contents

- study of annealing and melting effects on the molecular motion of spin-trapped chain-end radicals located on the PE surface, 896
 - study of the motion of spin-trapped radicals in polyethylene in relation to the morphological changes induced by ball-milling, 263
 - Electronic and molecular structures of polythiomethylene (PTM)**, 1346
 - Electrostatic interactions**, effect of, on phase transition in the swollen polymeric network, 1687
 - Emulsion polymerization of methyl acrylate**, mechanism of, 1. Initiation, 1729
 - End time policies**, minimum, in batch, chain addition polymerizations, 1593
 - Energy calculations of the crystal structure of the low temperature phase (II) of PTFE**, 1487
 - Entangled networks**, elasticity of, 1010
 - Entanglement interactions in polymers and the chain contour concentration**, 1329
 - Entanglements**, trapped chain, experimental evidence for: their influence on macroscopic behaviour of networks, 1504
 - Enzymes**, new hydrophilic acrylate monomers suitable for the gel bead entrapment of, 553
 - Epoxy**, amine cured rubber modified, characterization of the phase structure of, 87
 - groups, effect of, on the crosslinking process in polybutadiene being modified by epoxidation with dicumyl peroxide, 1073
 - polymers, diamine cured aliphatic, ultrasonic properties of some, 736
 - polymers, organotin, from tri-*n*-butyltin esters of ω -amino acids, synthesis and properties of, 934
 - resins, cured, correlations between dynamic mechanical properties and nodular morphology of, 902
 - resins, hygrothermal history dependence of equilibrium moisture sorption in, 1064
 - resins, rubber-modified, dielectric and ultrasonic relaxation studies of, 37
 - resins, rubber modified, equilibrium physical properties of, 32
 - Equation of state of real networks**, 209
 - Equilibria**, hydrogen ion, in poly(methacrylic acid) and poly(ethacrylic acid) solutions, 415
 - Ester groups**, influence on the stereocomplex formation between different polyalkylmethacrylates, 124
 - Esters**, some 2-propoxy- and 2-isobutyroxy-acrylic, 560
 - Ethylene oxide**, anionic polymerization of, with cryptates as counterions, 549
 - polymerization over supported $\text{TiCl}_4/\text{SiO}_2$ Ziegler catalyst modified with binary metal chlorides, kinetics of, 1118
 - Ethyl vinyl ether**, radiation-induced cationic polymerization of, influence of monomer and solvent concentration on the rate of polymerization of, 1575
 - Eutectic crystallization of poly(L-lactic acid) and pentaerythritol tetrabromide**, 862
 - Extrusion**, crystalline state, of melt-crystallized and solution-grown crystals of nylon-6 and -6,6, 1124
 - Excimer formation of poly(α -methylstyrenes) in solution**, dynamics of macromolecular chains, 235
-
- Fatigue characteristics of high impact PS**, 699
 - damage and fracture in semi-crystalline polymers, mechanisms of, 1272
 - Film**, starch/poly(vinyl alcohol) heatsealable: 2., 1279
 - Flame-resistance and high thermal stability**, halogenated polymers with, 1571
 - Flory-Schulz distribution** does hold for reversible polycondensation: Comments on articles on reversible nylon-6,6 polymerization by S. K. Gupta *et al.*, 1758
 - Response to Professor Heikens comments on page 1758, 1760
 - Fluorescence emission from poly[2-(9-ethyl) carbazoyl-methylmethacrylate]**, 435
 - molecule, a new and convenient, for probing molecular motions in bulk polymers: 10,10'-Diphenyl-bis-9-anthrylmethyl-oxide (Diphant), 1309
 - Fluorinated ethylene-propylene**, electron induced (surface) conductivity of, 865
 - Fold planes and fold plane roughening**, effect of, on calculation of SANS intensity for PE, 597
 - Formaldehyde and resorcinol**, study of reaction between, 804
 - Fracture and fatigue damage in semi-crystalline polymers**, mechanisms of, 1272
 - behaviour of polyethersulphone, a study of the, 1745
 - Friction, polymer, and polymer yield: a comparison**, 1587
-
- Gambler's Ruin method** – modelling the amorphous phase and the fold surface of a semicrystalline polymer, 1466
 - Gas transport in glassy polymer films**, effect of tensile deformations on, 299
 - Gel bead entrapment of enzymes**, new hydrophilic acrylate monomers suitable for the, 553
 - G.p.c. and viscometric investigation on grafting of styrene-co-acrylonitrile polymer to ethylene propylene elastomer**, 529
 - , aqueous high performance, of poly(ethylene oxide), use of macroreticular polyacrylamide gel particles, 291
 - , calibration in: primary, universal and empirical methods, 505
 - , excluded chain dimensions and network size in, 1561
 - Gel phase, solid, peptide synthesis**, simple preparation and radiochemical estimation of phenolic polystyrenes suitable for, 842
 - Gelation dose in the γ -irradiation of polyacrylonitrile (PAN)**, spectrophotometric determination of the, 1757
 - of rigid PVC compounds, thermal analysis technique for investigating the, 1134
 - Gels under hydrostatic pressure**, dynamic light scattering by, 877
 - Glass substrates**, wettability of, by molten nylon-6, 534
 - Glasses, polymeric**, influence of stress state and temperature on secondary relaxations in, 1580
 - Glass transition, dual, and crystallinity observations in poly(alkyl itaconates)**, dialkyl ester series diheptyl to di-eicosyl, 327
 - , effects of heating extruded PS above the, in dry and in aqueous environments, 822
 - elevation of PS by crosslinks, 1540
 - of polyhydroxystyrene derivatives containing sorbed water, d.s.c. studies on, 473
 - Glass transition temperature of poly(methyl methacrylate) blends**, 268
 - Grafting of styrene-co-acrylonitrile polymer to ethylene propylene elastomer, g.p.c. and viscometric investigation**, 529
-
- Growing reactions in formation of poly(butylene terephthalate)**, studied by model molecules, 799
 - Grüneisen parameters and the pressure dependence of the B_{1u} -lattice vibration in HDPE**, 1335
-
- Halogenated polymers with high thermal stability and flame-resistance**, 1571
 - HDPE**, kinetics of environmental stress cracking in, 682
 - , on the Grüneisen parameters and the pressure dependence of the B_{1u} -lattice vibration in, 1335
 - Histogram method in photon correlation spectroscopy applied to dilute polymer solutions**, a comment on, 576
 - Humidity cycling**, A procedure for rapid conditioning of hygroscopic test pieces by, 1136
 - Hydrodynamic interaction of the intrinsic flow birefringence of a rigid rod**, the effect of, 1441
 - radius and dynamic scattering from randomly crosslinked chains, 1621
 - Hygroscopic test pieces**, a procedure for rapid conditioning of, by humidity cycling, 1136
 - Hygrothermal history dependence of equilibrium moisture sorption in epoxy resins**, 1064
-
- I.r. and u.v. regions of the spectrum**, anisotropy of poly(vinyl alcohol) films in the, 1655
 - , far, adsorption spectra of undeuterated and deuterated PET, 615
 - , far, new absorption band at 39 cm^{-1} in the spectrum of high pressure crystallized polyethylene, 17
 - , FT-, studies of polymer blends: V. Further observations on polyester-poly(vinyl chloride) blends, 1324
 - , FT-, study of uniaxially oriented poly(2,6-dimethyl-1,4-phenylene oxide)-atactic PS blends, 1616
 - , FT-, study of uniaxially-oriented PS, 1040
 - spectroscopy, analysis of the crystallization kinetics of isotactic PP by, 1285
 - studies, polarized, of sulphochlorinated PE and products of its hydrolysis, 640
 - Interactions**, polymer-solvent, and copolymer structure, phase separation of binary copolymers from solution non-solvent mixtures in relation to, 1391
 - Interfacial resistance**, influence on kinetics of sorption, 748
 - Inter-lamellar crystallization in poly(tetramethylene oxide)**, 1349
 - Ion exchange with cationic dyes**, dyeing of sulphonated PS films by, chemical modification of polymers: 17, 1068
 - Isopropylxanthates**, metal, photodegradation of poly(2,6-dimethyl-1,4-phenylene oxide) film with, 523
 - Isotopic dilution study of proton n.m.r. relaxation and molecular motion of liquid *n*-paraffin $\text{C}_{32}\text{H}_{66}$** , 413
-
- Keratin**, determination of crosslink density by end group analysis after partial degradation: 2. Experimental application to 1219

