

*Bibliography Section*

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- ABATA, J. D., DZIOBAK, M. P., NACHBOR, M., MENDENHALL, G. D. (Michigan Technol. Univ. Dept. Chem. Chem. Engn. Houghton MI 49931 USA) Thermal decomposition of sodium trans-hyponitrite *J. Phys. Chem.* 93(1989)3368
- ABBASI, S. A. (Soroma State Univ., Rohnert PK, CA 94928 USA) Binary and ternary complexes of interest to environmental systems. 11. Effect of temperature and steric factors on the thermodynamics of metal –1,10-phenanthroline hydroxamic acid system *Polish J. Chem.* 62(1988)53
- ABDEL-GHANI, N. T., ISSA, Y. M., SHERIEF, O. E., KHALED, M. A. (Univ. Cairo. Fac. Sci., Dept. Chem., Cairo Egypt) Spectral and thermal conductance studies of some symmetric 1,5-diphenyl-3-cyanoformazans. SCF PPP CI calculation *Thermochim. Acta* 138(1989)129
- ABE, O., KANZAKI, S., TABATA, H. (Nikon Univ. Coll. Ind. Technol., Phys. Sci. Labs., 2-11-1 Shin-El Narashino Chiba 275 Japan) Thermal decomposition of silicon nitride along with powder characteristics *Nippon Kagaku Kaishi* 2(1989)275
- ABOUL-GHEIT, A. K., SUMMAN, A. H. (Umm Al Qura Univ., Fac. Appl. Sci. Engn., Dept. Chem., POB 3711, Makkah Al Mukkabratma Saudi Arabia) Acid sites strength distribution in heteropoly acids by differential scanning calorimetry *Thermochim. Acta* 140(1989) 21
- AGARWAL, R. K. (Lajpat Rai Post Grad. Coll., Dept. Chem., Sahibabad 2010005 Ghaziabad India) Magneto, spectral and thermal studies of lanthanum and lanthamide(III) bromide and nitrate complexes of 2,2'-bipyridine mono N-oxide *Polish J. Chem.* 62(1988) 379
- AGARWAL, S. K., SINGH, G., MITTAL, R. K. (III-3-7-9 Nehru Nagal, Ghaziabad 201001 India) Structural and thermal studies on mixed ligand coordination compounds of Pd(II), Rh(III) and Pt(II) with 3-(dimethylaminomethyl) indole and salicykaldoxime *Thermochim. Acta* 140(1989)265
- AHMED, A., PAKDAL, H., ROY, C., KALIAGUINE, S. (Univ. Laval, Dept. Chem. Engn., Quebec City, Quebec Canada G1 K7 P4) Characterization of the solid residues of vacuum pyrolysis of Populus tremuloides *J. Anal. Appl. Pyrol.* 14(1989)281
- AIROLDI, C., SOUZA, A. G. (Univ. Estadual Campinas, Inst. Quim., BR-13081 Campinas SP Brazil) Thermochemical properties of chelates of di-n-butylthiocarbamate with phosphorus-group elements *J. Chem. Thermodyn.* 21(1989)283
- AKAR, A., AYDOGAN, A. C., ZAIM, Ö., TINCER, T. (Tech. Univ. Istanbul, Dept. Chem., Istanbul Turkey) DSC studies on melt crystallized, drawn and fuming nitric acid oxidized polyethylene *Angew. Macromol. Chem.* 168(1989)10
- ALAMO, R. G., MANDELKERN, L. (Florida State Univ., Dept. Chem., Tallahassee FL 32306 USA) Thermodynamic and structural properties of ethylene copolymers *Macromolecules* 22(1989)1273
- AL-BADRI, H. T., ABDUL-JALIL, F. H., BARBOOTI, M. M. (Al Mussansiriyah Univ., Coll.

- Sci. Dept. Chem., Baghdad Iraq) Thermoanalytical organic compounds. Part V. Thermal decomposition of some substituted N-Phenylphthalamic acids *Thermochim. Acta* 138(1989)13
- ALBERTY, R. A. (MIT, Dept. Chem., Cambridge MA 02139 USA) Thermodynamics of the formation of benzene series polycyclic aromatic hydrocarbons in a benzene flame *J. Phys. Chem.* 93(1989)3299
- ALEKSANDROV, V. V., SHIKOVA, T. M., UVAROVA, O. N. (AM Gorkii State Univ., Kharkov, 310077 Ukraine USSR) Effect of the temperature and composition of a water-2-propanol solvent on thermodynamic characteristics of sigma (Na + J-) ion solvation *Zh. Fiz. Khim. SSSR* 63(1989)56
- ALLAN, J. R., BONNER, J. G., BOWLEY, H. J., GERRARD, D. L., HOEY, S. (Napier Polytech. Dept. Appl. Chem. Sci., Counton Rd., Edinburgh Scotland) Thermal studies on fumaric acid and crotonic acid compounds of the cobalt(II) and nickel(II) *Thermochim. Acta* 141(1989)237
- ALLAN, N. S., HARRISON, M. J., LEDWARD, M., FOLLOWS, G. W. (Fac. Sci. Engn. Manchester, Dept. Chem., John Dalton Bldg., Chester str., Manchester M1 5GD England) Thermal and photochemical degradation of nylon 6,6 polymer. Part III. Influence of iron and metal deactivators *Polym. Degrad. Stabil.* 23(1989)165
- AL-SAYEGH, A. J., LYLE, S. J. (King Fahd Univ. Petr. Minerals, Dept. Chem., Dhahran 31261 Saudi Arabia) Pyrolysis-gas chromatography of separated zones in thin-layer chromatograms. IV. Application to the determination of some sulfonamide drugs *J. Anal. Appl. Pyrol.* 14(1989)323
- ALTMAN, E. I., GORTE, R. J. (Univ. Penn, Dept. Chem. Engr., Philadelphia PA 19104 USA) Temperature-programmed desorption study of NO on Pt particles supported on  $\alpha\text{-Al}_2\text{O}_3\{0001\}$  *J. Phys. Chem.* 93(1989)1993
- ARAKAWA, T., TAKADA, K., TSUNEMINE, Y., SHIOKAWA, J. (Osaka Univ. Fac. Engr., Dept. Appl. Chem., 2-1 Yamadaoha, Suita Osaka 565 Japan) Temperature programmed desorption of CO from reduced perovskite oxides  $2n\text{CoO}_{3-x}$  ( $\text{Ln} = \text{La, Sm}$ ) *Mat. Res. Bull.* 24(1989)395
- ARAVINDAKSHAN, K. K., MURALEEDHARAN, K. (Univ. Calicut, Dept. Chem., Calicut 673635 Kerala India) Thermal decomposition kinetics of polymeric complexes of nickel(II), zinc(II) and cadmium(II) with N,N'-bis(dithiocarboxy) piperazine *Thermochim. Acta* 140(1989)325
- ASADOV, M. M., MAMEDOV, A. N. (Acid. Sci. Baku, Inst. Inorgan. Phys. Chem., pr. Narimanova 29, Baku 370143 Azerbaijan USSR) Thermodynamic calculation of phase equilibria in ternary mutual systems with participation of mercury and dithallium chalcogenides *Mater. Chem. Phys.* 21(1989) 30
- ATAKE, T., KAWAJI, H., TAKANABE, S., SAITO, Y., MORI, K., SAEKI, Y. (Tokyo Inst. Technol. Engr. Mat. Res. Lab., 4259 Nagatsuta Cho, Midori Ku, Yokohama Kanagawa 227 Japan) Thermodynamic studies of the high temperature superconductor  $\text{Ba}_2\text{TmCu}_3\text{O}$ , *Thermochim. Acta* 139(1989) 169
- AYAD, M. M. Y., AMER, S. A., ISSA, R. M. (Univ. Tanta, Fac. Sci., Dept. Chem., Tanta Egypt) Electrical properties of charge transfer complexes of diaminonaphthalene donors with dinitro- and trinitrobenzene acceptors *Thermochim. Acta* 140(1989)277
- BAONZA, G. V., DELGADO, N., ALONSO, C. M. (Univ. Complutense Madrid, Fac. Ciencias Quim. Dept. Quim. Fis., E-28040 Madrid Spain) (p, p, T) properties of liquid carbon disulfide from 198 to 288 K and pressures up to 104 MPa *J. Chem. Thermodyn.* 21(1989)231
- BARRALES-RIENDA, J. M., CHAVES, M. S., ARECHEDERRA, J. M. M., MARTIN, F. F. (CSIC, Inst. Ciencia Tecnol. Polimeros, Juan de la Cierva 3, E-28006 Madrid Spain) Polymer precursors of polyacetylene. Thermal degradation of poly(vinyl esters). Part II. Effect of the n-acyl chain length on the autocatalytic thermal degradation of a ho-

- mologous series of poly(vinyl n-alkyl esters) (PV-n-AEs) *Polym. Degrad. Stabil.* 23(1989) 279
- BARRIGA, C., MORALES, J., TIRADO, J. L. (Univ. Cordoba, Fac. Ciencias, Dept. Quim. Inorgan. Ingen. Quim., E-15004 Cordoba Spain) Kinetics of the isothermal transformation of  $\beta$ -PbO<sub>2</sub> into  $\alpha$ -PbO<sub>2</sub>, *Thermochim. Acta* 138(1989)277
- BASKIR, J. N., HATTON, T. A., SUTER, U. W. (MIT, Cambridge MA 02139 USA) Thermodynamics of the partitioning of biomaterials in two-phase aqueous polymer systems: comparison of lattice model to experimental data *J. Phys. Chem.* 93(1989)2111
- BAZAROV, I. P., NIKOLAEV, P. N. (MV Lomonosov State Univ., Dept. Phys. Moscow 117234 USSR) Method of nuclear-cluster decomposition in static thermodynamics *Zh. Fis. Khim. SSSR* 63(1989)64
- BAZILYUK, T. N., LEBEDEV, Y. V. (Acad. Sci. UKSSR, Inst. Chem. Macromolec Cpds., Kiev, Ukraine USSR) Thermodynamics of mixing for styrene-acrylonitrile-methyl methacrylate system *Vysokomol. Soedin. SSSR* 31(1989)57
- BERNARD, C., CHATILLON, C. (Ecole Natl. Super Electrochim. Electromet. Grenoble, Thermodyn. Physicochim. Met. Lab., CNRS, F-38402 St. Martin Dheres France) Complex equilibrium calculations in the course of critical assessment of thermodynamic data: the gaseous phase implications *Calphad* 13 (1989)97
- BESSERGENEV, V. G., KORALEVSKAYA, Y. A., PAUKOV, I. E., SHKREDOV, Y. A. (Acad. Sci. USSR, Inst. Inorgan. Chem. Siberian Branch, Novosibirsk USSR) Heat capacity measurements under continuous heating and cooling using vacuum adiabatic calorimetry *Thermochim. Acta* 139(1989) 245
- BEUSEMRA, N., HOANG, T., GUYOT, A., GAY, M., CARETTE, L. (CRNS Mat. Organ. Lab., BP24, F-69380 Vernaison France) Thermal dehydrochlorination and stabilization of poly(vinylchloride) in solution. Part IV. Synergistic effects of  $\beta$ -diketone compounds and metal soap stabilizers *Polym. Degrad. Stabil.* 24(1989)89
- BEUSEMRA, N., HOANG, T., MICHEL, A., BARTHOLIN, M., GUYOT, A. (CNRS, Mat. Organ. Lab., BP 24-69390, F-69390 Vernaison France) Thermal dehydrochlorination and stabilization of poly(vinyl chloride) in solution: Part III. Zn-Ca stearates as stabilizers *Polym. Degrad. Stabil.* 24(1989)33
- BEZUS, A. G., LOPATKIN, A. A., SHONIYA, N. K. (MV Lomonosov State Univ., Dept. Chem., Moscow 117234 USSR) Calculation of thermodynamic characteristics of ethane adsorption by CaX zeolite in an atom-ion approximation *Zh. Fis. Khim. SSSR* 63 (1989)170
- BHUYAN, K., DASS, N. N. (Dibrugarh Univ., Dept. Chem., Dibrugarh 786004 Assam India) Characterization and thermal studies of copolymers of methyl methacrylate and maleic anhydride prepared by charge-transfer initiation *J. Macromol. Sci.* 1725(1988) 1667
- BISCHOFF, J. L., KUBLER, L., BOLMONT, D. (Univ. Haute Alsace, Fac. Sci. Techn., 4 Rue France) Thermal nitridation of Si(100)-2x1 surface by NH<sub>3</sub> XPS results *Surface Sci.* 209 (1989)115
- BLACHNIK, R., STÖTER, U. (Univ. Osnabrück, Fb. Biol. Chem., Anorgan. Chem., Barbara str. 7., D-4500 Osnabrück Fed. Rep. Ger.) The phase diagram AgI-PbI<sub>2</sub>, *Thermochim. Acta* 141(1989)293
- BLEASE, T. G., PATERSON, G. A., SCRIVENS, J. H. (ICI PLC, Wilton Mat. Res. Ctr. POB 90, Cleveland TS6 8JE England) Thermal characterisation of polymeric systems by mass spectrometry *Brit. Polym. J.* 21 (1989)37
- BOBKHOVA, A. A., KAMAEVA, I. G., LOGVINENKO, W. A., ANUPHRIENKO, W. F., CHARLAMOV, G. W., POLUBOYAROV, W. A., GLYBOVSKAYA, W. A. (Altai State Univ., Barnaul 656099 USSR) The structure and kinetic study of thermal decomposition of hydrazine complexes of fluoride of transition metals *Izv. Sibir. Otd. Akad. Nauk Khim.* 6(1988)55
- BOERIO-GOATES, J., WOODFIELD, B. F., ARTMAN, J. I. (Brigham Young Univ., Dept. Chem., Provo UT 84602 USA) Heat

- capacity studies of phase transitions in larg-beinites. I.  $K_2Mn_2(SO_4)_3$  *Thermochim. Acta* 139(1989)157
- BOLDYREV, V. V., KANIMOV, B. K., FAK-TOROVICH, B. C., YAKOBSON, B. I. (Acad. Sci. USSR, Inst. Solid State Chem. Mineral. Ores. Proc., Novosibirsk USSR) Radiation-thermal activation of the diffusion-controlled solid-state reactions *Izv. Sibir. Otd. Akad. Nauk Khim.* 6(1986)3
- BOWSHER, B. R., DICKINSON, S., OGDEN, J. S., YOUNG, N. A. (Univ. Southampton, Dept. Chem., Southampton SO9 5NH Hants England) New estimates for the thermodynamic functions of molecular boric acid *Thermochim. Acta* 141(1989)125
- BRADLEY, T. D., BALL, A., HARDING, S. E., MITCHELL, Y. R. (Univ. Nottingham, Dept. Appl. Biochem. Food Sci., Loughborough LE12 5RD Leics England) Thermal degradation of guar gum *Carbohydr. Polym.* 10 (1989)205
- BRAIBANTI, A., DALLAVALLE, F., FISI-CARO, E. (Univ. Parma, Fac. Pharm., Inst. Appl. Phys. Chem., I-43100 Parma Italy) Cooperativity functions and site binding constants in polyprotic acids *Thermochim. Acta* 140(1989)203
- BROCHARD, F. (Univ. Pierre Marie Curie, Sri Bat. Chim. Phys., 11 Rue Pierre Marie Curie, F-75231 Paris 05 France) Motions of droplets on solid surfaces induced by chemical or thermal gradients *Langmuir* 5(1989)432
- BROOKS, C. R., DAS, S. (Univ. Tennessee, Dept. Mat. Sci. Engn., Knoxville TN 37996 USA) A third law of thermodynamics analysis of The enthalpy change of the order-disorder transformation in  $Ni_3Fe$  *Thermochim. Acta* 139(1989)149
- BROWN, R. J. C., WEIR, R. D. (Queens Univ., Dept. Chem. Kingston Ontario Canada K7L 3N6) Zhe authentication of phase transitions *Thermochim. Acta* 139(1989)93
- BROWN, T. C., KING, K. D. (Univ. Adelaide, Dept. Chem. Engn., Adelaide SA 5001 Australia) Very low-pressure pyrolysis (VLPP) of methyl- and ethynyl-cyclopentanes and cyclohexanes *Int. J. Chem. Kinet.* 21(1989) 251
- BUCKTON, G. (Univ. London, Sch. Pharm., Dept. Pharmaceut, 29-39 Brunswick SQ, London WC1N 1AX England) Structure-activity relationships for solubility and wettability of a number of substituted barbituric acids *Thermochim. Acta* 138 (1989)319
- BUGAJEWSKI, Z., BYLICKI, A. (Polish Acad. Sci., Inst. Phys. Chem., ul. Kasprzaka 44-52, PL-01224 Warsaw Poland) (Solid + liquid) phase equilibria for (N-methyl-pyrrolidin-2-one + p-cresol) *J. Chem. Thermodyn.* 21 (1989)37
- CAMPANELLA, L., TOMASSETTI, M., MAZZEI, F. (Univ. Rome, Dep. Chim., La Sapienza Piazza A Moro 5, I-00185 Rome Italy) Thermal analysis, conducting properties and electrochemical application of some conductor-doped polymers. Part 2. *Thermochim. Acta* 141(1989)41
- CANTOR, R. S., McLLROY, P. M. (Dartmouth Coll., Dept. Chem., Hanover, NH 03755 USA) Statistical thermodynamics of flexible-chain surfactants in monolayer films. II. Calculation for a modified cubic lattice model *J. Chem. Phys.* 90(1989) 4431
- CANTOR, R. S., McLLROY, P. M. (Dartmouth Coll., Dept. Chem., Hanover, NH 03755 USA) Statistical thermodynamics of flexible-chain surfactants in monolayer films. I. Theory of fluid phases *J. Chem. Phys.* 90 (1989)4423
- CASALE, A., ROBERTIS, A., STEFANO, C., GIANGUZZA, A. (Univ. Messina, Ist. Chim. Anal. Sperone 31, I-98166 S Agata Messina Italy) Thermodynamic parameters for the formation of calcium  $\alpha$ -alanite complexes in aqueous solution *Thermochim. Acta* 140 (1989)59
- CATENA, G. C., BRIGHT, F. V. (Suny Buffalo, Dept. Chem., Buffalo NY 14260 USA) Thermodynamic study on the effects of betacyclodextrin inclusion with anilinonaphthalenesulfonates *Anal. Chem.* 61(1989)905

- CHANG, S. S. (NBS, Inst. Mat. Sci. Engn. Div. Polymers, Gaithersburg MD 30899 USA) Thermal analysis of VAMAS polycarbonate-polyethylene blends *Thermochim. Acta* 139 (1989)313
- CHEN, M. S., CHANG, S. J., CHANG, R. S., CHEN, S. M., TSAI, H. B. (Technol. Res. Inst., Union Chem. Labs, 321 Kuang Fu Rd., Sec. 2, Hsinchu 30042 Taiwan) Copolymers: Part II. Thermal degradation of poly(butylene) isophthalate-co-terephthalates *Polym. Degrad. Stabil.* 23(1989)239
- CHEN, S., CHOU, K. C. (Beijing Univ. Iron Steel Technol., Thermodyn. Phase Diagram Lab., Beijing Peoples R China) The application of rational function to predict ternary thermodynamic properties *Calphad* 13 (1989)79
- CHENG, S. Z. D., JANIMAK, J. J., SRIDHAR, K., HARRIS, F. W. (Univ. Akron, Inst. Polymer Sci. Dept. Polymer Sci., Akron OH 44325 USA) Liquid-crystalline poly(azomethine)s: 1. Thermodynamic properties *Polymer* 30(1989)494
- CHEVALIER, P. Y. (Univ. Grenoble, BP 66, F-38402 St. Martin Dheres France) A thermodynamic evaluation of the Au-Ge and Au-Si systems *Thermochim. Acta* 141 (1989)217
- CHIANTORE, O., CORTEMIGLIA, L., GUAITA, M. (Univ. Turin, Dip. Chim. Inorgan. Chim. Fis. Chim. Mat., Via P Giuria 7, I-10125 Turin Italy) Changes of degree of polymerization in the thermal degradation of poly(methyl methacrylate) *Polym. Degrad. Stabil.* 24(1989)113
- CHIRICO, R. D., HOSSENLOPP, I. A., NGUYEN, A., STEELE, W. V., GAMMON, B. E. (Natl. Inst. Petr. Energy Res., India Inst. Technol., Res. Inst., POB2128 Bartlesville OK 74005 USA) The thermodynamic properties of 4-methylphenantrene *J. Chem. Thermodyn.* 21(1989)179
- CHOUDHARY, V. R., SRINIVASAN, K. R., AKOLEKAR, D. B. (Natl. Chem. Lab., Div. Chem. Engrn., Poona 411008 Maharashtra India) Temperature programmed desorption of benzene from NaY, CeNaY and CeNaX zeolites *Zeolites* 9(1989)115
- COCA, J., MEDINA, J., LANGER, S. H. (Univ. Oviedo, Dept. Chem. Engrn., E-33071 Oviedo Spain) Thermodynamic properties of solution by gas chromatography using a liquid crystal as solvent; cholesteryl myristate *Liq. Cryst.* 4(1989)175
- COLEMAN, M. M., LICHKUS, A. M., PAINTER, P. C. (Penn State Univ., Dept. Mat. Sci. Engr. University PK, PA 16807 USA) Thermodynamics of hydrogen bonding in polymer blends. 3. Experimental studies of blends involving poly(4-vinyl-phenol) *Macromolecules* 22(1989)586
- COLOMINA, M., JIMENEZ, P., ROUX, M. V., TURRION, C. (CSIC Inst. Phys. Chem. Rocasolano, Serrano 119, E-28006 Madrid Spain) Thermochemical properties of 1,2,4,5-tetramethylbenzene, pentamethylbenzene, and hexamethylbenzene *J. Chem. Thermodyn.* 21(1989)275
- CORDFUNKE, E. H. P., KONINGS, R. J. M. (Netherlands Energy Res. Fdn, Petten Netherland) The high temperature thermo-physical properties of ruthenium and palladium *Thermochim. Acta* 139(1989)99
- CREUZBURG, M., KOCH, F., WITTL, F. (Univ. Regensburg, Fak. Phys., D-8400 Regensburg Fed. Rep. Ger.) Low-temperature photolysis of hydrocarbons in solid xenon: evidence for metastable  $Xe_nH$  *Chem. Phys. Lett.* 156 (1989)387
- CULMANN, J. C., CHERRY, G., JOST, R., SOMNER, J. (Univ. Strasbourg 1, Dept. Chim., Curs. UA 469, 1 Rue Blaise Pascal, F-67070 Strasbourg France) Temperature controlled selectivity in methylcyclopentane carbonylation in HF-SbF<sub>5</sub> *Tetrahedron Lett.* 30(1989)70
- DAHIYA, K. K., KAUSHIK, N. K. (Univ. Delhi, Dept. Chem., Delhi 11007 India) Thermal studies on some lanthanide(III) complexes of hexamethylenedithiocarbamate *Thermochim. Acta* 141(1989)69
- DARROUJ, M. N., FAULKNER, R. G. (Assad Acad. Engrn., Aleppo Syria) A new method for measuring dynamic response in polymers over a wide range of frequency and temperature *J. Phys. E* 22(1989)218

- DARVEAUX, R., HWANG, L. T., REISMAN, A., TURLIK, I. (Microelectri. Ctr. N Carolina, POB 12889, Res Triangle PK, NC, 27709 USA) Thermal analysis of a multichip package design *J. Electron Mater.* 18 (1989)267
- DAS, P., EMA, K., GARLAND, C. W. (MIT Dept. Chem., Cambridge MA 02139 USA) Calorimetric study of the smectic A-smectic C transition in TBBA *Liq. Cryst.* 4(1989) 205
- DA SILVA, M. A. V. R., FERRAO, M. L. C. C. H. (Univ. Porto, Fac. Ciencias, Dept. Quim. P-4000 Porto Portugal) Standard enthalpies of formation of bis(fluoro-substituted *p*-ane-2,4-dionato)hydrates of Mn(II), Co(II) and Ni(II); the mean (M—O) bond dissociation enthalpies *Thermochim. Acta* 139(1988)33
- DA SILVA, M. A. V. R., MONTE, M. J. S., MATOS, M. A. R. (Univ Porto, Fac. Ciencias, Dept. Quim. P-4000 Porto Portugal) Enthalpies of combustion, vapour pressure and enthalpies of sublimation of 8-hydroxyquinoline, 5-nitro-8-hydroxyquinoline, and 2-methyl-8-hydroxyquinoline *J. Chem. Thermodyn.* 21(1989)159
- DA SILVA, M. A. V. R., REIS, A. M. M. V. (Univ. Porto, Fac. Ciencias, Dept. Quim. P-4000 Porto Portugal) Enthalpies of formation of five crystalline dialkyldithiocarbamate copper(II) complexes. The mean Cu—S bond-dissociation enthalpies *J. Chem. Thermodyn.* 21(1989)167
- DA SILVA, R. M. D. M. C., SOUZA, P., PILCKER, G. (Univ. Porto, Fac. Ciencias, Dept. Quim. P-4000 Porto Portugal) Enthalpies of combustion of thiobenzamide, N,N-dimethylthiobenzamide and N,N-diethylthiobenzamide *J. Chem. Thermodyn.* 21(1989) 173
- DA SILVA, M. A. V. R., DA SILVA, R. M. D. M. C., TEIXEIRA, J. A. S., BRUCE, J. M., GUYAN, P. M., PILCHER, G. (Univ. Porto, Fac. Ciencias, Dept. Quim., P-4000 Porto Portugal) Enthalpies of combustion of 1,4-naphthoquinone, 9,10-anthraquinone 9,10-phenanthraquinone, 1,4,9,10-anthraquinone, 5,8-dihydroxy-1,4-naphthoquinone and 1,4-dihydroxy-9,10-anthraquinone *J. Chem. Thermodyn.* 21(1989)265
- DE ANDRÉS-LIOPIS, J., AQUILAR-NAVARRO, A., DOMENECH, J. (Univ. Barcelona, Dept. Quim. Fis., E-08028 Barcelona Spain) Kinetics study of the reaction between atactic polypropylene and dicumyl peroxide by differential thermal analysis *J. Macromol. Sci. A25*(1988)1575
- DEB, N., GOGOI, P. K., DASS, N. N. (Dibrugarh Univ., Dept. Chem. Dibrugarh 786004 Assam India) Thermal decomposition kinetics of zinc(II) bis(oxalato)-zincate(II) tetrahydrate *Thermochim. Acta* 140(1989)145
- DEMIDOV, A. I., MORACHEVSKII, A. G., NIKOLAEV, V. P., BERENDA, N. V. Thermodynamic characteristics of lithium-silicon compounds *J. Appl. Chem. USSR* 61(1988) 1254
- DE NUZZIO, J. D., FARRINGTON, G. C. (Univ. Penn., Dept. Mat. Sci. Engn., 3231 Walnut str., Philadelphia PA 19104 USA) Protonic solid electrolytes: thermal stability and conductivity of ammonium/hydronium  $\beta'$ -aumina *J. Solid State Chem.* 79(1989)65
- DIAB, M. A., EL-SONBATI, A. Z., EL-SANABARI, A. A., TAHAA, F. I. (Mansoura Univ. Fac. Sci., Dept. Chem., Demiatta Egypt) Polymer complexes. VIII. Thermal stability of poly(2-acrylamidopyridine) and polymer complexes of 2-acrylamidopyridine with some transition metal chlorides *Polym. Degrad. Stabil.* 24(1989)51
- DONIA, A. M., SALOUM, H. (Menoufia Univ. Fac. Sci., Dept. Chim., Shebin El Kom Egypt) Preparation of novel non-symmetrical Schiff bases using solid state reactions *Thermochim. Acta* 141(1989)19
- DOZOV, I., KIROV, N., FONTANA, M. P., MANFREDI, M., ROSI, B., CYWINSKY, R. (Inst. Solid State Phys., BU-1174 Sofia Bulgaria) Temperature dependence of the molecular reorientational dynamics in nematic and isotropic EBBA and SCB by fluorescent probe depolarization spectroscopy *Liq. Cryst.* 4(1989)241
- DRULIS, M., BERAN, A., STALINSKI, B., SUSKI, W., PAWLAK, L., FELTEN, R.,

- STEGLICH, F. (W Trzebiatowski Inst. Low Temp. Struct. Res. POB 937, PL-50950 Wroclaw Poland) Low temperature specific heat and electrical resistivity of  $\text{UCu}_{4.5}\text{Al}_{7.5}$  *Thermochim. Acta* 139(1989)219
- DUIJNEVELDT, J. S., CHANH, N. B., OONK, H. A. J. Binary mixtures of naphthalene and five of its 2-derivatives. Thermodynamic analysis of solid-liquid phase diagrams *Calphad* 13(1989)83
- DUISTERWINKEL, A. E., DOESBURG, E. B. M., HAKVOORT, G. (Delft Univ. Technol., Phys. Chem. Lab., Julianalaan 136, 2628 BL Delft Netherlands) Comparing regenerative  $\text{SO}_2$ , sorbents using TG: the SRO test *Thermochim. Acta* 141(1989)51
- DUNLOP, P. J., BIGNELL, C. M. (Univ. Adelaide, Dept. Phys. Inorgan. Chem., GPO BOX 498, Adelaide SA 5001 Australia): Thermal diffusion at 300K in binary systems of helium with  $\text{CH}_4$ ,  $\text{C}_2\text{H}_4$ ,  $\text{C}_2\text{H}_6$  and  $\text{CHF}_3$ . *J. Chem. Phys.* 90(1989)4968
- DURIG, J. R., CALVERT, G. D., ESTERLE, J. S. (Univ. S Carolina, Dept. Chem., Columbia SC 29208 USA) Development of a pyrolysis-gas chromatographic-Fourier transform infrared spectroscopic technique for the study of woody peats *J. Anal. Appl. Pyrol.* 14(1989)295
- DYALL, L. K., HOLMES, A. L. (Univ. Newcastle Dept. Chem., Newcastle NSW 2308 Australia) Pyrolysis of aryl azides. IX. Azomethines as weak neighbouring groups *Aust. J. Chem.* 41(1988)1677
- EL-HOUTE, S., EL-SAYED, M., TOFT SORESEN, O. (Atom Energy Egypt, Natl. Res. Ctr., Cairo Egypt) Dehydration of  $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$  studied by conventional and advanced thermal analysis techniques *Thermochim. Acta* 138(1989)107
- EL-KABBANY, F., TOSSON, M., TAHAN, S. (Univ. Cairo, Fac. Sci., Dept. Phys., Giza Egypt) Electrical and thermal properties of  $\text{NH}_4\text{Br}_x\text{Cl}_{1-x}$  single crystal *Thermochim. Acta* 141(1989)159
- ELSABEE, M. Z., SABAA, M. W., MIKHAEL, M. S., EL HAMOULY, S. H. (Univ. Cairo, Fac. Sci., Dept. Chem. Giza Egypt) Thermal and dyeing properties of acrylonitrile-glycidyl methacrylate copolymers *Angew. Macromol. Chem.* 168(1989)91
- EL-SAIDED, F. A. (El Menoufia Univ., Fac. Sci., Dept. Chem., Shebia El Kom Egypt) Thermal synthesis of novel "half unit" Schiff bases *Thermochim. Acta* 141(1989)245
- ELSEMONGY, M. M. (Umm Al Qura Univ. Fac. Educ. Dept. Chem., Al Taif City Saudi Arabia) Thermodynamics of individual ions in various solvent system from electromotive force Measurements *Thermochim. Acta* 140(1989)305
- EL-SHOBAKY, G. A., EL-NABARAWY, T., FAGAL, G. A., AMIN, N. H. (Natl. Res. Ctr., Cairo Egypt) Mutual solid-solid interaction between  $\text{CuO}$  and sodium oxide-doped alumina *Thermochim. Acta* 141(1989)195
- EL-SHOBAKY, G. A., FAGAL, S. A., AMIN, N. H. (Natl. Res. Ctr., Cairo Egypt) Thermal solid-solid interaction between  $\text{CuO}$  and pure  $\text{Al}_2\text{O}_3$  solids *Thermochim. Acta* 141(1989)205
- ENGLER, P., SANTANA, M. W., MITTLEMAN, M. L., BALAZS, D. (BP Amer Res. Dev. 4440 Warrensville Ctr. Rd., Cleveland OH 44128 USA) Non-isothermal, in situ XRD analysis of dolomite decomposition *Thermochim. Acta* 140(1989)67
- ERICSSON, I., LATTIMER, R. P. (Univ. Lund, Ctr. Chem., POB 740, S-23007 Lund 7, Sweden) Pyrolysis nomenclature *J. Anal. Appl. Pyrol.* 14(1989)219
- ERNST, G., MAURER, G., WIEDERUH, E. (Univ. Karlsruhe, Fak. Maschinenbau, Inst. Tech. Thermodyn., D-7500 Karlsruhe Fed. Rep. Ger.) Flow calorimeter for the accurate determination of the isobaric heat capacity at high pressures: results for carbon dioxide *J. Chem. Thermodyn.* 21(1989)53
- ETCHESSAHAR, E., DEBUIGNE, J., HERMELIN, M. (Inst. Natl. Sci. Appl. Lyon, Met. Physicochim. Mat. Lab., 20 Ave Bubes Coesmes, F-35031 Rennes France) Structural relaxation, glass transition and crystal-