- Kerner packed grains model**, correlations with the effects of adhesion on the Poisson ratio of polymer blends, 619
- Kerr effect** relaxation measurements on glassy amorphous PMMA, 720
- Kevlar** fibres, compressional behaviour of, 960
- Kinetic study of free radical bulk copolymerization of styrene-methyl methacrylate**, 488
- study of the copolymerization of styrene with methyl methacrylate in presence of zinc chloride, 391
 - study of the polymerization of methyl methacrylate in the presence of molecular oxygen, 1692
- Kinetics and equilibria**, differential transient sorption, of diffusion of water vapour in cellulose acetate, 768
- crystallization, of isotactic PP, 731
 - crystallization, of poly(1,3-dioxepane), 477
 - non-ideal, in vinyl polymerization, primary radical termination and chain transfer to solvent in benzoyl peroxide initiated polymerization of vinyl acetate in benzene, 1737
 - of ethylene polymerization over supported $\text{TiCl}_4/\text{SiO}_2$ Ziegler catalyst modified with binary metal chlorides, 1118
 - of hydrolytic polymerization of ϵ -caprolactam, formation of cyclic dimer, 273
 - of oxygen doping and oxidation of poly(1,6-heptadiyne), a conducting polyene, 1367
 - of polymerization of styrene initiated by lamellar compounds of LiC_{12} , 95
 - of sorption, influence of interfacial resistance on, 748
 - permeation and integral sorption, of diffusion of water vapour in cellulose acetate: 2. 1058
-
- Lamellar compounds of LiC_{12}** , anionic polymerization of styrene initiated by, kinetics of, 95
- Laser fusion target fabrication**, utilization of polymeric materials in, 450
- Latex**, cationic copolymer, preparation and characterization of, 2. Copolymerization of styrene and 4-vinylpyridine in an emulsifier-free aqueous medium, 658
- Lattice vibration**, B_{1g} , in HDPE, Grüneisen parameters and the pressure dependence of the, 1335
- Light scattering**, dynamic, by gels under hydrostatic pressure, 877
- potential artefacts in the determination of the optical anisotropy of macromolecules by, 1301
- Linear and cyclic polydimethylsiloxanes**, studies of, effect of heat, 377
- LDPE**, correlation between crack growth rate and fracture mode transitions in, 575
- structural investigation of chemically crosslinked, 1355
- LCST**, semi-concentrated region near the, SANS from polymer solutions, 158
- semi-dilute solutions near the, SANS from polymer solutions, 153
-
- Magnetic relaxation**, proton, and dynamics of solid poly-L-proline and polyglycine, 715
- resonance, ^{13}C , studies of partial degrees of substitution in cellulose nitrates, 1112
 - susceptibility, evaluation of, in orientation of nematic liquid crystalline polymer in a magnetic field, 578
- Maleic acid copolymers in aqueous solutions**, viscosity and osmotic second virial coefficient of, 1500
- Matrix**, polymeric, charge and discharge of organic dye-doped, 765
- Mechanical properties**, dynamic, and nodular morphology of cured epoxy resins, correlations between, 902
- behaviour, dynamic, of polyether ester-nitrile rubber blends, 127
 - properties, dynamic, of polymers, measuring with the Rheovibron, error analysis and modelling of non-linear stress-strain behaviour in, 966
 - relaxations in polybutene-1 and poly-4-methylpentene-1, 543
- Mechanics and microstructure of crazes in oriented PS**, 691
- Melt crystallized PE**, chain folding in?, 718
- polymer, single chain motion in, 163
- Melts**, partly-labelled homopolymer, theory of correlations in, 195
- Membranes**, poly(vinyl alcohol), non-equilibrium electrolyte permeability in, 788
- Methyl acrylate**, emulsion polymerization of, 1. Initiation, 1729
- polymerization of, with the redox system $\text{TiCl}_3/\text{NH}_2\text{OH}$ in hydrochloric aqueous phase. Relation functionality/molecular weight/yield, 519
- Methyl methacrylate-acrylonitrile random copolymer**, application of various viscosity theories to the viscosity data of, 924
- styrene, radical copolymerization of, effect of solvent on the termination step of the, 951
 - grafting onto cellulose nitrate initiated by benzoyl peroxide, 491
 - polymerization of, in the presence of molecular oxygen—a kinetic study, 1692
 - polymerization of, synthesis of amino-telechelic polymers with the redox system $\text{TiCl}_3/\text{NH}_2\text{OH}$ in hydrochloric aqueous phase: 3. Relation functionality/molecular weight/yield, 513
 - spontaneous thermal polymerization of, 5. Experimental study and computer simulation of the high conversion reaction at 130°C , 928
- Methacrylic acid**, thermally initiated oligomerization of metallic salts of, in solid state, 1716
- Microgels as matrices for molecular receptor and catalytic sites**, studies with, stereoselectivity of copolymers of (–)-methyl acrylate and *N*-methacryloylhydroxylamine versus chiral esters, 946
- Microstructure and mechanics of crazes in oriented PS**, 691
- Miscibility in PVC-polyester blends**, 918
- Mobility and e.s.r. spectra of alkyl free radicals trapped in irradiated mats of solution-grown PE**, 1385
- Model molecules for growing reactions in formation of poly(butylene terephthalate)**, 799
- Modelling the amorphous phase and fold surface of a semicrystalline polymer**, the Gambler's Ruin method, 1466
- Modulus**, ultra high, PE, creep and recovery of, 871
- Molecular and electronic structures of polythiomethylene (PTM)**, 1346
- dynamics of a crystal-crystal phase transition in an alternating copolymer of ethylene and chlorotrifluoroethylene using the Raman active longitudinal acoustical mode (LAM), 890
- interpretation of *T*, the rubbery-viscous 'transition' temperature of amorphous polymers, 774
 - motion in a mesomorphic aryl-aliphatic polyester, a lineshape study of: by proton decoupled ^{13}C solid state n.m.r., 1150
 - motion of spin-trapped chain-end radicals located on the PE surface, e.s.r. study of annealing and melting effects on the, 896
 - motions in bulk polymers, a new and convenient fluorescence molecule for probing, 10,10'-Diphenyl-bis-9-anthrylmethyloxide (Diphant), 1309
 - weight distributions for reversible nylon-6 polymerizations in batch reactors, 481
- Monomer feed system for producing narrow composition range copolymers from comonomers of widely differing reactivities**, 342
- Monomers**, new hydrophilic acrylate, suitable for the gel bead entrapment of enzymes, 553
- Morphological changes**, annealing-induced, in segmented elastomers, 1428
- Morphology of poly(*para*)phenylene powders and pellets**, 992
- Moseley equation**, application of to the determination of the degree of orientation of fibres made of crystalline polymers from the sonic method, 258
-
- Network**, polymeric, swollen, effect of electrostatic interactions on phase transition in, 1687
- polymers, diffusion in, model development and evaluation, 1658
 - polymers with cholesteric liquid crystalline order prepared from poly(γ -butyl-L-glutamate)-butyl acrylate liquid crystalline system, 117
 - size and excluded chain dimensions in g.p.c., 1561
- Networks**, entangled, elasticity of, 1010
- interpenetrating polymer, of acronal-polymethyl acrylate, 405
 - macroscopic behaviour of, experimental evidences for trapped chain entanglements: their influence on, 1504
 - poly(vinyl acetate), swollen in isopropyl alcohol below the θ temperature; experimental studies of, 429
 - real, equation of state of, 209
- Neutron scattering investigations on the effect of crystallization temperature and thermal treatment on the chain trajectory in bulk-crystallized isotactic PS**, 313
- nuclear magnetic resonance and photon correlation studies of polymers adsorbed at solid-solution interface, 283
- Noble gas transport in PMVK and PMVE**, 912
- Nodular morphology and dynamic mechanical properties of cured epoxy resins**, correlations between, 902
- Nuclear magnetic relaxation**, ^1H , in isotactic PMMA in dilute solution, 190
- N.m.r.**, broad-line, investigation of polyacrylonitrile phase structure and chain conformation, 1649
- ^{13}C , spectroscopy, characterization of polyurethane elastomers by, 1205
 - ^{13}C , spectroscopy of polyvinylferrocene, 257
 - data, use of to calculate copolymer reactivity ratios, 740
 - FT pulsed-gradient spin-echo measurements of solvent self-diffusion in semi-dilute polystyrene solutions, 218