- lization of Cu-Zr amorphous ribbons studied by dilatometry and differential scanning calorimetry *Thermochim. Acta* 142(1989) 29
- FAGAN, D. T., KUWANA, T. (Univ. Kansas, Ctr. Bioanalyt. Res., Lawrence KS 66046 USA) Thermal desorption mass analysis of carbon surfaces - surface oxygen complexes *Anal. Chem.* 61(1989)1017
- FERLONI, P., SCAGLIOTTI, M. (Univ. Pavia, Dep. Chim. Fis., Viale Taramelli 16, I-27100 Pavia Italy) Magnetic phase transitions in iron and nickel phosphorus trichalcogenides *Thermochim. Acta* 139(1989)197
- FLORINDI, A., PETRONI, M., PELINO, M. (Dep. Chim. Ingn. Chim. Mat. I-67040 Montelupo Roio Italy) Thermodynamic study of the dehydration process of  $\alpha$ -goethite in vacuo *Thermochim. Acta* 138 (1989)47
- FONDA, M. F. R., AMIN, R. S., SELIM, M. M. (Natl. Res. Ctr., Cairo Egypt) Thermal and spectroscopic characterization of reaction products of Al-nitrate-Cr-nitrate interaction at various temperatures *Thermochim. Acta* 141(1989)279
- FRIEDRICH, J., SCHNEIDER, J. M. (Ruhr Univ. Bochum, Dept. Chem., Phys. Chem. Lab. D-4630 Bochum Fed. Rep. Ger.) Near-infrared spectroscopic investigations on phase behaviour and association of 1-octadecanol, 3-hexanol, and 3-methyl-3-pentanol in carbon dioxide and chlorotrifluoromethane *J. Chem. Thermodyn.* 21(1989) 307
- FRIPIAT, J. J., LAMBERT, J. F. (Univ. Wisconsin, Dept. Chem. POB 413, Milwaukee WI 53201 USA) Statistical thermodynamics approach to the hydrogen intercalation process in transition-metal oxides (H bronzes) *J. Phys. Chem.* 93(1983)2083
- FROLOVA, G. I., REZNIK, L. E., PAUKOV, I. E. (Acad. Sci. USSR, Inst. Inorgan. Chem. Thermodyn. Res. Lab., Novosibirsk 630090 USSR) Crystal-field effects on the thermodynamic properties of the  $KC_n(MoO_4)_2$  isostructural compounds *J. Chem. Thermodyn.* 21(1989)25
- FURUKAWA, Y., NAKAMURA, D. (Nagoya Univ., Fac. Sci. Dept. Chem., Chikusa Ku, Nagoya 464-01 Japan) Temperature studies of NQR frequencies of halogens and also of quadrupolar relaxation times of chlorine nuclei in ammonium hexahalotellurates(IV) *Ber. Bunsen Ger. Phys. Chem.* 93(1989)13
- GALLI, G., CHIELLINI, E., ANGELONI, A. S., LAUS, M. (Univ. Pisa, Dip. Chim. Chim. Ind., I-56100 Pisa Italy) Thermotropic liquid crystalline poly(ester  $\beta$ -sulfide)s based on twin hexamethylene-spaced p-oxybenzoyl diads *Macromolecules* 22(1989) 1120
- GALWEY, A. K., LAVERTY, G. M. (Queens Univ. Belfast, Dept. Pure Appl. Chem., Belfast BT9 5AG Antrim North Ireland) The thermal decomposition of magnesium chloride dihydrate *Thermochim. Acta* 138 (1989)115
- GANTAR, D., RAHTEN, A., VOLAVŠEK, B. (Edvard Kardelj Univ., Inst. Jozef Stefan, YU-61000 Ljubljana Yugoslavia) Synthesis and characterization of new hydrazinium (2+) and hydrazinium (2+) and hydrazinium (1+) hexafluorophosphates and hydrazinium (1+) hexafluoroarsenate *Thermochim. Acta* 142(1989)49
- GARDNER, P. J., PANG, P., PRESTON, S. (Royal Holloway New Coll., Dept. Chem., Egham TW20 0SX Surrey England) Thermodynamics of the dissociation of  $ZnCl_2(NH_3)_2$  by modified extrainternment *Thermochim. Acta* 138(1989)371
- GARG, B. S., JAIN, V. K. (Univ. Delhi, Dept. Chem., Delhi 110007 India) Investigation of the complexation equilibria and thermodynamic parameters of biologically active o-vanillin-semicarbazone with lanthanon(III) ions *Thermochim. Acta* 140(1989)271
- GARG, B. S., JAIN, V. K. (Univ. Delhi, Dept. Chem., Delhi 110007 India) Evaluation of thermodynamic parameters and stability constants of bivalent metal complexes of biologically active o-vanillinsemicarbazone *Thermochim. Acta* 138(1989)21
- GASPARYAN, R. A., GASPARYAN, K. A., BARANOV, V. G., FRENKEL, S. Y. (Acad.

- Sci. USSR, Inst. Macromolec. Cpds., Lenigrad USSR) Thermodynamics and topology of nucleation during crystallization of flexible polymers *Vysokomol. Soedin. Ser. B SSSR* 31(1989)91
- GAZIT, D., PESZKIN, P. N., FEIGLSON, R. S., SUN, J., GEBALLE, T. H. (Stanford Univ., Ctr. Mat. Res., Stanford CA 94305 USA) Preparation of high temperature superconductor-metal wire composites *Mat. Res. Bull.* 24(1989)467
- GHOSH, J. K., JERE, G. V. (Indian Inst. Technol., Dept. Chem., New Delhi 110016 India) Kinetics of solid state decomposition of  $K_3[Nb(O_2)_2F_4]$ : TG study *Thermochim. Acta* 138(1989)199
- GIBSON, J. K., HAIRE, R. G. (Darling Downs Inst. Adv. Educ., Toowoomba QLD 4350 Australia) Vapor pressure of promethium trifluoride *Thermochim. Acta* 140(1989) 287
- GIERYCZ, P., RANK, J., GREGOROWICZ, J. (Polish Acad. Sci., Inst. Phys. Chem., Kasprzaka 44-52, PL-00901 Warsaw Poland) Correlation and prediction of vapour-liquid equilibria in ternary systems formed by hydrocarbons *Thermochim. Acta* 142(1989) 59
- GILLEN, K. T., CLOUGH, R. L. (Sandia Natl. Labs., Albuquerque NM 87185 USA) Time-temperature-dose rate superposition: A methodology for extrapolating accelerated radiation ageing data to low dose rate conditions *Polym. Degrad. Stabil.* 24(1989)177
- GLAZOV, M. V., BURKHANOV, G. S. (AA Baikov Met. Inst., Moscow, USSR) Thermodynamics of superconducting phase transition in the multicomponent system *Zh. Fis. Khim. SSSR* 63(1989)230
- GLAZOV, V. M., PASHINKIN, A. S., MALKOVA, A. S. (Moscow Electr. Machinery Inst., Moscow USSR) Calorimetry of cadmium selenide in the 360–760 K temperature range *Zh. Fis. Khim. SSSR* 63(1989)38
- GOEL, S. P., VERMA, G. R., SHARMA, M. P., KUMAR, S. (Sanatan Dharm. Post-grad. Coll. Dept. Chem., Muzaffarnagar UP 25001 Uttar Pradesh India) Preparation of potassium trimolybdate by the thermal decomposition of a new oxomolybdenum(VI) oxalato complex *Thermochim. Acta* 141(1989)87
- GOLOVANOV, V. I. (Chelyabinsk State Univ., Chelyabinsk USSR) Temperature effect on the extraction of copper di-normal-butylphosphate *Zh. Neorg. Khim. SSSR* 34(1989) 473
- GOMAA, E. A. (Teachers Training Coll., Salalat PO 19905 Sultanate Oman) Study of the  $Ph_4SbBPh_4$  assumption for single ion free energies in some organic solvents *Thermochim. Acta* 140(1989)7
- GOMAA, E. A. (Teachers Training Coll., Salalat PO 19905 Sultanate Oman) Transfer free energies of ions from water to  $N,N$ -dimethylformamide and its aqueous mixtures, based on  $Ph_4AsBPh_4$  and  $Ph_4SbBPh_4$  assumptions *Thermochim. Acta* 142(1989)19
- GOÑI-ELIZALDE, S., FRESNO-RUIZ, S., GARCIA-CLAVEL, E. (CSIS. Inst. Eduardo Torroja, C Serrano Galvache S-N Costillares Chamastin, E-28033 Madrid Spain) Treatment of CdO at room temperature and 150 °C in a water-vapour-saturated atmosphere Part 1. *Thermochim. Acta* 142(1989) 73
- GRASSO, D., FASONE, S., DI PASQUALE, G., CASTELLI, F. (Univ. Catania, Dip. Sci. Chim., Viale A Doria 6, I-95125 Catania Italy) Scanning dilatometry and calorimetry of p-alkyl-p'-cyano-cyclohexyl-cyclohexanes *thermochim. Acta* 140(1989)31
- GRONVOLD, F., STOLEN, S., SVENDSEN, S. R. (Univ. Oslo, Dept. Chem. N-0315 Oslo 3 Norway) Heat capacity of  $\alpha$ -quartz and revaluation of the thermodynamic properties *Thermochim. Acta* 139(1989)225
- GUILLERMET, A. F. (Royal Inst. Technol. Div. Phys. Met., S-10044 Stockholm 70 Sweden): Assessing the thermodynamics of the Fe–Co–Ni system using a “Calphad” predictive technique *Calphad* 13(1989)1
- GUION, J., LAUGT, M., TEISSEIRE, M. (CNRS, Ecotherm Lab., Sophia Antipolis, BP 21, F-06561 Valbonne France) Calcium chloride hexahydrate-ammonium chloride hexa-

- hydrate-ammonium chloride binary solutions: A DSC study *Thermochim. Acta* 138 (1989)39
- GUPTA, D., HIRTZEL, C. S. (Syracuse Univ., Dept. Chem. Engn. Mat. Sci., Syracuse NY 13244 USA) Thermal desorption of interacting molecules from mixed adlayers *Surface Sci.* 210(1989)322
- GUPTA, V. K., PAL, S., KUMAR, A., GUPTA, R., JAIN, N. (Univ. Roorkee, Dept. Chem., Roorkee 247667 Uttar Pradesh India) Thermodynamic and related studies of the oxidation of p-aminobenzoic acid, sulphamic acid and anthranilic acid by periodate *Thermochim. Acta* 140(1989)197
- HAEGEN, R., KLEINTJENS, L. A., OPSTAL, L., KONINGSVELD, R. Thermodynamics of polymer solutions *Pure Appl. Chem.* 61 (1989)159
- HAJIEV, S. N., KERTMAN, S. V., LEYKIN, U. A., AMELIN, A. N. (Tyumen Univ., Dept. Chem., Tyumen USSR) Thermochemical study of ion-exchange processes. V. Sorption of copper ions in complex-forming resins *Thermochim. Acta* 139(1989)327
- HARPER, C., HEICKLEN, J. (Penn State Univ., Dept. Chem., University PK, PA 16802 USA) Pyrolysis of propyne-2-methylbut-1-ene-3-yne mixtures between 350 and 450 °C *Int. J. Chem. Kinet.* 21(1989)175
- HATAKEYAMA, T., KANETSUNA, H. (Res. Inst. Polymers Text., 1-1-4 Higashi Tsukuba Ibaraki 305 Japan) Thermal analysis of polymer samples by round robin method. Part 2. Factors affecting heats of transition *Thermochim. Acta* 138(1989)327
- HEITZ, M., CARRASCO, F., OVEREND, R. P., CHORNET, E. (Univ. Sherbrooke, Fac. Sci. Appl., Dept. Gen. Chim. Starbrooke Quebec Canada J1K 2R1) Correlation between polystyrene molecular weights and a characteristic temperature derived from the thermogravimetric weight loss curves *Thermochim. Acta* 142(1989)83
- HISHAM, H. W. M., BENSON, S. W. (Univ. Calif., Dept. Chem., Donald P., Katherine B. Loker Hydrocarbon Res. Inst., Univ. PK, Los Angeles CA 90089 USA) Thermochemistry of inorganic solids. 9. A quantitative reaction between the lattice enthalpy and near neighbor *J. Phys. Chem.* 93(1989) 3308
- HO, W. K. B., KOGURE, Y., GRANATO, A. V. (Adv. Micro Devices, 901 Thompson PL, Mail stop 143, POB 3433 Sunnyvale CA 94008 USA) Low-temperature ultrasonic relaxation and resonance in RbCl: OH *Phys. Rev. B.* 39(1983)53
- HORÁNYI, T. S. (Hungarian Acad. Sci. Tech. Phys. Res. Inst., POB 76, H-1325 Budapest Hungary) Investigation of the effects of heat treatment on the  $\beta$ -Ni(OH)<sub>2</sub>- $\beta$ -NiOOH system using IR spectrometry *Thermochim. Acta* 142(1989)143
- HOWARD, R. A., SCANLON, M. J. (Montana State Univ., Dept. Chem., Bozeman MT 59717 USA) Heats of fusion and phase equilibria in the MgO-SiO<sub>2</sub> system *Calphad* 13(1989)33
- HUKAO, K. (Chiba Univ., Coll. Arts Sci., Chiba 260 Japan) Heat of immersion of active carbon in fatty acid *Nippon Kagaku Kaishi* 2(1989)296
- HUWEI, L., RUONONG, F. Investigation of thermal decomposition of HMX and RDX by pyrolysis-gas chromatography *Thermochim. Acta* 138(1989)163
- IMAMURA, A., TAKAHASHI, K., MURATA, S., SAKIYAMA, M. (Osaka Univ., Fac. Sci., Chem. Thermodyn. Lab., Toyonaka Osaka 560 Japan) Standard enthalpies of formation of trimethyl cyanurate, malonamide and 1,3-dimethyluracil *J. Chem. Thermodyn.* 21(1989)237
- INABA, A., CHIHARA, H. (Osaka Univ. Fac. Sci., Dept. Chem., Toyonaka Osaka 560 Japan) The heat capacity of the metal hydride TaD<sub>0.5</sub> between 10 and 550 K *Thermochim. Acta* 139(1989)181
- INOUE, T., YAMANAKA, T. (Res. Assoc. Basic Polymer Technol., 5-21 Toranomon, 2 Chome, Minato Ku, Tokyo 105 Japan) Thermotropic polyarylates from phenyl-