Classified contents

- , ^2H -, line shape study of orientational distribution of polymer chains, 1516
 - , ^1H - study on anionic polymerization initiated by the lamellar compounds LiC_{12} : 2. Thermodynamics and propagation mechanisms in 1,4-*Cis* and 1,4-*Trans* isoprene, 1419
 - , neutron scattering and photon correlation studies of polymers adsorbed at solid-solution interface, 283
 - , proton decoupled ^{13}C solid state,: A line-shape study of molecular motion in a mesomorphic aryl-aliphatic polyester, 1150
 - , proton, relaxation and molecular motion of liquid n-paraffin $\text{C}_{32}\text{H}_{66}$ as studied by isotopic dilution, 413
 - relaxation, pulsed, study of a polystyrene/poly(ethylene oxide) diblock copolymer, evidence for interaction at phase boundary, 221
 - Nylon-6**, adsorption of a synthetic tanning agent and a sulphonated phenol-formaldehyde novolac by, 1439
 - and -6,6, crystalline state extrusion of melt-crystallized and solution-grown crystals of, 1124
 - , molten, wettability of glass substrates by, 534
 - , reversible polymerizations in batch reactors, M.wt. distributions for, 481
 - Nylon-6,6** crystals, solution crystallization and solution annealing behaviour of, 43
 - , simulation of reversible polymerization of, 387
-
- Oligomerization**, thermally initiated, of metallic salts of methacrylic acid in solid state, 1716
 - Optical anisotropy** of macromolecules by light scattering, potential artefacts in the determination of the, 1301
 - properties of styrene-isoprene two-block copolymers, 29
 - Optical rotatory dispersion** and circular dichroism and protonation of amide-containing polymers in strong acid media: poly(-)1,2-diaminopropane sebacamide, an optically active nylon-type polyamide, 1683
 - Optical transform**, application to the electron diffraction pattern of PE single crystal, 753
 - Organolithium** initiators, new perfectly difunctional, for block copolymer synthesis: Synthesis of dilithium initiators in the absence of polar additives, 1724
 - Organotin** epoxy polymers from tri-n-butyltin esters of ω -amino acids, synthesis and properties of, 934
 - polymers: V. Binary and ternary copolymerization reactions of tributyltin acrylate and methacrylate with vinyl acetate and *N*-vinylpyrrolidone, 807
 - Orientation**, determination of the degree of, of fibres made of crystalline polymers from the sonic method, application of Moseley equation to, 258
 - of nematic liquid crystalline polymer in a magnetic field. Evaluation of magnetic susceptibility, 578
 - Orientational** distribution of polymer chains studied by ^2H n.m.r. line shapes, 1516
 - Oriented**, uniaxially-, PS, *FTIR*. study of, 1040
 - Osmotic** second virial coefficient and viscosity of maleic acid copolymers in aqueous solutions, 1500
-
- Oxidation** and oxygen doping of poly(1,6-heptadiyne), a conducting polyene, kinetics of, 1367
 - of poly(oxyalkylene) derivatives of ethylenediamine, amide group formation during, 956
 - of thiophenol with thionyl chloride in the presence of AlCl_3 in the synthesis of poly-*p*-phenylene sulphide, 845
 - Ozonolysis**—g.p.c. method for determination of sequence length distribution in SBR copolymer, 1721
-
- Paraffin**, liquid n-, $\text{C}_{32}\text{H}_{66}$, proton n.m.r. relaxation and molecular motion of, isotopic dilution study, 413
 - Particle** interaction in a concentrated polymer dispersion, rheological study of, 847
 - Penetrant** structure, the role of, in diffusion in structured polymers, 1665
 - Penultimate** effect, existence of, in the cationic copolymerization of 1-isopropenyl naphthalene with styrene, 844
 - Peptide** synthesis, solid (gel) phase, simple preparation and radiochemical estimation of phenolic polystyrenes suitable for, 842
 - Permeability**, non-equilibrium electrolyte, in poly(vinyl alcohol) membranes, 788
 - Permeation** characteristics and preparation of chitin membranes, 1155
 - Phase-behaviour** of rod-like particles in solution and their application to the isotropic and anisotropic phases of poly(n-alkylisocyanates) in solution, 1451
 - (II), low temperature, of PTFE, crystal structure of, 1480
 - separation in polycapramide-caprolactam system, effect of deformation on the, 1373
 - separation of binary copolymers from solution non-solvent mixtures in relation to copolymer structure and polymer-solvent interactions, 1391
 - structure and chain conformation of polyacrylonitrile, a broad-line n.m.r. investigation of, 1649
 - transition, ferroelectric, of vinylidene fluoride-trifluoroethylene random copolymers, structural study on, 1312
 - transition in the swollen polymeric network, effect of electrostatic interactions on, 1687
 - transitions in mesophase macromolecules: The transitions of poly(*p*-acryloyloxybenzoic acid), 778
 - Phenol** formaldehyde polymerization, resol-type, modelling of, 1699
 - Phenylacetylene**, thermal polymerization of, e.p.r. studies, 1462
 - Photochromic** polymers, crosslinked, photo-mechanical effects in, 1511
 - Photocrosslinkable** polymers containing backbone triple bonds, 434
 - Photodegradation** of poly(2,6-dimethyl-1,4-phenylene oxide) film with metal isopropylxanthates, 523
 - Photo-initiated** cationic polymerization, ion pair dissociation equilibria for iodonium and sulphonium salts useful in, 143
 - Photon** correlation spectroscopy applied to dilute polymer solutions, a comment on the histogram method in, 576
 - correlation studies, neutron scattering and nuclear magnetic resonance studies of polymers adsorbed at solid-solution interface, 283
 - Photomechanical** effects in crosslinked photochromic polymers, 1511
-
- Photo-oxidation** of some unsaturated polymers, effect of singlet oxygen sensitizers and quenchers on the, 942
 - Photophysical** processes, transient decay studies in; intramolecular excimer formation in homopolymers of 1-vinylnaphthalene, 2-vinylnaphthalene and 1-naphthyl methacrylate, 427
 - studies in aromatic polymers, transient decay studies of, intramolecular excimer formation in copolymers of 1-vinyl naphthalene and methyl acrylate, 293
 - Physical properties**, equilibrium, of rubber modified epoxy resins, 32
 - Physico-mechanical** investigation of cross-linked PP, 1677
 - Piezoelectric** and resistivity measurements on oriented and unoriented thick PVF_2 films, 1288
 - Plastic** toughened plastic, polycarbonate/polystyrene ABCP, 139
 - Plastics**, low-density cellular, modulus anisotropy of; an aggregate model, 882
 - Poisson** ratio of polymer blends, effect of adhesion on, correlation with the Kerner packed grains model, 619
 - Polyacetylene** hydrogen sulphate $[\text{CH}(\text{HSO}_4)_y]_x$, Synthesis and e.p.r. studies of, 1605
 - Polyacrylamide**, adsorbed metal ions as stabilizers for the thermal degradation of, 1740
 - gels, diffusion in, 185
 - macroreticular gel particles for aqueous high performance g.p.c. of poly(ethylene oxide), 291
 - , spatial crossover for, in aqueous solution, 287
 - , unperturbed dimensions of, in salt-water-methanol mixtures, 609
 - Polyacrylamides** in water, thermodynamic parameters of, 1530
 - Polyacrylonitrile** phase structure and chain conformation, a broad-line n.m.r. investigation of, 1649
 - (PAN), spectrophotometric determination of the gelation dose in the γ -irradiation of, 1757
 - , thermally induced structural changes in, 285
 - Poly(*p*-acryloyloxybenzoic acid)**, a mesophase macromolecule, phase transitions of, 778
 - Poly(n-alkylisocyanates)** in solution, phase behaviour of rod-like particles in solution and their application to the isotropic and anisotropic phases of, 1451
 - Poly(alkyl itaconates)**, observations of dual glass transitions and crystallinity in the dialkyl ester series diheptyl to di-eicosyl, 327
 - Polyalkylmethacrylates**, different, stereo-complex formation, influence of ester groups on, 124
 - Poly(α -methylstyrenes)**, excimer formation of in solution, dynamics of macromolecular chains, 235
 - Polyamide** polyelectrolytes with phenolic side groups, synthesis and properties of, 1544
 - Polyaryletherketones**, synthesis and properties of, 1096
 - Polybenzimidazoles** containing dibenzothio-phenediyl or 5,5-dioxodibenzothio-phenediyl units, preparation and properties of, 1290
 - Poly(β -ketothioethers)** by polycondensation of bis- β -dialkylaminoketones with bis-thiols, 270

- Polybutadiene** containing vinyl cyclopentane units, preparation of, 382
 – modified by epoxidation: 2. The effect of epoxy groups on the crosslinking process with dicumyl peroxide, 1073
- Polybutene-1** fibres, laser Raman spectrum of, 1341
- Poly n-butyl methacrylate** system, anti-plasticized, dielectric relaxation in, 1211
- Poly(butylene terephthalate)**, formation of: growing reactions studied by model molecules, 799
 –, formation of: Secondary reactions studied by model molecules, 1566
 –, solid state polycondensation of, 655
- Polycapramide**–caprolactam system, effect of deformation on the phase separation in, 1373.
- Poly[2-(9-ethyl)carbazolyl–methylmethacrylate]** fluorescence emission from, 435
- Polycarbonate**, amorphous, SANS study of, 1353
 – and PMMA, physical ageing in the region of secondary relaxation, 1199
- Poly-p-chlorostyrene**, the dipole moment of, 1464
- Polycondensation** of bis- β -dialkylamino ketones with bis-thiols giving poly(β -ketothioethers), 270
 –, reversible, Flory–Schulz distribution does hold for, comments on articles on reversible nylon-6,6 polymerization by S. K. Gupta *et al.*, 1758
 –, reversible,: Response to Professor Heikens' comments on page 1758., 1760
 –, solid-state, an attempt to synthesize regular cresolic resins through, 1257
 –, solid state, of poly(butylene terephthalate), 655
- Poly(2,2-dialkyltrimethylene sulphones)**, preparation and properties of, 1283
- Poly(-)1,2-diaminopropane sebacamide**, an optically active nylon-type polyamide. Optical rotatory dispersion, circular dichroism and protonation of, 1683
- Poly(2,6-dimethyl 1,4-phenylene oxide)**-atactic PS blends, uniaxially oriented, FTi.r. study of, 1616
- Poly(2,6-dimethyl-1,4-phenylene oxide)** film, photodegradation of, with metal isopropylxanthates, 523
- Poly(dimethylsiloxane)** blocks, synthesis and characterization of multiblock copolymers containing, 663
 – diol blended with poly(dimethylsiloxane-b-styrene-b-dimethyl-siloxane), 372
 –, adsorption from solution on silica, 56
 –, cyclic and linear, studies of, effect of heat, 377
- Poly(1,3-dioxepane)**, crystallization kinetics of, 477
- Polyelectrolyte**, sedimentation behaviour in semidilute solution of, 573
- Polyelectrolytes**, polyamide, with phenolic side groups, synthesis and properties of, 1544
- Poly(epichlorohydrin-g-styrene)** copolymers, living anionic synthesis and characterization of, 1104
- Polyester**, a mesomorphic aryl–aliphatic, a lineshape study of the molecular motion in a, by proton decoupled ^{13}C solid state n.m.r., 1150
 – poly(vinyl chloride) blends, further observations on FTi.r. studies of, 1324
 – synthesis by phase transfer catalysis, 558
 – synthesis from phase transfer catalysed polymerizations involving *m*-xylylene dibromide, 272
- Polyesters**, unsaturated, based on terephthalic acid: 4. Sequence distribution of crosslinks in styrene-cured resins, 812
- Poly(ethacrylic acid)** and poly(methacrylic acid) solutions, hydrogen ion equilibria in, 415
- Polyethersulphone**, a study of the fracture behaviour of, 1745
- Polyethylene**, adhesion to, 7
 – and polyoxymethylene, relation between diffusion controlled decay of radicals and α -relaxation in, 1377
 –, calculation of SANS intensity for,: effect of varying fold planes and fold plane roughening, 597
 –, crosslinking initiated by benzoyl peroxide, high pressure effect on, 1400
 –, e.s.r. study of the motion of spin-trapped radicals in, in relation to the morphological changes induced by ball-milling, 263
 –, films, production through flow-induced crystallization, 850
 –, from dilute solution, SAXS – isothermal annealing and swelling studies on, 1590
 –, γ -irradiation of, a commentary on 'Free radicals and new end groups resulting from chain scission', 1458
 –, high frequency ultrasonic studies of, 1032
 –, high pressure crystallized, A new far i.r. absorption band at 39 cm^{-1} in the spectrum of, 17
 –, low density, surface modification of, in a fluorine gas plasma, 361
 –, low molecular weight high density, environmental stress cracking of, 245
 –, melt crystallized, chain folding in?, 718
 –, melt crystallized, chain folding in: 2. Low molecular weight polymers, 1003
 –, molten, simple model for thermal pressure in, 1754
 –, nodular linear, crystallized from the glass, annealing of, 701
 –, response to commentary by M. Dole on page 1458, 1460
 –, single crystal, application of optical transform to electron diffraction pattern of, 753
 –, solid solutions, structure of,: 2. Aspects of spectral deconvolution, 907
 –, solution-grown, mobility and e.s.r. spectra of alkyl free radicals in irradiated mats of, 1385
 –, stress whitening in, 1610
 –, sulphochlorinated, and products of its hydrolysis, polarized i.r. studies of, 640
 –, thermal gasification of, estimation of the product yield on the basis of intensity function for the, studies on thermal degradation of synthetic polymers, 1403
 –, ultra high modulus, creep and recovery of, 871
 –, ultra high molecular weight, uniaxial tensile creep behaviour of, 23
- Poly(ethylene oxide)**–alkali metal ion complexes, a double helical model for, 1305
 –, aqueous high performance g.p.c. of, with macroreticular polyacrylamide gel particles, 291
- PET**, far i.r. adsorption spectra of undeuterated and deuterated, 615
- Polyformals**, alicyclic, random-coil configurations of, 465
- Polyglycine** and poly-L-proline, solid, proton magnetic relaxation and dynamics of, 715
- Poly(1,6-heptadiyne)**, a conducting polyene, kinetics of oxidation and oxygen doping of, 1367
- Poly(n-hexylisocyanate)**, a rigid backbone polymer, dielectric relaxations in lyotropic and highly concentrated isotropic solutions of, in toluene, 571
- Poly[p-(2-hydroxyethoxy)benzoic acid]** fibres, e.s.r. studies on free radicals generated in, at low temperatures, 1267
- Polyhydroxystyrene** derivatives containing sorbed water, d.s.c. studies on the T_g of, 473
- Polyimides** containing tricyclic fused rings, thermal and electrical properties of, 649
- Polyimidothioether** polymers, 1250
- Polyisobutylene**, effect of light and solvent polarity on the preparation of, with isoprene in the presence of VCl_4 , 1243
 –: fractional precipitation from binary solvent induced by non-solvent addition, 461
- Polyisocyanates**, rodlike crosslinked and uncrosslinked rigid backbone, stress-strain behaviour of, 418
- Poly(L-lactic acid)** and pentaerythritol tetra-bromide, eutectic crystallization of, 862
- Polymer coil** undergoing stress relaxation, SANS from a, 1157
 – films, glassy, effect of tensile deformations on gas transport in, 299
 – friction and polymer yield: a comparison, 1587
 – membranes, special, syntheses and permeabilities of, concentration of poly(styrene sulphonic acid) in various aqueous solutions using poly(vinylidene fluoride) membranes, 240
 – membranes, special, syntheses and permeabilities of, ultrafiltration and dialysis characteristics of cellulose nitrate–poly(vinyl pyrrolidone) polymer blend membranes, 829
 – membranes, special, studies of syntheses and permeabilities of,: 35. Preparation and permeation characteristics of chitin membranes, 1155
- Polymeric**, all-, solid state battery, 1454
 – materials, utilization of, in laser fusion target fabrication, 450
 – matrix, organic dye-doped, charge and discharge of, 765
- Polymerization**, anionic, initiated by lamellar compounds of LiC_{12} : kinetics of polymerization of styrene and isoprene-initiator efficiency, 95
 –, anionic, initiated by the lamellar compounds of LiC_{12} : 2. Thermodynamics and the propagation mechanisms in 1,4 *Cis* and 1,4 *Trans* isoprene, -H-n.m.r. study, 1419
 –, anionic, of diene monomers, application of complex bases to, 1425
 –, anionic, of ethylene oxide with cryptates as counterions, 549
 –, a resole-type phenol formaldehyde, modelling of, 1699
 –, batch chain addition, minimum end time policies in, 1593
 –, bulk anionic, of vinyl monomers, application of solid complex bases to, 356
 –, catalysts for propene from the reduction of titanium tetrachloride with halogen-free magnesium alkyls, 667
 –, catalysts, supported solid acids as, 859
 –, catalysts, titanium chloride–alkylmagnesium,: effects of transformation to violet allotropes, 1558
 –, emulsion, of methyl acrylate, mechanism of,: 1. Initiation, 1729
 –, hydrolytic, of ϵ -caprolactam, kinetics of formation of cyclic dimer, 273