- hydroquinone and 4,4'-diphenyldicarboxylic acid *Kobunshu Ronbunshu* 46(1989)75
- IPPOMMATSU, M., SASAKI, M. (Osaka Gas Co Ltd., Res. Ctr., 6-19-9 Torishima, Kono-hana Ku, Osaka 554 Japan) Temperature and humidity dependence of tin oxide semiconductor gas sensor measured by hall effect *Denki Kagaku* 57(1989)259
- IRWIN, R. S., SWECNY, W., GARDNER, K. H., GOCHANOUR, C. R., WEINBERG, M. (Du-pont Co., Exptl. Stn., Dept. Cent. Res. Dev., Wilmington DE 19898 USA) 3,4'-di-hydroxybenzophenone terephthalate: an all aromatic thermotropic polyester with a helical chain conformation *Macromolecules* 22(1989)1065
- ISAEVA, Y. V., KUZOVLEVVA, O. Y., KABAL-NOVA, L. Y. (MV Lomonosov State Univ., Moscow 117234 USSR) Prediction of chemical stability of polyamide materials in the wide range of air temperatures and humidities *Vysokomol. Soedin. Ser. B SSSR* 31(1989)96
- JACKMAN, R. B., FOORD, J. S. (Univ. Oxford, Inorgan. Chem. Lab., S PK RD, Oxford OX1 3QR England) Thermal and photochemical vapour deposition of Fe from  $\text{Fe}(\text{CO})_5$  on Si(100) *Surface Sci.* 209(1989)151
- JANIAK, T., BLAZEJOWSKI, J. (Univ. Gdansk, Inst. Chem., PL-80952 Gdansk Poland) Thermal properties of  $\text{H}_2\text{SnCl}_6$  complexes. Part 2. Thermal features of alkanaminium hexachlorostannates *Thermochim. Acta* 141(1989)93
- JANNELLI, L., PARRELLA, L. L. (Univ. Naples, Fac. Engn., Dept. Mat. Prod., Thermodyn. Sect., I-80128 Naples Italy) Solid-liquid phase diagram of the binary system pyridine + sulfolane *Thermochim. Acta* 138(1989)1
- JARA, R., CERDÁ, V. (Univ. Balear, Isl., Dept. Chem., E-07071 Palma de Mallorca Spain) Analytical properties of the amidoxime group. Potentiometric and thermometric behaviour of ethanediamidoxide *Thermochim. Acta* 142(1989)135
- JOHARI, G. P., HALLBRUCKER, A., MAYER, E. (McMaster Univ. Dept. Mat. Sci. Engn. Hamilton Ontario Canada L8S 4L7) Thermal behaviour of several hyperquenched organic glasses *J. Phys. Chem.* 93(1989)2648
- JOZAVI, H., SANCAKTAR, E. (Clarkson Univ., Dept. Mech. Ind. Engn., Postdarn NY 13676 USA) The effects of cure temperature and time on the stress-whitening behaviour of structural adhesives. Part 1. Analysis of bulk tensile data *J. Adhesion* 27(1989)143
- KALKUR, T. S., LU, Y. C., ARAUJO, C. A. (Univ. Colorado, Microelectr. Res. Labs., Colorado Springs CO 80933 USA) Non-alloyed ohmic contacts on rapid thermally Zn diffused GaAs *Solid State Electronics* 32(1989)281
- KALOEV, N. I., DZERANOVA, K. B. (N Ossetia State Univ., Orozhonikidze USSR) Thermodynamics study of  $\text{BiI}_3$ ,  $\text{AgI}$  and  $\text{BiBr}_3$ - $\text{AgBr}$  systems in the approximation of the model of perfectly associated solutions *Zh. Neorg. Khim. SSSR* 34(1989)532
- KAMMER, H. W., INOUE, T., OUGIZAWA, T. (Tech. Univ. Dresden, Dept. Chem., Mommsen str. 13, DDR-8027 Dresden Ger. Dem. Rep.) Upper and lower critical solution temperature behaviour in polymer blends and its thermodynamic interpretation *Polymer* 30(1989)888
- KANEDA, M., SUZUKI, M., UEHARA, A. (Kanazawa Univ., Fac. Sci., Dept. Chem., Kanazawa Ishikawa 920 Japan) Thermal reactions of metal complexes under quasi-isothermal and quasi-isothermal and quasi-isobaric conditions. 5. Thermal behaviour of molybdenum (O) dinitrogen complexes in the solid state *Thermochim. Acta* 138(1989)161
- KANG, D. P., HA, C. S., CHO, W. J. (Pusan Natl. Univ., Dept. Polymer Sci. Engn., Pusan 609735 South Korea) FT-IR spectroscopy and thermal studies of poly(styrene-co-vinyl naphthalene) and poly(vinyl methyl ether) blends *J. Polym. Sci. A* 27(1989)1401
- KASALI, G. B., SENIOR, E. (Natl. Council Sci. Res., POB CH-158 Lusaka Zambia) Effects of temperature and moisture on the anaerobic digestion of refuse *J. Chem. Technol. Biotechnol.* 44(1989)31

- KATA, T., KABIR, G. M. A., URYU, T. (Univ. Tokyo, Inst. Ind. Sci., Minato Ku, Tokyo 106 Japan) Solid-state CP/MAS  $^{13}\text{C}$ -NMR studies of naphthalene-based thermotropic polyesters and model compounds *J. Polym. A 27* (1989)1447
- KAUR, H., KHURMA, J. R., MAHL, B. S. (Punjab Agr. Univ., Dept. Chem., Ludhiana 141004 Punjab India) Thermodynamic properties of binary liquid mixtures of cycloalkanol + n-alkanes *Fluid Phase Equilibria 45* (1989)121
- KAWASHIMA, G. R. (Muroran Inst. Technol. Dept. Appl. Mat. Sci., Muroran Hokkaido 050 Japan) Temperature and frequency dependence of a.c. conductivities in a neodymium nitrate crystal *Solid State Commun. 70* (1989)393
- KENNER, R. D., PFANNENBERG, S., STUHL, F. (3417 Patricia Ave, Apt. 26. Montreal Quebec Canada H4B 1Y9) Collisional quenching of PH(A $^3\text{Ti}_2\text{O}_4$ ) at 296 and 415 K *Chem. Phys. Lett. 156*(1989)305
- KHORAMI, J., LEMIEUX, A. (Univ. Sherbrooke, Prog. Rech. Amiante, Sherbrooke Quebec Canada J1K 2R1) Comparison of attapulgites from different sources using TG/DTG and FTIR *Thermochim. Acta 138*(1989)37
- KIRCHNER, K., DODGEN, H. W., WHERLAND, S., HUNT, J. P. (Washington State Univ., Dept. Chem., Pullman WA 99164 USA) Pressure and temperature effects on the ruthenocene/bromoruthenocene electron self-exchange in CD $_3$ CN *Inorg. Chem. 28*(1989) 604
- KIRICHENKO, O. A., USHAKOV, V. A., MOROZ, E. M., ISMAGILOV, Z. R. (Novosibirsk Catalysis Inst., Novosibirsk 630090 USSR) Thermal stability of supported Al-Cu-Cr catalysts. *React. Kinet. Catal. Lett. 38*(1989)307
- KISELEV, M. Y., MOLCHANOV, A. P., KOSTIKOV, R. R. (AA Zhdanov State Univ., Leningrad B-164 USSR) Thermal isomerization of substituted hemedibromo-1-alkylenecyclopropanes in polar solvents *Zh. Organ. Khim. SSSR 25*(1989)100
- KLEPPA, O. J., TOPOR, L. (Univ. Chicago, James Franck Inst., Chicago IL 60637 USA) A new calorimeter for temperatures above 1400 K *Thermochim. Acta 139*(1989)29
- KLOTS, C. E. (Oak Ridge Natl. Lab., Div. Hlth Safety Res. Psychophysiol. Sect., Oak Ridge TN 37831 USA) Thermal kinetics of small systems *J. Chem. Phys. 90*(1989) 4770
- KLUEH, R. L. (Oak Ridge Natl. Lab., Div. Met. Ceram. POB 2008 Oak Ridge TN 37831 USA) Heat treatment behaviour and tensile properties of Cr-W steels *Met. Trans. A. Phys. Met. Mater. Sci. 20*(1989)463
- KNAUTH, P., SABBAT, R. (CNRS, Ctr. Thermodyn. Microcalorimet., 26 Rue 141E Ria, F-13003 Marseille France) Combustion calorimetry on milligram samples of liquid substances with a CRMT rocking bomb calorimeter. Application to the study of  $\omega$ -alkanediols at 298.15K *J. Chem. Thermodyn. 21*(1989)203
- KOKSBERG, R., RASMUSSEN, S. E., HA-ZELL, R. G. (Hope Lundsgaard Eng., Vestergrade 24-26 DK-5700 Svendborg Denmark) Critical temperatures of superconductivity and neutron diffraction studies at 293 and at 10K of molybdenum-iridium single crystals of A15 structure *J. Appl. Cryst. 22*(1989)23
- KONINGSVELD, R., MACKNIGHT, W. J. (Univ. Maastricht, Inst. Polymer Res. Sigma-PL, POB 5551, 6202 XA Maastricht Netherlands) Thermodynamic stability of mixtures containing statistical copolymers. 1. Phantom-lattice treatment of chemically modified polymers *Macromol. Chem.-Macro. Chem. Phys. 190*(1989)419
- KOSCIELECKA, A. (Nicholas Copernik Univ., Inst. Chem. PL-87100 Torun Poland) Thermal stability of polyurethanes with carbon-carbon crosslinks *Angew. Macromol. Chem. 168*(1989)119
- KRICHELDORF, H. R., CONRADI, A., PAKULL, R., SCHWARZ, G. (Univ. Hamburg, Inst. Tech., Makromolek. Chem., Bundesstr. 45, D-7000 Hamburg 13, Fed. Rep. Ger.) Thermotropic copolymers of 4-hydroxybenzoic acid *Macromol. Chem. 26* (1989)25

- KRISHNAIAH, M. V., KRISHNAIAH, P. S., MURTI, MATHEWS, C. K. (Indira Gandhi Ctr. Atom Res., Radiochem. Programme, Kalpakkam 603102 India) Thermal diffusivity and thermal conductivity studies on europium, gadolinium, and lanthanum pyrohafnates *Thermochim. Acta* 140(1989)103
- KUNIOKA, M., TAMAKI, A., DOI, Y. (Tokyo Inst. Technol., Resources Utilizat Res. Lab., Midori Ku, Yokohama, Kanagawa 227 Japan): Crystallic and thermal properties of bacterial copolymers: poly(3-hydroxybutyrate-co-3-hydroxyvalenate) and poly(3-hydroxybutyrate-co-4-hydroxy-butyrat) *Macromolecules* 22(1989)694
- KUNITSUGU, Y., SUEMUNE, I., TANAKA, Y., KAN, Y., YAMANISHI, M. (Hiroshima Univ. Fac. Engn., Hiroshima 724 Japan) Low-temperature cleaning of Si and growth of GaAs on Si by hydrogen plasma-assisted metalorganic molecular-beam epitaxy *J. Cryst. Growth* 95(1989)91
- KWON, H., HONG, J. W. (Kookmim Univ., Coll. Engn., Dep. Met. Engn., Seoul 136702 South Korea) Communication variation of brittle fracture with test temperature in tempered martensitic structure in 2Si-0.4C steel *Met. Trans. A-Phys. Mat. Mater. Sci.* 20(1989)560
- LATOCHA, C., UHNIAT, M. (Inst. Heavy Organ. Synth. Blachownia PL-47225 Kedzierzyn Kozle Poland) Interaction of the thermal decomposition products of azodicarbonamide with some antioxidants in polyethylene. *Polym. Degrad. Stabil.* 23(1989) 133
- LEBEDEV, B. V., BYKOVA, T. A., KIPARI-SOVA, E. G., FRENKEL, T. M., FAINLEIB, A. M., PANKRATOV, V. A. (NB Lobachevskii State Univ., Chem. Res-Inst., Gorkii USSR) Thermodynamics of phenyl glycidyl ether and its reactions with diphenylcarbodiimide and phenyl isocyanate with the formation of iminooxazolidine and oxazolidinone in the 0-33° K range *Bull. Acad. Sci. USSR* 37(1988)1082
- LEE, I. J., LIM, H. S., PARK, D. S., KIM, K. (Korea Univ., Dept. Chem., Seoul 13 6701 South Korea) Effects of SDS and temperature on the structural changes of bacteriorhodopsin *Bull. Kor. Chem. Soc.* 10(1989) 69
- LEE, P. P., BACK, M. H. (Energy Mines Resources Canada, Canmet, Ottawa K1A OG1, Ontario Canada) Thermal decomposition of nitroguanidine *Thermochim. Acta* 141 (1989)305
- LETCHER, T. M., SEWRY, J., BAXTER, R. (Rhodes Univ., Dept. Chem., Grahamstown 6140 South Africa) Excess molar volumes of (a cycloalkane + an alk-1-yne) at 298.15 K *J. Chem. Thermodyn.* 21(1983)19
- LEUTE, V. (Univ. Munster, Inst. Phys. Chem., Sch. Pl. 4, D-4400 Munster Fed. Rep. Ger.) Thermodynamic excess functions for quaternary solid solutions of type (MnN<sub>1-x</sub>-K<sub>x</sub>)(X<sub>y</sub>/1-I) *Ber. Bunsen Ges. Phys. Chem.* 93(1989)7
- LI, R. Q. (Gen. Res. Inst. Nonferrous Met. 2 Xiu Jie Kou Wei Dajie, Beijing Peoples R China) Semi-empirical methods for predicting thermodynamic properties of quaternary and higher order systems *Calphad* 13 (1989)61
- LI, R. Q., CHOU, K. C. (Gen. Res. Inst. Nonferrous Met. 2. Xiu Jie Kou Wei Dajie, Beijing Peoples R. China) Some useful relationship between the thermodynamic properties and binary phase diagram involving an intermediate compound *Calphad* 13 (1989)53
- LIELMEZS, J., HERRICK, T. A. (Univ. British Columbia, Dept. Chem. Engn., Vancouver, BC Canada VET 1WS) Correlation of the thermal conductivity of saturated vapours *Thermochim. Acta* 141(1989)113
- LIFSHITE, A., BIDANI, M., SUSLENSKY, A., TANBURU, C. Pyrolysis of acrylonitrile at elevated temperatures. Studies with a single-pulse shock tube *J. Phys. Chem.* 93(1989) 1369
- LIPATOV, Y. S., SHIFRIA, U. V., VASILENKO, O. I. (Acad. Sci., UKSSR, Inst. Macromol. Chem., Kiev 252160 Ukraine USSR) Thermodynamics of interactions in the mixture of thermodynamically compat-