- , non-classical free-radical,: Degradative addition to monomer in the polymerization of 1-vinylimidazole, 1227
 - of α -olefins, highly active coordination catalysts for: 2. Thermal investigations of the support system anhydrous magnesium chloride-ethyl benzoate, 818
 - of ethylene over supported $\text{TiCl}_4/\text{SiO}_2$ Ziegler catalyst modified with binary metal chlorides, kinetics of, 1118
 - of methyl acrylate with the redox system $\text{TiCl}_3/\text{NH}_2\text{OH}$ in hydrochloric aqueous phase. Relation functionality/molecular weight/yield, 519
 - of methyl methacrylate in the presence of molecular oxygen — a kinetic study, 1692
 - of methyl methacrylate, synthesis of aminotetrahelic polymers with the redox system $\text{TiCl}_3/\text{NH}_2\text{OH}$ in hydrochloric aqueous phase: 3. Relation functionality/molecular weight/yield, 513
 - of styrene with magnesium-reduced titanium chloride-based catalyst system, 255
 - of vinyl acetate in benzene, benzoyl peroxide initiated, non-ideal kinetics in, primary radical termination and chain transfer to solvent in, 1737
 - , phase transfer catalysed, polyester synthesis from, involving *m*-xylylene dibromide, 272
 - , photo-initiated cationic, ion pair dissociation equilibria for iodonium and sulphonium salts useful in, 143
 - , radiation-induced cationic, of vinyl ethers in solution: 1. Influence of monomer and solvent concentration on their rate of polymerization of ethyl vinyl ether in benzene, 1571
 - , reversible nylon-6, in batch reactors, M.wt. distributions for, 481
 - , reversible, of nylon-6,6, simulation of, 387
 - , ring-opening, of cyclo-octadiene-1,5, stereoselectivity of, 1554
 - , solution anionic, of vinyl monomers, application of new complex bases to, 347
 - , spontaneous thermal, of methyl methacrylate: 5. Experimental study and computer simulation of the high conversion reaction at 130°C, 928
 - , stereospecific, of *N*-vinyl carbazole by $\text{ZnEt}_2/\text{CoCl}_2$ -pyridine catalyst system, 1319
 - , thermal, of phenylacetylene, e.p.r. studies of, 1462
 - Polymers of *c*-(n^6 -Acrls-Gly), synthesis and properties of, and interactions with metal ions in solution, 1548**
 - , block, completely-alternating, synthesis of, 1299
 - , dynamic structure factor, $S(q, \omega)$, of, in dilute solution, 1019
 - , high molecular weight compatible, a pair of, showing UCST behaviour, 1005
 - , lead trialkyl-terminated, homolytic scission of the C—Pb bond of, both thermally and by transition metal salts. Block copolymers prepared by anion to free radical transformation process, 1076
 - , multiphase, defocus electron microscopy of, use and misuse, 333
 - , rigid backbone, stress-strain behaviour of uncrosslinked and of crosslinked rod-like polyisocyanates, 418
 - , rigid backbone: 22. Dielectric relaxation in lyotropic and highly concentrated isotropic solutions of poly(*n*-hexyl-isocyanate) in toluene, 571
 - , semi-crystalline, mechanisms of fatigue damage and fracture in, 1272
 - , solid, non-linear viscoelastic properties of, 673
 - , structured, on the role of penetrant structure in diffusion in, 1665
 - , thermal conductivity of: a new correlation, 867
 - Poly(methacrylic acid) and poly(ethacrylic acid) solutions, hydrogen ion equilibria in, 415**
 - , syndiotactic-polyvinylpyrrolidone complexes, formation of, in dimethylformamide, 1709
 - Polymethyl acrylate—acronal interpenetrating polymer networks, 405**
 - , proton spin-lattice and spin-spin relaxation in, in dilute solution, 288
 - PMMA and polycarbonate, physical ageing in the region of secondary relaxation, 1199**
 - blends, glass transition temperature of, 268
 - , coil expansion, association and phase separation of, in poor solvents acetonitrile and chlorobutane, comparison between the effect of temperature and cosolvency, 1147
 - , cosolvent systems, depression of the critical temperature in, 783
 - , determination of the local conformation of, from WAXS, 175
 - , ethyl acrylate copolymer, stress cracking behaviour of, 539
 - , glassy amorphous, Kerr effect relaxation measurements on, 720
 - , isotactic, in dilute solution, ^1H nuclear magnetic relaxation in, 190
 - , methanol system, diffusion mechanics of, 627
 - PMMA, stereoregular, association of: 5. Stereo-complex formation in dilute solutions, 1705**
 - PMVE and PMVK, Noble gas transport in, 912**
 - PMVK and PMVE, Noble gas transport in, 912**
 - Polyolefin solutions, thermodynamic properties of, at high temperatures of PE, PP and ethylene-propylene copolymers in hydrocarbon solvents, 1181**
 - solutions, thermodynamic properties of, at high temperature: 2. Lower critical solubility temperatures for, 1190
 - Poly(olefin sulphones), post-irradiation thermal degradation of, 71**
 - Poly(oxyalkylene) derivatives of ethylenediamine, amide group formation during the oxidation of, 956**
 - Polyoxymethylene and PE, relation between diffusion controlled decay of radicals and α -relaxation in, 1377**
 - Polyparaphenylene powders and pellets, morphology of, 992**
 - sulphide, synthesis by oxidation of thiophenol with thionyl chloride in the presence of AlCl_3 , 845
 - Polypropylene, adhesion to, 7**
 - , atactic, and ethylene-propylene copolymers, conformational effects on melting point depression of, 647
 - , calendered, surface irregularities of, 250
 - , crosslinked, physico-mechanical investigation of, 1677
 - , drawn, ultrasonic investigations of morphology and stress relaxation in, 1026
 - , film, influence of roll embossing on, 5
 - , isotactic, analysis of the crystallization kinetics of, by i.r. spectroscopy, 1285
 - , isotactic, high pressure d.t.a. study on the melting and crystallization of, 1673
 - , isotactic, polymorphic transitions of, caused by aminosulphur compounds, 562
 - , isotactic, some crystallization kinetics of, 731
 - Polypropylenes obtained with $\text{Ti}(\text{OC}_4\text{H}_9)_4/\text{Al}_2(\text{C}_2\text{H}_5)_3\text{Cl}_3$ catalyst system, M.wt. distribution and stereoregularity of, 469**
 - Polysulphone—arylate block copolymers, 3**
 - Polystyrene, atactic, poly(2,6-dimethyl 1,4-phenylene oxide) blends, uniaxially oriented, FTi.r. study of, 1616**
 - blends containing high concentrations of labelled molecules, SANS measurements of chain factors from, 886
 - , bulk-crystallized isotactic, neutron scattering investigations on the effect of crystallization temperature and thermal treatment on, 313
 - , chloromethylated crosslinked, chemical modification of *via* phase transfer catalysed Wittig reactions, 1153
 - , cyclohexane, dilute solutions, sedimentation in, close to the theta temperature, 67
 - , effect of electrode material on thermally stimulated discharge and dark current in, 1645
 - , extremely high molecular weight, properties of in solution, 1054
 - , extruded, the effects of heating, above T_g in dry and in aqueous environments, 822
 - , films, sulphonated, dyeing of, by ion exchange with cationic dyes, chemical modification of polymers: 17., 1068
 - , FTi.r. study of uniaxially-oriented, 1040
 - , glass transition elevation of, by crosslinks, 1540
 - , high impact, fatigue characteristics of, 699
 - , isotactic, extended-chain structure for: additional X-ray diffraction and calorimetric results, 1161
 - , isotactic, normal coordinate analysis of: 1. A force field for monosubstituted benzenes, 1629
 - , isotactic, normal coordinate analysis of: 2. The normal modes and dispersion curves of the polymer, 1633
 - , oriented, microstructure and mechanics of crazes in, 691
 - , phenolic, suitable for solid (gel) phase peptide synthesis, simple preparation and radiochemical estimation of, 842
 - , poly(2,6-dimethyl-1,4-phenyleneoxide) mixtures and graft copolymers, pyrolysis of, 1236
 - , poly(ethylene oxide) diblock copolymer, pulsed n.m.r. relaxation study of, evidence for interaction at phase boundary, 221
 - , short-chain, in deuterio-chloroform solution, ^{13}C spin relaxation study of, 321
 - , solutions, semi-dilute, solvent self diffusion in, pulsed-gradient spin-echo measurements on a standard FT n.m.r. spectrometer, 218
- Poly(styrene sulphonic acid) concentration in various aqueous solutions using poly(vinylidene fluoride) membranes, 240**
- Polystyryl-1,5-naphthyridine and polystyrylpyrido[2,3-*b*]pyrazine and some of their copper (II) complexes, preparation of, 1007**
- Polystyryl-pyrido[2,3-*b*]pyrazine and polystyryl-1,5-naphthyridine and some of their copper (II) complexes, preparation of, 1007**
- Poly[4,4'-(*p*-terphenylene)amide], thermally obtained, 1263**