- ible polymers at the interface with a solid  
*Ukr. Khim. Zh. SSSR* 55(1989)306
- LITVINOV, V. M., PAPKOV, V. S. (Acad. Sci. USSR, Inst. Synthet. Polymer Mat., Moscow V-71 USSR) Phase state and molecular dynamics in some flexible thermotropic mesomorphic polymers *Macromol. Chem.* 26(1988)115
- LIU, H. Effect of chemical adsorption of calcium oxalate monohydrate on DTA baseline *Thermochim. Acta* 141(1989)151
- LOOS, T. W., POOT, W., SWAAN, A. J. Fluid-phase equilibria and critical phenomena in (tetrafluoro methane + n-butane) *J. Chem. Thermodyn.* 21(1989)113
- LÓPEZ, L. C., WILKES, G. L. (Virginia Polytech. Inst. Strate Univ. Dept. Chem. Engrn. Polymer Mat. Interfaces Lab. Blacksburg VA 24061 USA) Non-isothermal crystallization kinetics of poly(p-phenylene sulfide) *Polymer* 30(1989)882
- LOURDES-LEZA, M., CORTAZAR, M., CASINOS, I., GUZMÁN, G. M. (Univ. País Vasco, Fac. Quim., Dept. Cien. Technol. Polímeros, POB 1072; E-20080 San Sebastian Spain) Thermal degradation of partially carboxy-methylated cellulose grased with 4-vinylpyridine *Angew. Macromol. Chem.* 168(1989)185
- LOZANO, R., ROMAN, J., DE JESUS, F., JEREZ, A., GAITAN, M., RANOS, E. (Univ. Computense Madrid, Fac. Farm., Dept. Quim. Inorgan. Bioinorgan, E-28040 Madrid Spain) Application of a new method to the kinetic study of the thermal decarbonylation of sodium oxalate *Thermochim. Acta* 141(1989)261
- LUCAS, M., LUCAS, K. (Univ. Duisburg Ge-samthsch., Fachgebiet Thermodyn., Lotharstr. 1, D-4100 Duisburg 1, Fed. Rep. Ger.) Thermodynamic properties of fluid carbon dioxide from the SSR-MPA potential *Fluid Phase Equilibria* 45(1989)7
- MACIEJEWSKI, M., RELLER, A. (Warsaw Univ. Technol. Inst. Basic. Chem., Noakowskiego 3, PL-00662 Warsaw Poland) Formation of amorphous  $\text{CaCO}_3$  during the reaction of  $\text{CO}_2$  with  $\text{CaO}$  *Thermochim. Acta* 142(1989)175
- MAILHOS-LEFIEVRE, V., SALLET, D., MARTEL, B. (CAL, Atochem. 95 Rue Danton, F-92300 Levallois Perret France) Thermal degradation of pure and flame-retarded polyamides 11 and 12 *Polym. Degrad. Stabil.* 23(1989)327
- MAGUNDAR, K., LAHIRI, S. C., MUKKHERJEE, D. C. (Vive Kanonda Coll., Calcutta 700063 India) Studies on the dissociation constants of 1,1-phenanthroline in ethanediol + water mixtures at 25 °C *Thermochim. Acta* 142(1981)1
- MAJER, V., INGLESE, A., WOOD, R. M. (Univ. Delaware, Dept. Chem., Newark DE 19716 USA) Volumetric properties of  $\text{LiCl}(\text{aq})$  from 0.05 to 3.0 mol ·  $\text{kg}^{-1}$ , 322 to 550 K, and 0.8 to 32.6 MPa *J. Chem. Thermodyn.* 21(1989)321
- MAX, P. C. N., LIELMEZS, J. (Univ. British Columbia, Dept. Chem. Engrn., Vancouver 3C Canada V6S 1 WS) Use of F-function in van der Waals-type two-constant cubic equation of state *Thermochim. Acta* 140(1989)77
- MAKRÉIK, E. (Nucl. Res. Inst. CS-25068 Rez Czechoslovakia) Contribution to thermodynamics of complex formation in extraction system with 2 immiscible liquid phases *J. Phys. Chem.* 270 (1989)212
- MAKSIM, V. I., GUDZ, N. Y., STANDRITCHUK, O. Z. (Acad. Sci. UKSSR, Inst. Colloid Chem. Water Chem., Kiev Ukraine USSR) Thermal effects of calcium carbonate wetting by chloride solutions of alkaline and alkaline, earth metals *Ukr. Khim. Zh.* 55(1989)141
- MÁLEK, J. (Czechoslovak Acad. Sci. Inst. Chem. Technol. Joint Lab. Solid State Chem., CS-53210 Pardubice Czechoslovakia) A computer program for kinetic analysis of non-isothermal thermoanalytical data *Thermochim. Acta* 138(1989)337
- MALKOVA, A. S., ZHAROV, V. V., SHMOILOVA, G. I., PASHINKIN, A. S. Calorimetry of zinc and cadmium tellurides in the 360–760 K temperature range *Zh. Fis. SSSR* 63(1989)41

- MAMEDOV, A. N., ASADOV, M. M. (Acad. Sci. AZSSR, Inst. Inorgan. Phys. Chem., Baku Azerbaidzhan USSR) Thermodynamic computing of phase equilibria in triple mutual systems with participation of mercury and dithallium chalcogenides *Zh. Neorg. Chim.* 34(1989)529
- MAMYLOV, S. G., LOMOVSKY, O. I. (Acad. Sci. USSR, Inst. Solid State Chem. Mineral. Ores. Proc., Novosibirsk USSR) Mechanism of lead thiosulfate thermal decomposition *Izv. Sibir. Otd. Akad. Nauk Khim.* 6(1988) 61
- MANCHOBAS, R. M., SALAT, A., BORRULL, F., PISCINA, P. R., HOMS, N. (Univ. Barcelona. Fac. Ciencias Quim. Tarragona, Dept. Quim. PCA Imperial Tarraco 1, E-43005 Tarragona Spain) Thermometric study of the bromate-iodide reaction catalyzed by Ho(VI). *Thermochim. Acta* 142(1989)107
- MANENOK, G. S., PETROV, P. T., ARTAMONOVA, V. A. (Acad. Sci. BESSR, Inst. Phys. Organ. Chem., Minsk Belorussia USSR) Effect of temperature and solvent composition on hydrodynamic parameters of copolyamide *Vysokomol. Soedin. SSSR* 31 (1989)50
- MARCOS, M., NAVARRO, F., ORIOL, L., SERRANO, J. L. (Univ. Zaragoza, CSIC, Fac. Ciencias, Inst. Ciencia Mat. Aragon, E-50009 Zaragoza Spain) Synthesis of thermotropic poly(azine-ether)s derived from 2,4-hydroxybenzaldehyde and 2,4-dihydroxyacetophenone *Macromol. Chem. Macro. Chem. Phys.* 180(1989)305
- MAROLLEAU, I., GISSELBRECHT, J. P., GROSS, M., NEU, F. A., WEILL, M. J. S. (Ecole Hautes Ind. Chim. Strasbourg. Chim. Phys. Lab., CNRS, UA 405, 1 Rue Blaise Pascal F-67000 Strasbourg France) Thermodynamic and electrochemical behaviour of lanthanide cryptates in N,N-dimethylformamide *J. Chem. Soc. Dalton Trans.* 2 (1989)367
- MAROTTA, A., ARONNE, A., PERNICE, P., BRANDA, F. (Univ. Naples, Dept. Mat. Prod. Engn., I-80138 Naples Italy) The non-isothermal devitrification of lithium metasilicate glass *Thermochim. Acta* 140 (1989)191
- MARROSU, G., RODANTE, F., TRAZZA, A., GRECI, L., FANTAUZZI, F. (Univ. La Sapienza. Dip. Ing. Chim. Mat. Mat. Prime Met., Via Cestro Laurentiaro 7, I-00161 Rome Italy) A calorimetric study of the protonation process of some indole derivatives in a cetonitrile. Correlations with electrooxidation and ionization potentials *Thermochim. Acta* 138(1989)27
- MARSH, K. N., ROGERS, H. (Texas AM Univ. Thermodyn. Rev. Ctr., College Stn., TX 77843 USA) Excess enthalpies of (cyclohexane + nitroethane) near the (liquid + liquid) critical state *J. Chem. Thermodyn.* 21(1989)24
- MARTINEZ, J., MARTINEZ, A., LOPEZ, A. D. (Univ. Complutense Madrid, Fac. Pharm. Dip. Quim. Inorgan. Bioinorgan, E-28040 Madrid Spain) Thermal and structural studies on the adducts of bis( $\beta$ -diketone) oxovanadium(IV) complexes with organic bases *Thermochim. Acta* 140(1989)179
- MASCIO, P., SIES, H. Quantification of singlet oxygen generated by thermolysis of 3,3'(1,4-naphthylidene) dipropionate. Monomol and dimol photoemission and the effects of 1,4-diazabicyclo[2.2.2]octane *J. Amer. Chem. Soc.* 111(1989)2909
- MASOUD, M. S., EL-EREIN, S. A. (Fac. Sci. Alexandria, Dept. Chem., Alexandria Egypt) Temperature and substituted effects on the ionization of some disubstituted arylazo barbituric and thiobarbituric acid compounds *Thermochim. Acta* 140(1989)365
- MATHURIN, D., BENEKHIS, M. (Inst. Natl. Sci. Appl. Lyon, Thermochim. Minerale Lab. 116, 20 Ave Einstein, F-69621 Villeurbanne France) Enthalpies standards de formation des hexaiodotellurates(IV) de potassium, rubidium et cesium *Thermochim. Acta* 138(1989)67
- MATILLA, A. D., AICART, E., PENA, M. D., TARAJOS, G. (Univ. Complutense Madrid, Fac. Ciencias Quim., Dept. Quim. Fis., E-28040 Madrid Spain) Isobaric thermal ex-

- pansion and isothermal compressibility of ethylbenzene + n-hexane, and + n-octane at 25 and 45 °C *J. Solut. Chem.* 18(1989)X43
- MATSUI, T., NAITO, K. (Nagoya Univ., Fac. Engn., Dept. Nucl. Engn., Chikusa Ku, Nagoya 46401 Japan) Vaporization study on fission-produced noble metal alloys by mass-spectrometric method *Thermochim. Acta* 139(1989)299
- MAUGE, F., VALLET, A., BACHELIER, J., DUCHET, J. C., LAVALLEY, J. C. (Univ. Caen, Ismra CNRS, UA 040414 Catalyse Spectrochim., F-140032 Caen France) Preparation and activity of a sulfided Co-Mo/Al<sub>2</sub>O<sub>3</sub> catalyst prepared by thermodecomposition of Co(CO)<sub>3</sub>NO *Catalysis Lett.* 2 (1989)57
- MAYS, J. W., FETTERS, L. J. (Univ. Alabama, Dept. Chem., Birmingham AL 35294 USA) Temperature coefficients of unperturbed dimensions for atactic polypropylene and alternating poly(ethylene-propylene) *Macromolecules* 22(1989)921
- MAHROTRA, K. N., UPADHYAYA, S. K. (Agra Univ. Dept. Chem., Agra 280004 Uttar Pradesh India) Thermodynamics and acoustical studies on calcium soap solutions *Phys. Chem. Liq.* 19(1989)47
- MELODY, D. P. (Lochite Tech. Facil, Dublin 24 Ireland) Advances in room temperature curing adhesives and sealants. A review *British Polym. J.* 21(1989)175
- MEOT-NER, M. (Nbs, Ctr. Chem. Phys., Div. Chem. Kinet., Gaithersburg MD 20899 USA) Ion chemistry of ferrocene. Thermochemistry of ionization and protonation and solvent clustering. Slow and entropy-driven proton-transfer kinetics *J. Amer. Chem. Soc.* 111(1989)2830
- MIDMORE, B. R., DIGGINS, D., HUNTER, R. J. (Univ. Sydney, Dept. Phys. Chem., Sydney, NSW 2006 Australia) The effect of temperature and ion type on the effective charge in polystyrene latices *J. Colloid Interface Sci.* 129(1989)153
- MILLER, M., SKUDLARSKI, K. (Polytech. Univ. Wroclaw, Inst. Inorgan. Chem. Met. Rare Elements, PL-50370 Wroclaw Poland)
- High temperature properties and vaporization of KCN and K(CN, CNO) determined by Knudsen effusion-mass spectrometry *Polish J. Chem.* 62(1988)211
- MILLS, K. C., PONSFORD, F. H., RICHARDSON, M. J., ZAGHINI, N., FASSINA, P. (Natl. Phys. Lab., Div. Mat. Applicat., Teddington TW11 OLW MIDDX England) Heat capacity and enthalpy of UO<sub>2</sub> and gadolinia-doped UO<sub>2</sub> *Thermochim. Acta* 139(1989)107
- MINEELY, P. J., TARIQ, S. A. (Monash Univ., Dept. Phys. Chem., Clayton, VIC 3168 Australia) Molten potassium pyrosulphate: reactions of seven metal sulfides *Thermochim. Acta* 140(1988)337
- MINKOVA, L., NIKOLOVA, M. (Sci. Ins. Enterprise Electron Proc. Mat. 34-30-20 Str., BU-1324 Sofia Bulgaria) Thermochemical and some mechanical properties of irradiated films prepared from polymer blends *Poly. Degrad. Stabil.* 23(1989)215
- MOHAMED, M. A., MANSOUR, S. A. A., ZAKI, M. I. (Minia Univ., Fac. Sci., Dept. Chem., El Minia Egypt) Non-isothermal kinetic and thermodynamic parameters of ammonium paratungstate decomposition – a thermoanalytic study *Thermochim. Acta* 138(1989)309
- MOITRA, S., BISWAS, M. (Indian Inst. Technol., Dept. Chem., Kharagpur 721302, W Bengal India) Thermal stability characteristics of some resins from chemically modified PVC *J. Appl. Polym. Sci.* 37(1989)1855
- MOORE, J. A., ROBELLO, D. R. (Rensselaer Polytech. Inst., Dept. Chem., Polymer Sci., Engn. Program, Troy NY, 12180 USA) Curable, thermally stable poly(enaminonitriles) *Macromolecules* 22(1989)1084
- MORCELLEL, M. (Univ. Sci. Tech. Flandres Artois, CNRS, UA 351, Chim. Macromolec. Lab., F-59655 Villeneuve Dasco France) Thermodynamics of the protonation of some polyelectrolytes *Thermochim. Acta* 142(1989)165
- MORELLI, J. J., GRAYSON, M. A., WOLF, C. J. (McDonnell Douglas Corp., McDonell

- Douglas Res. Labs., POB 516, St. Louis MO 63166 USA) Thermally labile salts for aiding quantitation of reactive decomposition products *Anal. Chem.* 61(1989)802
- MORIYOSHI, T., NAKAGAWA, M. (Univ. Tokushima, Fac. Engn., Dept. Chem. Sci. Technol., Tokushima 770 Japan) Compression of aqueous binary mixtures containing amides and carbamic-acid derivates at 298.15 K and 101.3 MPa *J. Chem. Thermodyn.* 21(1989)73
- MORIYOSHI, T., UOSAKI, Y., SAKAMOTO, T., HAYASHI, Y. (Univ. Tokushima, Fac. Engn., Dept. Chem. Sci. Technol., Tokushima 770 Japan) (Liquid + liquid) equilibria of (water + ethanol + 2,6-dimethyl-4-heptanone) from 0.1 to 200 MPa at 298.15 and 323.15 K *J. Chem. Thermodyn.* 21(1989) 219
- MORTIER, A., LEMAITRE, J., RODRIQUE, L., ROUXHET, P. G. (Ecole Polytech. Fed. Lausanne, Technol. Poudres Lab., Bâtiment Chim., CH-1015 Lausanne Switzerland) Synthesis and thermal behaviour of well-crystallized calcium-deficient phosphate opalite *J. Solid State Chem.* 78(1989)215
- MOSER, Z., SOMMER, F., PREDEL, B., LEE, J. J. (Polish Acad. Sci., Inst. Met. Res., Rexmonta st. 25, PL-30059 Cracow Poland) Calorimetric studies of liquid Li-Zn alloys *Thermochim. Acta* 142(1989)117
- MOSTAFA, S. N., SELIM, S. R., SOLIMAN, S. A., EL-LAKWAH, F. A. (Al Azhar Univ., Fac. Sci. Dept. Chem., Cairo Egypt) Thermodynamic investigations on cuprous selenide *Ber. Bunsen Ges. Phys. Chem.* 93 (1989)123
- MOUSA, M. A., AHMED, M. A. (Ctr. Sci. Mat., Dept. Chem., POB 1070 Taif Saudi Arabia); Crystallization kinetics of amorphous Ge<sub>2</sub>, Se<sub>5</sub> Te<sub>7</sub>, *Thermochim. Acta* 140 (1989)155
- MOUSA, M. A., DIEFALLAH, E. H. M., DES-SOUKI, H. A., ATWA, S. T. (Ctr. Sci. Mat. Dept. Chem. POB 1070 Taif |Saudi Arabia) Solvolysis rates and activation parameters of phenylchloroformate in water-tetrahydrofuran and water-dioxane mixed solvents *Thermochim. Acta* 141(1989)1
- MOZZHUKHIN, E., BURMEISTER, M., ROTH, P. (Acad. Sci. USSR, Inst. Chem. Phys., Moscow V-71 USSR) High temperature dissociation of CN *Ber. Bunsen Ges. Phys. Chem.* 92(1989)70
- MURPHY, K. P., GIU, S. J. (Univ. Colorado, Dept. Chem. Biochem. Boulder CO 80309 USA) Calorimetric measurement of the enthalpy of dissolution of diketopiperazine in water as a function of temperature *Thermochim. Acta* 139(1989)279
- MUSTAFA, M. B., TIPTON, D., RUSSO, P. S. (Louisiana State Univ., Macromolec. Studies Grp.-Baton Rouge LA 70803 USA) Temperature ramped fluorescence photobleaching recovery for the direct evaluation of thermoreversible gels *Macromolecules* 22(1989) 1500
- NAGATA, I. (Kanazawa Univ., Dept. Chem. Engn., Div. Phys. Sci., 2-40-20 Kodatsumo Kanazawa Ishikawa 820 Japan) Isothermal vapour-liquid equilibria for binary and ternary mixtures formed by acetonitrile 2-butanol and benzene *Thermochim. Acta* 140(1989)355
- NAGATA, I. (Kanazawa Univ., Dept. Chem. Engn. Div. Phys. Sci., 2-40-20 Kodatsumo Kanazawa Ishikawa 820 Japan) Isothermal (vapour + liquid) equilibria of (2-methylpropan-2-ol + acetonitrile) and (2-methylpropan-2-ol + acetonitrile + benzene) *J. Chem. Thermodyn.* 21(1989)225
- NAGATA, I., SATOH, T. (Kanazawa Univ., Dept. Chem. Engn., Div. Phys. Sci., Kodatsuno 2, Kanazawa, Ishikawa 920 Japan) Thermodynamics of associated solutions. Vapour-liquid equilibrium for the systems acetic acid-water and acetic-acid-2-butanone with association in both phases *Thermochim. Acta* 38(1989)207
- NAGATA, I., TAMURA, K. (Kanazawa Univ., Dept. Chem. Engn., Div. Phys. Sci., Kodatsuno 2, Kanazawa, Ishikawa 920 Japan) Thermodynamics of solutions of acetonitrile with 2-methyl-1-propanol *Thermochim. Acta* 140(1989)109
- NAGATA, I., USUI, Y. (Kanazawa Univ., Dept. Chem. Engn., Div. Phys. Sci., Kodatsuno 2,

- Kanazawa, Ishikawa 920 Japan) Correlation or ternary liquid-liquid equilibrium data and prediction of quaternary liquid-liquid equilibrium data by means of the UNIQUAC model *Thermochim. Acta* 140(1989)121
- NAGUMO, T., MATSUO, T., SUGA, H. (Hitachi Ltd., Cent. Res. Lab., Kokubunji, Tokyo 185 Japan) Thermodynamic study on camphor crystals *Thermochim. Acta* 139(1989)121
- NAIDU, R. S., RUBY, R., RAO, E. N., MALLIKARJUN, K. G. (Sri Venkateswara Univ., Dept. Chem., Tirupati 517502, Andhra Pradesh India) Kinetic parameters of thermal decomposition of bis(2-OH-1-naphthaldoxime) chelates using Freeman-Carroll equation *Thermochim. Acta* 140(1989)97
- NAIR, S. M. K., MALAYIL, K. K., JACOB, P. D. (Univ. Calicut, 673635 Kerale India) Evaluation of kinetic parameters for the thermal decomposition of  $\gamma$ -irradiated sodium bromate by dynamic thermogravimetry *Thermochim. Acta* 14(1989)61
- NAM, W., ABDOU, Z. J., LEE, H., BARUELOS, T., ONAK, T. (Calif. State Univ. Los Angeles, Dept. Chem., Los Angels CA 90032 USA): Thermal rearrangement studies on ethyl and chloro-diethyl derivates of closo-2,4-C<sub>2</sub>B<sub>6</sub>H<sub>10</sub>: elimination of a 1,2-substituent-shift mechanistic hypothesis and further support of the DSD cage rearrangement mechanism. *Inorg. Chem.* 28(1989)669
- NEGISHI, A., TAKAHASHI, Y., SAKAMOTO, R., OZAWA, T., KAMIMOTO, M. (Electro-tech. Lab. Tsukuba Ibaraki 305 Japan): Thermoanalytical investigation of YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-y</sub> superconductor. III. Preparation from mixed 2-ethylhexanoates of yttrium, barium and copper. *Thermochim. Acta* 140(1989)41
- NHU, N., KOHLER, F. Excess enthalpy and excess volume of cyclohexanone + tetrachloroethene. *Thermochim. Acta* 139(1989) 11
- NICKEI, D., SCHNEIDER, G. M. (Ruhr Univ. Bochum, Dept. Chem., Phys. Chem. Lab. D-4630 Bochum Fed. Rep. Ger.): Near-infrared spectroscopic investigations on phase behaviour and association of 1-hexanol and 1-decanol in carbon dioxide, chlorotrifluoromethane and sulfur hexafluoride. *J. Chem. Thermodyn.* 21(1989)293
- O'HARE, P. A. G., AWERE, E. G., PARSONS, S., PASSMORE, J. (Argonne Natl. Lab., Argonne IL 60439 USA): The standard molar enthalpy of formation at 298.15 K of S<sub>2</sub>N<sup>+</sup>AsF<sub>6</sub><sup>-</sup> by fluorine-combustion calorimetry. *J. Chem. Thermodyn.* 21(1989) 153
- OKUNISHI, M., YAMANOUCHI, K., TSUCHIYA, S. (Univ. Tokyo, Coll. Arts Sci., Dept. Pure Appl. Sci., Meguro Ku, Tokyo 153 Japan): High temperature pulsed valve and its application to laser spectroscopic study of CdA Vanderwaals complex. *Chem. Lett.* 3(1989)393
- OLAH, G. A., WEBER, T., FAROOQ, O. (Univ. So Calif., Donald P. Katherine B Loker Hydrocarbon Res. Inst., Los Angeles CA 90089 USA): The thermal cleavage of boron tris-fluoromethanesulfonate (triflate) and boron tris-pentafluoroethanesulphonate (pentflate) to triflic (pentfluc) anhydride and trifluoromethyl triflate (pentafluoroethyl pentflate). *J. Fluor. Chem.* 43(1989)235
- OMS, M. T., CALAFAT, A. M., FORTEZA, R., FOL, J. J., TERRON, A., CERDA, V. (Univ. Illes Balears, Dept. Chem. E-07071 Palma de Mallorca Spain) Automatic batch calorimetry: application to the determination of the thermodynamic parameters of Co(II)-5' adenosine monophosphate complex formation *Thermochim. Acta* 141(1989)14
- OMS, M. T., FORTEZA, R., CERDA, V., BORULL, F. (Univ. Illes Balears, Dept. Chem., E-07071 Palma de Mallorca Spain) Thermometric study of metal-nitrogenated-ligand complexes. I. Ethylenediamine complexes with Ag(5), Cu(II), Zn(II), Mn(II), Cd(II) and Co(II) *Thermochim. Acta* 138(1989)1
- OORT, M. J. M., WHITE, M. A. Solid-solid phase transitions in phenalkylammonium salts *Thermochim. Acta* 139(1989)205
- ORTIZ, M. I., IRABIEN, A., ROMERO, A.

- (Univ. Pais Vasco, Fac. Ciencias Dept. Ingeniera Quim., Apdo 644 Bilbao Spain) Integral kinetic analysis from temperature programmed reaction data: alkaline hydrolysis of ethyl acetate as test reaction *Thermochim. Acta* 141(1989)169
- PAINTER, P. C., PARK, Y., COLEMAN, M. M. (Penn State Univ., Dept. Mat. Sci. Engn., University PK PA 16807 USA) Thermodynamics of hydrogen bonding in polymer blends. 1. Application of association models *Macromolecules* 22(1989)570
- PAINTER, P. C., PARK, Y., COLEMAN, M. M. (Penn State Univ., Dept. Mat. Sci. Engn., University PK PA 16807 USA) Thermodynamics of hydrogen bonding in polymer blends. 2. Phase behaviour *Macromolecules* 22(1989)580
- PAJDOWSKA, M., BATOR, G. (Wroclaw W Beirut Univ., Inst. Chem., F Joliot Curie 14, PL-50383 Wroclaw Poland) Temperature dependence of the static electric permittivity for trichloroacetonitrile and trimethylsilane carbonitrile *J. Molec. Liq.* 40(1989) 117
- PALCHSUDHURI, S., BICHILE, G. K. (Maharashtra Univ., Dept. Phys., Aurangabad 431004 Maharashtra India) The thermal conductivity of some fluorite structured compounds *Solid State Commun.* 70 (1989)475
- PALMOUR, J. W., DAVIS, R. F., KONG, H. S., CORCORAN, S. F., GRIFFIS, D. P. (Cree Res. Inc., Durham NC 27713 USA) Dopant redistribution during thermal oxidation of monocrystalline beta-SiC thin films *J. Electrochem. Soc.* 136(1989)502
- PAMPHILIS, N. A. (AC Spark Plug, Flint MI 48556 USA) Compositional analysis of polyphenylene sulfide containing PTFE and carbon fibers *Thermochim. Acta* 142(1989) 151
- PANDO, C., RENUNCIO, J. A. R., FAUX, P. W., CHRISTENSEN, J. J., IZAK, R. M. (Univ. Oviedo, Fac. Quim., E-33071 Oviedo Spain) The excess enthalpies of (carbon dioxide + n-hexane + toluene) at 573.15 K and 7.50 and 17.50 MPa *J. Chem. Thermodyn.* 21(1989)4
- PANYJCZAK, T., FERBOTKO, J. M., ZIELINSKI, P. A. (Tech. Univ. Lodz, Inst. Gen. Chem., PL-90924 Lodz Poland) Temperature-programmed desorption of carbon monoxide from Pt, Pd and Ru/Al 203 *Polish J. Chem.* 62(1988)567
- PATEL, R. H., PATEL, V. S., PATEL, R. G. (Sardar Patel Univ., Dept. Chem., Vallabh Vidyanagar 388120 Gujarat India) Effect of different epoxy diluents fortifier on the reactivity in curing and the thermal stability of epoxy resin using 2,2-bis[4-p-aminophenoxy/phenyl] propane as a curing agent *Thermochim. Acta* 141(1989)77
- PATEY, S. M., MAKARIL, S. V., DESHMUKH, B. T. (Nagpur Univ., Dept., Nagpur 440010 Maharashtra India) Thermoluminescence of microcrystalline powders of alkali halides *J. Phys. Condensed Matter* 1(1989)2537
- PERCEC, V., YOURD, R. (Case Western Reserve Univ., Dept. Macromolec Sci., Cleveland OH 44106 USA) Liquid crystalline polyethers based on conformational isomerism. 2. Thermotropic polyethers and copolyethers based on 1-(4-hydrophenyl)-2-(2-methyl-4-hydroxyphenyl) ethane and flexible spacers containing an odd number of methylene units *Macromolecules* 22(1989)524
- PÉREZ, P., VALERO, J., GARCIA, M., LOSA, G. C. (Univ. Saragossa, Fac. Cien., Dept. Quim. Fis., Saragossa Spain)  $G_m^E$  (298.15 K) of mixtures containing 1,2-dichloropropane or 1,3-dichloropropane *J. Chem. Thermodyn.* 21(1989)259
- PETRIC, A., PELTON, A. D., SABOUNGI, M. L. (Ecole Polytech., Campus Univ. Montreal, CP 6079 Succ A, Montreal Quebec Canada H3C 3A7) Thermodynamic properties of molten Na-Te solutions *Ber. Bunsen Ges. Phys. Chem.* 93(1989)18
- PHAM, V. T., PHILLIPS, R. S., LJUNGDAHL, L. G. (Univ. Georgia, Sch. Chem. Sci. Dept. Chem., Athens, GA 30602 USA) Temperature-dependent enantiospecificity of secondary alcohol dehydrogenase from "thermo-