- Poly(4-tert-butylphenyl methacrylate)**, viscometric and preferential adsorption behaviour of, in tetrahydrofuran/chloroform, 1045
- Poly-1,1,2,2-tetrachlorobutane**, vibrational spectra of, a model for head-to-head poly(vinylidene chloride), 762
- PTFE**, crystal structure of the low temperature phase (II) of, 1480
- , energy calculations of the crystal structure of the low temperature phase (II) of PTFE, 1487
- , crystalline, vibrational spectra of, 726
- , measurement of the absorption spectrum of, in the near mm region by an untuned cavity, 20
- Polytetrahydrofuran**, living, reactions with amines; Pyridine, 101; Tertiary amines, 108
- , living, reactions with amines: 3. Secondary amines, 1081
- Poly(tetramethylene oxide)**, inter-lamellar crystallization in, 1349
- Polythiolmethacrylates**: poly(phenyl thiolmethacrylate) and poly(*o*-methyl phenyl thiolmethacrylate), solution properties and chain flexibility of, 63
- Polythiomethylene**, molecular and electronic structures of, 1346
- Poly(trimethylene oxide)**, conformational stability of, by the CNDO/2 calculation, 624
- Polyurethane elastomers**, characterization of by ^{13}C n.m.r. spectroscopy, 1205
- elastomers, conformational analysis of poly(MDI-butandiol) hard segment in, 202
- elastomers, structure of, X-ray diffraction and conformational analysis of MDI-propandiol and MDI-ethylene glycol hard segments, 1534
- Poly(valerolacetone)**, preparation and properties of, 1223
- Poly(vinyl acetate)**, networks swollen in isopropyl alcohol below the θ temperature, experimental studies of, 429
- Poly(vinyl alcohol)** and borate ion, complex formation between, 1456
- films, anisotropy of, in the u.v. and i.r. regions of the spectrum, 1655
- membranes, non-equilibrium electrolyte permeability in, 788
- /starch heatsealable film: 2, 1279
- Poly(vinyl chloride)** and poly(vinyl chloride) blends, small-angle scattering studies of, 168
- compounds, rigid, thermal analysis technique for investigating gelation of, 1134
- —Cu composite, dilatometric studies on, 142
- gels, thermoreversible, correlations between viscoelastic behaviour and SAXS of, 305
- —polyester blends, miscibility in, 918
- —polyester blends, further observations on FTi.r. studies of, 1324
- Polyvinylferrocene**, ^{13}C nuclear magnetic resonance spectroscopy of, 257
- Poly(vinylidene chloride)**, head-to-head, a model for, from vibrational spectra of poly-1,1,2,2-tetrachlorobutane, 762
- , thermal decomposition mechanism of, 131
- , crystallization of the β phase of, from the melt, 412
- Polyvinylidene fluoride**, drift mobility determination using surface-charge decay technique in, 1642
- membranes used in the concentration of poly(styrene sulphonic acid) in various aqueous solutions, 240
- thick films, oriented and unoriented, resistivity and piezoelectric measurements on, 1288
- Polyvinylpyrrolidone**—syndiotactic poly(methacrylic acid) complexes, formation of, in dimethylformamide, 1709
- Precipitation**, fractional, of polyisobutylene from binary solvent induced by non-solvent addition, 461
- Preparation and properties of polybenzimidazoles** containing dibenzothiophenediyl or 5,5-dioxodibenzothiophenediyl units, 1290
- and properties of poly(2,2-dialkyltrimethylene sulphones), 1283
- and properties of poly(valerolacetone), 1223
- of polyisobutylene with isoprene in the presence of VCl_4 , effect of light and solvent polarity on the, 1243
- Pressure dependence and the Grüneisen parameters of the B_{1u} -lattice vibration in HDPE**, 1335
- effect, high, on PE crosslinking initiated by benzoyl peroxide, 1400
- , elevated, crystallization of copolyamides under, 792
- , hydrostatic, dynamic light scattering by gels under, 877
- , thermal, simple model for, in molten PE, 1754
- variation of front factor in rubber elasticity, origin of the, 1314
- Propagation mechanisms and thermodynamics in anionic polymerization**, initiated by lamellar compounds of LiC_{12} , of 1,4 *Cis* and 1,4 *Trans* isoprene, -H-n.m.r. study, 1419
- Propellants**, double based (nitrocellulose—nitroglycerin), surface chemistry of, as revealed by e.s.c.a., 1303
- Propene**, polymerization catalysts for, from the reduction of titanium tetrachloride with halogen-free magnesium alkyls, 667
- Properties and preparation of polybenzimidazoles** containing dibenzothiophenediyl or 5,5-dioxodibenzothiophenediyl units, 1290
- and preparation of poly(2,2-dialkyltrimethylene sulphones), 1283
- and preparation of poly(valerolacetone), 1223
- and synthesis of polyaryletherketones, 1096
- of extremely high molecular weight PS in solution, 1054
- Proton migration and relaxation in wet cellulose and its derivatives**, dielectric studies of, 1048
- Pyridine and maleic anhydride**, charge transfer complex between, 129
- , reaction with living polytetrahydrofuran, 101
- Pyrolysis of PS-poly(2,6-dimethyl-1,4-phenyleneoxide) mixtures and graft copolymers**, 1236
- Quenchers and sensitizers**, singlet oxygen, effect, on the photo-oxidation of some unsaturated polymers, 942
- Radical**, spin-trapped, produced by ball-milling polyethylene powder with nitrosobenzene, detection and identification, 132
- Radicals**, spin-trapped, in polyethylene in relation to the morphological changes induced by ball-milling, e.s.r. study of the motion of, 263
- Raman spectrum**, laser, of isotactic polybutene-1 fibres, 1341
- Random-coil configurations of alicyclic polyformals**, 465
- Reactivity ratios**, copolymer, use of n.m.r. data of calculate, 740
- Relaxation**, α -, and diffusion controlled decay of radicals in PE and polyoxymethylene, relation between 1377
- and proton migration in wet cellulose and its derivatives, dielectric studies of, 1048
- , dielectric, in antiplasticized poly n-butyl methacrylate system, 1211
- , dielectric, in lyotropic and highly concentrated isotropic solutions of the rigid backbone polymer poly(n-hexylisocyanate) in toluene, 571
- , dielectric, of isotropic and lyotropic solutions of a copolymer of n-butyl isocyanate and n-oxy isocyanate, rigid backbone polymers, 1361
- , mechanical, in polybutene-1 and poly-4-methylpentene-1, 543
- , proton spin—lattice and spin—spin, in vinyl polymers in dilute solution: poly(methyl acrylate), 288
- studies, dielectric and ultrasonic, of rubber-modified epoxy resins, 37
- , secondary, in polymeric glasses, influence of stress state and temperature on, 1580
- Resins**, regular cresolic, an attempt to synthesize, through solid-state polycondensation, 1257
- Resistivity and piezoelectric measurements** on oriented and unoriented thick PVF₂ films, 1288
- Resole-type phenol formaldehyde polymerization**, modelling of, 1699
- Resorcinol and formaldehyde**, study of reaction between, 804
- Rheological study of particle interaction in a concentrated polymer dispersion**, 847
- Rheovibron**, error analysis and modelling of non-linear stress—strain behaviour in measuring dynamic mechanical properties of polymers with the, 966
- Roll embossing**, influence of, on polypropylene film, 5
- Rouse dynamics of a polymer**, self-entanglement effects on the, 1308
- Rubber blends**, polyether ester—nitrile, dynamic mechanical behaviour of, 127
- elasticity, calorimetric study of, 75
- elasticity, origin of the pressure variation of front factor in, 1314
- modified epoxy, amine-cured, characterization of the phase structure of, 87
- modified epoxy resins, dielectric and ultrasonic relaxation studies of, 37
- modified epoxy resins, equilibrium physical properties of, 32
- , unvulcanized natural, creep and recovery of, 399
- Secondary reactions in formation of poly(butylene terephthalate)**: studied by model molecules, 1566
- Sedimentation behaviour in semidilute solutions of polyelectrolyte**, 573
- in dilute polystyrene—cyclohexane solution close to the theta temperature, 67
- Self-entanglement effects on the Rouse dynamics of a polymer**, 1308
- Sensitizers and quenchers**, singlet-oxygen, effect of, on the photo-oxidation of some unsaturated polymers, 942
- Sequence length distribution in SBR copolymer**, determination of, by ozonolysis—g.p.c. method, 1721

Classified contents

- Shear compliance, steady-state, of regular star polymers, 1603**
- Small-angle light scattering, spectral properties of speckle created by, 260**
- SANS from a polymer coil undergoing stress relaxation, 1157**
- from polymer solutions, semi-concentrated region near the *LCST*, 158
 - from polymer solutions, semi concentrated region near the *UCST*, 147
 - from polymer solutions, semi-dilute solutions near the *LCST*, 153
 - intensity for PE, calculation of: effect of varying fold planes and fold plane roughening, 597
 - investigation of block copolymers of styrene and isoprene in the solid state, 581
 - measurements of chain form factors from PS blends containing high concentrations of labelled molecules, 886
 - study of amorphous polycarbonate, 1353
- Small-angle scattering studies of PVC and PVC blends, 168**
- Small angle X-ray scattering and viscoelastic behaviour of thermoreversible poly(vinyl chloride) gels, correlations between, 305**
- Isothermal annealing and swelling studies on PE from dilute solution, 1590
- Solubility parameters of ternary solvent mixtures; calculation of the solvent composition with maximum polymer interaction, 261**
- Solution properties and chain flexibility of polythiolmethacrylates: poly(phenyl thiolmethacrylate) and poly(*o*-methyl phenyl thiolmethacrylate), 63**
- properties of maleic anhydride and maleic acid copolymers, unperturbed dimensions and persistence lengths of chains in solution, 231
- Solutions, high polymer, macro- and micro-viscosity in, 145**
- , polymer, SANS from, semi-concentrated region near the *LCST*, 158
 - , polymer, SANS from, semi concentrated region near the *UCST*, 147
 - , semi-dilute polymer, SANS from, near the *LCST*, 153
- Solvent, mixtures, ternary, solubility parameters of, calculation of composition with maximum polymer interaction, 261**
- Sorption, equilibrium moisture, in epoxy resins, hygrothermal history dependence of, 1064**
- , influence of interfacial resistance on kinetics of, 748
- Spatial crossover for polyacrylamide in aqueous solution, 287**
- Speckle, spectral properties of, created by small-angle scattered light, 260**
- Spectral deconvolution, aspects of, in structure of PE solid solutions, 907**
- properties of speckle created by small-angle scattered light, 260
- Spectrophotometric determination of the gelation dose in the γ -irradiation of polyacrylonitrile (PAN), 1757**
- Stabilizers, adsorbed metal ions as, for the thermal degradation of polyacrylamide, 1740**
- Star polymers, regular, the steady-state shear compliance of, 1603**
- Stereocomplex formation between different polyalkylmethacrylates, influence of ester groups on, 124**
- formation of stereoregular PMMAs in dilute solutions, 1705
- Stereoselectivity of copolymers of (–)-methylacrylate and *N*-methacryloyl-hydroxylamine versus chiral esters, studies with microgels as matrices for molecular receptor and catalytic sites, 946**
- of the ring-opening polymerization of cyclo-octadiene-1,5, 1554
- Strength, tensile, of joints bonded with ABA poly(styrene-*b*-isoprene) films, 995**
- Stress cracking behaviour of poly(methyl methacrylate-ethyl acrylate) copolymer, 539**
- cracking, environmental, in HDPE, kinetics of, 682
 - cracking, environmental, of low molecular weight high density polyethylene, 245
 - , high shear, degradational effects on bisphenol A polycarbonate extruded at, 836
 - in environmental crazes, effect of surface tension on, 687
 - relaxation and morphology of drawn PP, ultrasonic investigations of, 1026
 - relaxation, polymer coil undergoing, SANS from, 1157
 - state and temperature, influence of, on secondary relaxations in polymeric glasses, 1580
 - strain behaviour, non-linear, in measuring dynamic mechanical properties of polymers with Rheovibron, 966
 - strain behaviour of uncrosslinked and crosslinked rigid backbone rodlike polyisocyanates, 418
 - whitening in PE, 1610
- Structural change, thermally induced, in polyacrylonitrile, 285**
- changes in the grafted copolymers PE-styrene, 590
 - investigation of chemically crosslinked LDPE, 1355
 - study on ferroelectric phase transition of vinylidene fluoride-trifluoroethylene random copolymers, 1312
- Structure and synthesis of vinyl polymer-poly(α -amino acid) graft copolymers, 1407**
- factor, dynamic, $S(q, \omega)$, of polymers in dilute solution, 1019
 - , phase, characterization of, in an amine-cured rubber-modified epoxy, 87
- Styrene-methyl methacrylate free radical bulk copolymerization, kinetic study of, 488**
- polymerization initiated by lamellar compounds of LiC_{12} , kinetics of, 95
 - , polymerization of, with magnesium-reduced titanium chloride catalyst system, 255
- Substitution, partial degrees of, in cellulose nitrates determined by means of ^{13}C magnetic resonance studies, 1112**
- Substrate selectivity effects involving polymer-supported phase transfer catalysts, 431**
- Surface chemistry of double based(nitro-cellulose-nitroglycerin) propellants as revealed by e.s.c.a., 1303**
- irregularities of calendered polypropylene, 250
 - modification of LDPE in a fluorine gas plasma, 361
- Surface tension effects on the stress in environmental crazes, 687**
- Surgery, biodegradable polymers for use in, —PEO/PET copolymers: 2. *In vitro* degradation, 499**
- , biodegradable polymers for use in, poly(glycolic)/poly(lactic acid) homo and copolymers: 2. *In vitro* degradation, 494
- Swelling and isothermal annealing studies on PE from dilute solution by SAXS, 1590**
- , anomalous θ , of macromolecules: new method of calculation, 447
- Synthesis and characterization of tetramethyl-*p*-silphenylene siloxane/dimethylsiloxane, 1607**
- and crystallization studies on aliphatic-aromatic copolyesters, 1522
 - and e.p.r. studies of polyacetylene hydrogen sulphate $[\text{CH}(\text{HSO}_4)_y]_x$, 1605
 - and properties of polyamide polyelectrolytes with phenol side groups, 1544
 - and properties of polyaryletherketones, 1096
 - and structure of vinyl polymer-poly(α -amino acid) graft copolymers, 1407
 - , living anionic, and characterization of poly(epichlorohydrin-*g*-styrene) copolymers, 1104
 - of completely-alternating block polymers, 1299
 - of polymers of $c\text{-(n}^{\text{e}}\text{-AcrLys-Gly)}$ and interactions with metal ions in solution, 1548
- Temperature and concentration dependence of diffusion coefficient in dilute solutions, 1169**
- and cosolvency, comparison between the effects of, coil expansion, association and phase separation of PMMA in poor solvents acetonitrile and chlorobutane, 1147
 - intrinsic viscosity relationships, 410
- Tensile deformations, effect of, on gas transport in glassy polymer films, 299**
- strength of joints bonded with ABA poly(styrene-*b*-isoprene) films, 995
- Terephthalic acid, unsaturated polyesters based on, 4. Sequence distribution of crosslinks in styrene cured resins, 812**
- Termination steps for the radical copolymerization of methyl methacrylate and styrene, effect of solvent on, 951**
- Theta swelling, anomalous, of macromolecules: new method of calculation, 447**
- temperature, sedimentation in dilute polystyrene-cyclohexane solutions close to the, 67
- Thermal analysis technique for investigating gelation of rigid PVC compounds, 1134**
- and electrical properties of polyimides containing tricyclic fused rings, 649
 - conductivity of polymers: a new correlation, 867
 - decomposition mechanism of poly(vinylidene chloride), 131
 - degradation of polyacrylamide, adsorbed metal ions as stabilizers for the, 1740
 - degradation, post-irradiation, of poly(olefin sulphones), 71
 - degradation of synthetic polymers: 16. Estimation of the product yield on the basis of intensity function for thermal gasification of PE, studies on, 1403
 - gasification of PE, estimation of the product yield on the basis of intensity function for, studies on thermal degradation of synthetic polymers, 1403
 - pressure in molten PE, simple model for, 1754
 - stability, high, and flame-resistance, halogenated polymers with, 1571
- Thermally initiated oligomerization of metallic salts of methacrylic acid in solid state, 1716**
- obtained poly[4,4''(*p*-terphenylene) amide], 1263