- anaerobacter ethanolicus". *J. Amer. Chem. Soc.* 111(1989)1935
- PICHKOV, V. N., SIMISSYN, N. M., STULPIN, B. E., SHUBOCHKIN, L. K. (MV Lomonosov Fine Chem. Technol. Inst., Moscow, USSR) Thermolysis of certain coordination palladium, rhodium and ruthenium compounds in the hydrogen atmosphere *Zh. Neorg. Khim. SSSR* 34(1989)536
- PIRAUX, L., KINANY-ALAOUI, M., ISSI, J. P., BEGIN, D., BILLAUD, D. (Catholic Univ. Louvain, Physicochim. Phys. Mat. Lab. Pl Croix Sud 1, B-1348 Louvain La Neuve Belgium) Thermal conductivity of an oriented polyacylene film *Solid State Commun.* 70(1989)427
- PISCINA, P. R., HOMS, N., BORRULL, F. Surface basicity modification of  $\gamma$ -alumina: study by thermometric titration *Thermochim. Acta* 138(1989)303
- PITZER, K. S. (Univ. Calif. Berkeley, Dept. Chem., Berkeley CA 94720 USA) Fluids, both ionic and non-ionic, over wide ranges of temperature and composition *J. Chem. Thermodyn.* 21(1989)1
- PITZER, K. S. (Univ. Calif. Berkeley, Lawrence Berkeley Lab., Berkeley CA 94720 USA) Some interesting properties of vapour-liquid coexistence curves for ionic and non-ionic fluids *Thermochim. Acta* 139(1989)25
- PLEWA, J., STEINDOR, J., NOWAKOWSKI, J., FITZNER, K. (Silesia Tech. Univ., Inst. Non-ferrous Met., 88 Krasinskiego st., PL-40019 Katowice Poland) Kinetics of  $\text{SrSO}_4$  reduction with CO *Thermochim. Acta* 138(1989)55
- POPOVSKA, N. (Chem. Technol. Hochschule, BU-8010 Burgas Bulgaria) A study on the pyrolysis behaviour of organic binding agents for preparation of carbon materials *Angew. Macromol. Chem.* 168(1989)157
- POUWELS, A. D., EIJKEL, G. B., BOON, J. J. (FOM, Inst. Atom Molec. Phys., Mass Spectr. Macromolec Syst., Kruislaan 407, 1098 SJ Amsterdam Netherlands) Curie-point pyrolysis-capillary gas chromatography-high-resolution mass spectrometry of microcrystalline cellulose *J. Anal. Appl. Pyrol.* 14 (1989)237
- PRASAD, N. V. L. N., VENKATACHARYULU, P., PREMASWARUG, D. (Nagarjuna Univ., Dept. Phys., Nagarjuna Nagar 522510, Andhra Pradesh India) Temperature variation of NQR frequency in 4,4'-dichlorodiphenylsulphide *J. Phys. Chem.* 270(1989)190
- PRASAD, S. N., GHOSH, J. C. (Univ. Patna, Dept. Chem. Patna 800005 Bihar India) Thermodynamics of dissociation of  $\text{BeSO}_4$  in aqueous solution from 278.15 to 308.15 K *J. Indian Chem. Soc.* 65(1988)83
- PRIVALOV, P. L., PLOTNIKOV, V. V. (Acad. Sci. USSR, Inst. Prot. Res., Moscow Region, Pushchino 142292 USA) Three generations of scanning microcalorimeters for liquids *Thermochim. Acta* 139(1989)257
- PTASZNSKI, B. (Tech. Univ. Lodz, Inst. Gen. Chem., PL-90924 Lodz Poland) Studies on the thermal decomposition of complex salts of the  $\text{Cs}_3[\text{Bi}_{2-x}\text{Pb}_x\text{Cl}_9-x]$  type *Thermochim. Acta* 138(1989)249
- PYUN, E., MATHISON, R. J., SUNG, C. S. P. (Univ. Connecticut, Inst. Mat. Sci., Dept. Chem., 97 N Eagleville Rd, Storrs CT 06268 USA) Kinetics and mechanism for thermal imidization of a polyamic acid studied by ultraviolet-visible spectroscopy *Macromolecules* 22(1989)1174
- RAI, R. D., SHUKLA, R. K., SHUKLA, A. K., PANDEY, J. D. (Univ. Allahabad. Dept. Chem., Allahabad 211002. Uttar Pradesh India) Ultrasonic speeds and isentropic compressibilities of ternary liquid mixtures at  $(298.15 \pm 0.01)$  K *J. Chem. Thermodyn.* 21(1989)125
- RAI, U. S., MANDAL, K. D. (Banaras Hindu Univ., Dept. Chem., Varanasi 221005, Uttar Pradesh India) Chemistry of organic eutectics and 1:1 additon compound: p-phenylene-diamine-catechol system *Thermochim. Acta* 138(1989)219
- RAMACHANDRAN, T. P., RAMACHANDRAN, S., ANANTH, M. S. (Indian Inst.

- Technol. Dept. Chem. Engn., Madras 600036 Tamil Nadu India) Isothermal (vapour + liquid) equilibria of three binary mixtures at four temperatures *J. Chem. Thermodyn.* 21(1989)X31
- RAMASAMY, S. M., HURTUBISE, R. J. (Univ. Wyoming, Dept. Chem., Laramie WY 8271 USA) Temperature effects on the solid-matrix luminescence properties of 4-phenyl-phenol adsorbed on filter paper *Talanta* 36 (1989)315
- RAPER, E. S., BRITTON, A. M., CREIGHTON, J. R. (Polytech. Newcastle Upon Tyne, Dept. Chem. Life Sci., Newcastle Tyne NE1 8ST England) Thermal analysis of heterocyclic thione donor complexes. Part VI. Palladium(II) and platinum(II) complexes of thiazole-thiones *Thermochim. Acta* 140(1989)343
- RASHID, R. I. M. A., MARCH, N. M. (Univ. Daka, Dept. Phys., Dhaka 1000 Bangladesh) Vacancy formation energies in close-packed crystals correlated with melting temperature via thermodynamics and liquid structure *Phys. Chem. Liq.* 19(1989)4
- READING, J. F., HEDWIG, G. R. (Massey Univ., Dept. Chem. Biochem., Palmerston North New Zealand) Thermodynamic properties of peptides solutions 4. Partial molar volumes and heat capacities of aqueous solutions of some glycyl dipeptides *J. Solut. Chem.* 18(1989)159
- REGO, J. M., CAMPO, J. J., KATIME, J. (Univ. Pais Vasco, Dept. Quim. Fis., Nuevos Mat. Grp., Apdo 644 Bilbao Spain) Influence of the macrodiol chain length on the kinetics of linear non-segmented and segmented polyurethanes *Thermochim. Acta* 142 (1989)127
- REICH, L., PATEL, S. H., STIVALA, S. S. (Univ. Pais Vasco, Dept. Quim. Fis., Nuevos Mat. Grp., Apdo 644 Bilbao Spain) Factors affecting the thermal decomposition of cadmium carbonate by TG *Thermochim. Acta* 138(1989)147
- REICH, L. (Stevens Inst. Technol., Dept. Chem. Engn., Hoboken NJ 07039 USA) Use of spreadsheets in thermal analysis. Part 2 *Thermochim. Acta* 138(1989)177
- REY, F. J., GIL, J. (Univ. Valladolid, Ets. Ingenieros Ind., Paseo Cause Sw E-47011 Valladolid Spain) Excess enthalpies of ketone-triether mixtures. Measurement and application on the DISQUAC group contribution method *Thermochim. Acta* 141(1989)269
- RIGHINI, R., ANGELONI, L., FOGGI, P., CASTELLUCCI, E., CALIFARO, S. (Univ. Florence, Dept. Chim., I-50121 Florence Italy): Temperature-dependent (10–240 K) relaxation of vibrational excitons in  $\text{KClO}_4$  crystal *Chem. Phys.* 131(1989)463
- ROBERTIS, A., STEFANO, C., RIGANO, C. Computer analysis of equilibrium data in solution. ESSCH FORTAN and BASIC programs for computing formation enthalpies from calorimetric measurements *Thermochim. Acta* 138(1989)141
- ROBIE, R. A., RUSSELL-ROBINSON, S., HEMINGWAY, B. S. (US Geol. Survey; Mail Stop 959, Reston VA 22092 USA) Heat capacities and entropies from 8 to 1000 K of largbeinite ( $\text{K}_2\text{Hg}_2$ ) $(\text{SO}_4)_3$ , anhydrite ( $\text{CaSO}_4$ ) and of gypsum ( $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ ) to 325 K *Thermochim. Acta* 139(1989) 67
- RODANTE, F., MARROSU, G., FANTAUZZI, F. (Univ. La Sapienza Roma, Dip. Ingegneria Chim., Via Castro Laurenziano 2, I-00161 Roma Italy) Thermodynamics of the second proton dissociation processes of nine  $\alpha$ -amino-acids and the third ionization processes of glutamic acid, aspartic acid and tyrosine *Thermochim. Acta* 141(1989)297
- ROSS, J., COLIN, L. S. G. (Stanford Univ. Dept. Chem., Stanford CA 94305 USA) Thermodynamics of chemical systems far from equilibrium. *J. Phys. Chem.* 93(1989) 2091
- ROUX, M. V., TURRION, C., FERNANDEZ-MARTIN, F., FUENTE, F. L. L., CHEDA, J. A. Z. (Univ. Complutense Madrid, Fac. Ciencias Quim. Dept. Quim. Fis., E-28040 Madrid Spain) DSC thermophysics on some medium chain thallium(1) n-alkanoates: phase transitions, thermal functions and heat capacity *Thermochim. Acta* 139(1989)139
- RUDNYI, E. B., VOVK, O. M., KAIBICHEVA, E. A., SIDOROV, L. N. (Moscow State Univ.,

- Dept. Chem., Moscow 119899 USSR) Formation enthalpies of oxygen-containing anions of group VI elements in the gas phase and the electron affinities of  $\text{CrO}_3$ ,  $\text{MoO}_3$  and  $\text{WO}_3$ . *J. Chem. Thermodyn.* 21(1989) 247 with possible antimicrobial activity *Thermochim. Acta* 140(1989)1
- SABAA, M. W., MIKHAEL, M. G., FURUHATA, K., ELSABEE, M. Z. (Univ. Cairo Fac. Sci., Dept. Chem., Giza Egypt) Thermal degradation behaviour of acrylonitrile-indene copolymers *Polym. Degrad. Stabil.* 23 (1989)257 SAMANT, S. P., DHANDE, S. K., HOSANGADI, B. D. (Univ. Bombay, Dept. Chem. Bombay 400098 India) Thermal rearrangement of substituted 4-(4-chromarylphenoxy) quinazolines *Indian J. Chem.* 27(1988) U34
- SABBAH, R., WATIK, L. (CNRS, Ctr. Thermodyn. Microcalorimetrie, 26 Rue 141E Ria, F-13003 Marseille France) Etude thermodynamique de la molécule de thianthéne *Thermochim. Acta* 138(1989)241 SANCHEZ-MARTIN, M. J., SANCHEZ CAMAZANO, M. (Inst. Recursos Nat. Agrobiol., Apdo 257, E-37071 Salamanca Spain) Kinetic analysis of the thermal decomposition of the primicarb-Cu-montmorillonite complex *Thermochim. Acta* 141(1989)317
- SAITO, K. I., SUGAI, K., FUJIKARA, K., YANADA, N., GOTO, M., BAN, C., HAYASAKA, E., SUGIYAMA, N., TOMITA, K. (Mect. Corp. Cent. Res. Inst., 1780 Kitano, Tokorozawa Saitama 359 Japan) Thermal degradation of sodium N-acetylneuraminate *Carbohydr. Res.* 185(1989)307 SANCHEZ-SATO, P. J., PEREZ-RODRIGUEZ, J. L. (CSIC, Inst. Recursos Nat. Agrobiol. Apdo 1052, E-41080 Sevilla Spain) Thermal analysis of pyrophyllite transformations *Thermochim. Acta* 138(1989)267
- SAKHAROV, A. V., GELMBOLDT, V. O., SUKHOVERKHOV, V. F., ENNAN, A. A. (II Mechnikov State Univ. Odessa Ukraine USSR) Thermochemical transformations of the  $\text{SiF}_4 \cdot 2\text{NH}_3$  complex *Zh. Neorg. Khim. SSSR* 34(1989)332 SAWADA, Y., WATANABE, N., HEUMI, H., MIZUTAMI, N., KATO, M. (Tokyo Inst. Polytech., Fac. Engn., Dept. Ind. Chem. Kanagawa 24302 Japan) Thermal decomposition of silver carbonate 1. Differential thermal gas analysis *Thermochim. Acta* 138 (1989)257
- SALAS, J. M., SANCHEZ, E., VALENZUELA, C. (Granada Univ., Fac. Sci. Dept. Inorgan. Chem., E-18071 Granada Spain) Thermal studies on purine complexes XV. Thermal behaviour of some new complexes of 8-ethylxanthine and 8-ethyl-3-methylxanthine *Thermochim. Acta* 140(1989)13 SAWHNEY, S. S., MITTAL, R. K. (Dayanand Anglo Vedic Postgrad., Coll., Dept. Chem., Dehra Dun 248001 India) Kinetic parameters of the decomposition of hydrated tris(indole-3-butyrato) Ho(III) *Thermochim. Acta* 138(1989)173
- SCHMELZER, J., SCHWEITZER, F. (Univ. Rostock, Sekt. Phys., Universitätspl. 3., DDR-2500 Rostock Ger. Dem. Rep.) Thermodynamics and nucleation. 2. Adiabatic nucleation in finite systems *Z. Phys. Chem.* 279(1989)5
- SALINAS, F., VIDAL, J. L. M., PINO, J. L., AWAREZ, I. J. P. (Univ. Granada, Coll. Univ. Almeria, Dept. Quim. Analit. Quim. Organ. E-02071 Almeria Spain) Thiophene-hydroxamic acid (THA) and its solid complexes with several metallic divalent cations: a spectroscopic and thermal study *Thermochim. Acta* 141(1989)253 SCHOEBCREHTS, J. P., GEN, R., FUGER, J., MORSS, C. R. (Commiss. European Communities, Joint Res. Ctr., European Inst., Transuranium Elements, Postfach 2340, D-7500 Karlsruhe Fed. Rep. Ger.) Thermodynamical and structural studies on complex actinide chlorides  $\text{Cs}_2\text{NaAuCl}_6$  ( $\text{An} = \text{U-Cf}$ ), ionization potentials and hydration enthalpies of  $\text{An}^{3+}$  ions *Thermochim. Acta* 139(1989)49
- SALMAN, S. R., MAMOUD, N. F. (Univ. Baghdad, Coll. Sci. Dept. Chem., Baghdad Iraq) Thermal stability of some 1,3,4-thiodiazoles

- SCHULZE, G. E. W., WILBERG, H. P. (Univ. Dusseldorf, Inst. Phys. Kondensierten Mat. Abt. Werkstoffwissenschaft., D-4000 Dusseldorf 1, Fed. Rep. Ger.) Isothermic spherulitic growth and the shape of grain boundaries and growth fronts *Colloid Polym. Sci.* 267(1989)108
- SEDLÁČKOVÁ, M., POLA, J., VOLNINA, E. A., GUSELNIKOV, L. E. (Czechoslovak Acad. Sci., Inst. Chem. Proc. Fundamentals, CS-16502 Prague 6 Czechoslovakia). Efficient gas phase polymer deposition by infrared laser-photosensitized decomposition of 4-silaspiro[3.4]octane *J. Anal. Appl. Pyrol.* 14(1989)345
- SHARMA, B., RAKSHIT, K. (Maharaja Sayajirao Univ. Baroda, Fac. Sci. Dept. Chem., Baroda 390002 Gujarat India) Thermodynamics of micellization of a nonionic surfactant, Brij 35 in aquo-sucrose solution *J. Colloid Interface Sci.* 129(1989)139
- SHARMA, H. S. S. (Dept. Agr. No. Ireland, Div. Plant Pathol. Res., Newforge Lane, Belfast BT9 5PX North Ireland) Thermo-gravimetric analysis of flax shives degraded by Pleurotus ostreatus and ceraceomyces subloevius. *Thermochim. Acta* 138(1989) 347
- SHARMA, S. C., JOSHI, I. M., SINGH, J. (Panjab Univ., Dept. Chem., Chandigarh 160014 India) Excess molar volumes of (oxolane + trichloromethane or tetrachloromethane or 1,2-dichloroethane or 1,1,2-trichloroethane or 1,1,2,2-tetrachloroethane or 1,1,1,2,2-pentachloroethane) at 303.15 K *J. Chem. Thermodyn.* 21(1989)331
- SHARMA, V. K., BHAT, R. (Univ. Miami, Rosenstiel Sch. Marine Atmosphere Sci., Miami FL 33149 USA) Calorimetric studies on the interaction of sugars and polyols with the non-ionic surfactant triton-Y-100 in aqueous solutions *Thermochim. Acta* 138 (1989)359
- SHAWABKEH, A., SCOTT, J. F. (Univ. Colorado, Dept. Phys. Condensed Matter, Lab., Boulder CO 80309 USA) Raman spectroscopy of low-temperature phases of  $\text{RbAg}_4\text{I}_3$  *J. Raman Spectrosc.* 20(1989)277
- SHEN, J., SNOOK, R. D. (Univ. Manchester, Inst. Sci. Technol., Dept. Instrumentat. Analyt. Sci., POB 88 Manchester M60 1 QD Lancs England) Thermal lens measurement of absolute quantum yields using quenched fluorescent samples as references *Chem. Phys. Lett.* 155(1989)583
- SHUTILIN, Y. F. (Voronezh Polytech. Inst., Voronezh USSR) Thermodynamic description of segmented movement in polymers and their mixtures *Zh. Fis. Khim. SSSR* 63 (1988)44
- SIIMER, E., GRINTCHAK, M., KUUS, M., KUDRYAVTSEVA, L. (Acad. Sci. ESSR, Inst. Chem. Tallinn 200108 Estonia USSR) Use of the modified Wilson equation for description of vapor-liquid equilibrium in the system 1-nonyne-1-propanol *Thermochim. Acta* 140(1989)49
- SIIMER, E., KURRITS, M. (Acad. Sci. ESSR, Inst. Chem. Tallinn 200108 Estonia USSR) Calorimetric studies of benzoic acid-cyclodextrin inclusion complexes *Thermochim. Acta* 140(1989)161
- SILEO, E. E., MORANDO, P. J., BLESIA, M. A., VEDOVA, C. O. D. (Univ. Buenos Aires, Fac. Ciencias Exactas Nat. Dept. Quim. Inorgan. Analit. Quim. Fis., Dabellon II, RA-1428 Buenos Aires Argentina) The thermal decomposition of copper(II) nicotinate and isonicotinate *Thermochim. Acta* 138(1989)233
- SIMANOVSKII, B. A., EZHOV, A. I., LAINER, Y. A., REZNICHENKO, V. A. Influence of the conditions of production of aluminium hydroxide on its structural conversions during thermal dehydration *J. Appl. Chem. USSR* 61(1988)1114
- SINGH, L. K., MITRA, S. (Manipur Univ., Dept. Chem., Canchipur Imphal 795003 India) Thermal investigation and stereochemical studies of some cyclic diamine complexes of nickel(II), zinc(II) and cadmium(II) in the solid state. Part 3 *Thermochim. Acta* 142(1989)89
- SINGH, L. K., MITRA, S. (Manipur Univ., Dept. Chem., Imphal 795003 India) Thermal investigation and stereochemical studies