Thermodynamic parameters of polyacrylamides in water, 1530

- properties of polyolefin solutions at high temperature: 2. Lower critical solubility temperatures for, 1190
- properties of polyolefin solutions at high temperatures of PE, PP and ethylene-propylene copolymers in hydrocarbon solvents, 1181

Thermodynamics and the propagation mechanisms in 1,4 *Cis* and 1,4 *Trans* isoprene, anionic polymerization initiated by lamellar compounds of LiC_{12} : -H-n.m.r. study, 1419

Transformation process, anion to free radical, in block copolymer preparation: 2. Homolytic scission of the C-Pb bond of lead trialkyl-terminated polymers both thermally and by transition metal salts, 1076

- reaction, Ziegler-Natta, block copolymers synthesis *via* anionic to, 1316

Transient decay studies of photophysical studies in aromatic polymers, intramolecular excimer formation in copolymers of 1-vinyl naphthalene and methyl acrylate, 293

Transition, crystal-crystal phase, in an alternating copolymer of ethylene and chlorofluoroethylene, molecular dynamics of, using the Raman active longitudinal acoustical mode (*LAM*), 890

- temperature *T*, the rubbery-viscous, of amorphous polymers, molecular interpretation of, 774

Transitions, phase, of poly(*p*-acryloyloxybenzoic acid), a mesophase macromolecule, 778

- , polymorphic, of isotactic PP caused by aminosulphur compounds, 562

Ultrafiltration and dialysis characteristics of cellulose nitrate-poly(vinyl pyrrolidene) polymer blend membranes, 829

Ultrasonic investigations of morphology and stress relaxation in drawn PP, 1026

- properties of some diamine cured aliphatic epoxy polymers, 736
- studies, high frequency, of PE, 1032
- U.v. and i.r. regions of the spectrum, anisotropy of poly(vinyl alcohol) films in the, 1655

UCST behaviour, a pair of high molecular weight compatible polymers showing, 1005

- , semi concentrated region near the, SANS from polymer solutions, 147

Vibrational spectra of crystalline PTFE, 726

- spectra of poly-1,1,2,2-tetrachlorobutane — a model for head-to-head poly(vinylidene chloride), 762

***N*-vinylcarbazole and optically active fumaramates, copolymers of, synthesis, fluorescence emission spectra and chiroptical properties of, 1088**

- , stereospecific polymerization of, by $\text{ZnEt}_2/\text{CoCl}_2$ -pyridine catalyst system, 1319

Vinyl cyclopentane units, preparation of polybutadiene containing, 382

- monomers, bulk anionic polymerizations of, application of solid complex bases to, 356

- monomers, solution anionic polymerizations of, application of new complex bases to, 347

- polymers, proton spin-lattice and spin-spin relaxation in poly(methyl acrylate) in dilute solution, 288

1-Vinylimidazole, non-classical free-radical polymerization of, degradative addition to monomer in, 1227

Viscoelastic behaviour and SAXS of thermoreversible poly(vinyl chloride) gels, correlations between, 305

- properties, non-linear, of solid polymers, 673

Viscometric and preferential adsorption behaviour of poly(4-tert-butylphenyl methacrylate) in tetrahydrofuran/chloroform, 1045

Viscosity and osmotic second virial coefficient of maleic acid copolymers in aqueous solutions, 1500

- , intrinsic, —temperature relationships, 410
- , macro- and microviscosity in high polymer solutions, 145
- theories, various, application of to the viscosity data of methyl methacrylate-acrylonitrile random copolymers, 924

WAXS, determination of the local conformation of PMMA from, 175

Wettability of glass substrates by molten nylon-6, 534

Whitening, stress, in PE, 1610

Wittig reactions, phase transfer catalysed, chemical modification of chloromethylated crosslinked PS *via*, 1153

X-ray diffraction and calorimetric results, additional: on extended-chain structure for isotactic polystyrene, 1161

- and conformational analysis of MDI-propandiol and MDI-ethylene glycol hard segments, structure of polyurethane elastomers, 1534

Yield, polymer and polymer friction: a comparison, 1587

Ziegler-Natta catalysts, supported, concentration of active sites in, 226

- transformation reaction, block copolymers synthesis *via* anionic to, 1316