- of some cyclic diamine complexes of nickel (II), zinc(II) and cadmium(II) in the solid state *Thermochim. Acta* 138(1989)285
- SIVASUBRAMANIAN, G., SIVASAMY, P., VIJAYAKUMAR, C. T., FINK, J. K. (Univ. Min. Mat. Leoben, Inst. Chem. Phys. Technol. Kunststoffe A-8700 Leoben Austria) Structural characterization and thermal degradation of hexolic-anhydride-based polyesters *Thermochim. Acta* 140(1989)169
- SJÖBERG, A., KARLSTRÖM, G. (Chem. Ctr., Dept. Phys. Chem. POB 124, S-22100 Lund Sweden) Temperature dependence of the phase equilibria for the system poly(ethylene glycol) dextram/water. A theoretical and experimental study *Macromolecules* 22(1989)1325
- SKANCKE, P. N., KOGA, N., MOROKUMA, K. (Univ. Tromso, Dept. Chem., POB 953, N-9001 Tromso Norway) A theoretical study of the thermal degenerate rearrangement in methylene-cyclobutane *J. Amer. Chem. Soc.* 111(1989)1559
- SLANINA, Z. (Czechoslovak Acad. Sci., J. Heyrovsky Inst. Phys. Chem. Electrochem., Dolejskova 3, CS-18223 Prague 8 Czechoslovakia) CO adsorbed on Ni(001) effects of the interplay of "on-top" and "bridge" adsorption complexes on heat capacity *Thermochim. Acta* 140(1989)237
- SLANINA, Z., RUDZINSKI, J. M., TOGOSI, M., OSAWA, E. (Czechoslovak Acad. Sci., J. Heyrovsky Inst. Phys. Chem. Electrochem., Dolejskova 3, CS-18223 Prague 8 Czechoslovakia) On relative stability reassessing for clusters of different dimensions: an illustration with the  $C_{6,0}-C_{7,0}$  system *Thermochim. Acta* 140(1989)87
- SRIRAMA, Musti, R., YADAV, R. B., NAWADA, H. P., VASUDEVA, RAO, P. R., MARTEENS, C. K. A study of the non-stoichiometry in  $U_3O_8$  *Thermochim. Acta* 140(1989)299
- STAKER, W. C., KING, K. D. (Univ. Adelaide, Dept. Chem. Engr., Adelaide SA 5001 Australia) Collisional energy transfer in the three-channel thermal decomposition of 1-chloro-2,2,3,3-tetrafluorocyclobutane *J. Phys. Chem.* 93(1989)1805
- STRONG, L. E., NEFF, R. M., WHITESEL, I. (Earlham Coll. Dept. Chem., Richmond IN 47374 USA) Thermodynamics of dissolving and solvation processes for benzoic acid and the toluic acids in aqueous solution *J. Solut. Chem.* 18(1989)101
- STEELE, W. V., CHIRICO, R. D., HOSSENLIN, I. A., NGUYEN, A., SMITH, N. K., GAMMON, B. E. (Natl. Inst. Petr. Energy Res., IIT, Res. Inst., POB 2128 Bartlesville, OK 74005 USA) The thermodynamic properties of the five benzoquinolines *J. Chem. Thermodyn.* 21(1989)8
- STEINHOFF, H. J. (Ruhr Univ. Bochum., Inst. Biophys., D-4630 Bochum Fed. Rep. Ger.) Thermophysical properties of protein crystals: thermal diffusivity measurements of methemoglobin single crystals using a dielectric heating technique *Thermochim. Acta* 141(1989)235
- STENHOUSE, P. J., VALLES, E. M., KANTOR, S., W., MACKNIGHT, W. J. (Univ. Massachusetts, Dept. Polymer Sci. Engr., Amherst MA 01003 USA) Thermal and rheological properties of a liquid-crystalline polyurethane *Macromolecules* 22(1989)1467
- SUMMAN, A. M., MOUSA, M. A., AHMED, M. A., BADAWI, A. M. (Ctr. Sci. Math. Dept. Chem. POB 1070 Taif Saudi Arabia) Thermal and electrical studies on some two-dimensional chelated compounds *Thermochim. Acta* 140(1989)228
- SWAMY, I. V., VIRKAR, A. N., RAY, H. S., PAUL, A. (Ctr. Sci. Math. Dept. Chem. POB 1070 Taif Saudi Arabia) Kinetics of sintering of irregular particles of glass. Part 1. Isothermal sintering *Thermochim. Acta* 140(1989)219
- SWAMY, I. V., VIRKAR, A. N., RAY, H. S., PAUL, A. (Univ. So Calif. Dept. Mat. Sci., Los Angeles CA 90089 USA) Kinetics of sintering of irregular particles of glass. Part 2. Non-isothermal sintering *Thermochim. Acta* 140(1989)225
- SYRKHOVA, O. V., KABANOV, D. A., TSVETKOV, V. K. Thermodegradation of aliphatic polyamides filled with silicon dioxide in the course of synthesis *J. Appl. Chem. USSR* 61(1989)1310

- SZUBER, J. (Silesian Tech. Univ., Inst. Phys. Spect. Res. Semiconductor Surfaces Lab., Krzywoustego 2, PL-44100 Gliwice Poland) The effect of oxygen adsorption on the electronic properties of the polar GaAs(III) surface after thermal cleaning in ultrahigh vacuum *Thin. Solid Films* 170 (1989)219
- TACHI, S. Low-temperature dry etching for ULSI *Denki Kagaku Kaishi* 57(1989)277
- TAKAHASHI, Y., AZUMI, T., SEKINE, Y. (Univ. Tokyo Dept. Nucl. Engr., Bunkyo Ku, Tokyo 113 Japan) Heat capacity of aluminium from 80 to 880 K *Thermochim. Acta* 139(1989)133
- TANAKA, H., GOMEZ, M. A., TONELLI, A. E., THAKUR, M. (ATT Bell Labs. Murray Hill NJ 07974 USA) Thermochromic phase transition of a polyacetylene, poly-(ETCD) studied by high-resolution solid-state  $^{13}\text{C}$  NMR *Macromolecules* 22(1989) 1208
- TANAKA, S. (Natl. Chem. Lab. Ind., Yatabe, Ibaraki 305 Japan) Linear system theory of a heat conduction calorimeter. Part 1. Some properties of a linear system with zero initial conditions *Thermochim. Acta* 141(1989)181
- TANIEWSKA-OSINSKA, S., KOZLOWSKI, Z., NOWICKA, B., BALD, A., SZEJGIS, A. (Univ. Lodz, Dept. Phys. Chem., ul. Nowotki 18 PL-9146 Lodz Poland) Heat of solution and electric conductivity of electrolytes in water-tetrahydrofuran mixtures *J. Chem. Soc. Faraday Trans. I.* 85(1989) 479
- TANIEWSKA-OSINSKA, S., TKACZYK, M. (Univ. Lodz, Dept. Phys. Chem., ul. Nowotki 18, PL-91410 Lodz Poland) Enthalpies of solution of  $\text{Na}_3$  and  $\text{CsI}$  in N,N-dimethylacetamide-water mixtures at 258.15 K *Thermochim. Acta* 141(1989)131
- TANIGAMI, T., ONO, T., SUDA, N., SUKAMAKI, Y., YAMAURA, K., MATSUZAWA, S. (Shinshu Univ., Fac. Text. Sci. Technol., Ueda 386 Japan) Low-temperature soluble-type sol-gel transition in a newly synthesized poly(organophosphazene) and water system *Macromolecules* 22(1989)1397
- TAS, A. C., BASHIAAUSE, H. B., GREEF, J., KERKENAAR, A. (TNO, CIVO, Food Anal. Inst., POB 360, 3700 AJ Zeist Netherlands) Pyrolysis-direct chemical ionization mass spectrometry of the dimorphic fungus *Candida albicans* and the pleomorphic fungus *Ophiostoma ulmi* *J. Anal. Appl. Pyrol.* 14 (1989)303
- TERECH, P. (Inst. Max von Laue Paul Langevin, F-38042 Grenoble France) A non-aqueous thermoreversible lyotropic gelling system. Characterization of gels and xerogels from low molecular weight steroid derivatives *Mol. Cryst. Liquid Cryst.* 166(1989)29
- TEZUKA, T., SUSAKI, K., NARITA, N., FUJITA, M., ITR, K., OTSUKA, T. (Univ. Tsukuba, Dept. Chem., Sakura Ibaraki 305 Japan) Thermal high yield aromatic arylation with  $\alpha$ -azohydroperoxide. I. A novel free radical aromatic arylation reaction *Tetrahedron Lett.* 30(1989)963
- THOMAS, M. M., CLOUSE, J. A. (Exxon Prod. Res. Co., POB 2189 Houston TX 77252 USA) Thermal analysis of compounds adsorbed on low-surface-area solids. Part 2. Calorimetric investigations of fatty acids on calcite, *Thermochim. Acta* 140(1989)253
- THOMAS, M. M., CLOUSE, J. A. (Exxon Prod. Res. Co., POB 2189 Houston TX 77252 USA) Thermal analysis of compounds adsorbed on low-surface-area solids. Part 1. Measurement and characterization by TGA *Thermochim. Acta* 140(1989)245
- TINGFA, D. Thermal decomposition studies of solid propellant binder HTPB *Thermochim. Acta* 138(1989)189
- TOMASSETTI, M., CAMPANELLA, L., MORGIA, C., ORTAGGI, G. (Univ. Rome La Sapienza, Dep. Chim., Piazza A Moro 5, I-00185 Rome, Italy) Thermal analysis and conducting properties of polymers of diethynyl benzene and diethynylpyridine *Thermochim. Acta* 141(1989)27
- TORELL, J. M., EVANS, Y. O., VALCARE, R. V., SMITH, G. G. (Utah State Univ. Dept. Plant. Sci., Logan UT 84322 USA)

- Chemical characterization of leafy spurge (*Euphorbia esula L.*) by Curie-point pyrolysis-gas chromatography-pattern recognition *J. Anal. Appl. Pyrol.* 14(1989)223
- TORRES-GOMEZ, L. A., YANEZ-NIETO, R. (Inst. Politecn. Nucl., Ctr. Invest. Estudios Avanzados, Dept. Quim. Apdo Postal 14740 Mexico City 07000 DF Mexico) Wide range determination of thermal conductivity by differential scanning calorimetry *Thermochim. Acta* 140(1989)139
- TUTUNJI, M. S., ABSOOD, A. H., CLEVER, H. L. (Emory Univ., Dept. Chem., Atlanta GA 30322 USA) Excess Gibbs energy of binary solutions of acetonitrile and of dimethylsulphoxide with several aromatic hydrocarbons *Thermochim. Acta* 138(1989) 19
- UDALOV, A. V., GUSEV, V. I., BURYLEV, B. P., OREL, I. V. (Kuban State Univ., Krasnodar 350751 USSR) Thermometric determination of gold in jewelry alloys *J. Anal. Chem. USSR* 43(1988)913
- UEMICHI, Y., MAKINO, Y., KANAZUKA, T., (Muroran Inst. Technol. Dept. Ind. Chem. 21-1 Mizumoto Cho, Muroran Hokkaido 050 Japan) Degradation of polyethylene to aromatic hydrocarbons over metal-supported activated carbon catalysts *J. Anal. Appl. Pyrol.* 14(1989)33
- URBANOVICI, E., SEGAL, E. (Res. Inst. Electrotechn., Sfintu Gheorghe Branch, St. Jozsef Attila NR 4, Sfintu Gheorghe Romania) Iterative integral method to evaluate the classical non-isothermal kinetic parameters from a single curve obtained at constant heating rate using integration over small intervals of variables and the least-squares method *Thermochim. Acta* 141 (1989)9
- URRETAVIZCAYA, G., BARAN, E. J. (Natl. Univ. La Plata, Fac. Ciencias Exactas, Dept. Quim., Calles 47, 115 RA-1900 La Plata Argentina) The thermal decomposition of  $\text{VO}(\text{DMSO})_3\text{SO}_4$  *Thermochim. Acta* 138 (1989)367
- VASILEV, V. P., KOZLOVSKII, E. V., KHOCHERKOVA, T. B., KOSTYUSHINA, I. E. (Ivanovo Chem. Technol. Inst., Ivanovo USSR) Thermodynamics of reactions of hydroxyethylidenediphosphoric acid complexation with Cu-II aqueous solutions *Zh. Neorg. Khim. SSSR* 34(1989)376
- VASILEV, V. P., UTEGULOV, R. N., RAMENSKAYA, L. M., KAMYSBAEV, D. K., OSPANOV, K. K. (Ivanovo Chem., Technol. Inst., Ivanovo USSR) Thermodynamic characteristics of unithiol dissociation in aqueous solutions *Zh. Obshch. Khim. SSSR* 59(1989) 210
- VEERANNA, D., KUMAR, Y. U. L. R., RAMAKRISHNA, M. (Reg. Res. Lab. Hyderabad 500007 India) Bubble temperature data for phenol-alcohol, systems. 1. Phenol-*I*-propanol system *Phys. Chem. Liq.* 19(1989) 17
- VEISSIER, V., VIOVY, J. L., MONNERIE, L. (Ecole Super Phys. Chim. Ind., Physico-chim. Struct. Macromolec. Lab., 10 Rue Vanquelin F-75231 Paris 05 France) Temperature dependence of the fundamental anisotropy of anthracene derivates in melt polyisobutylene *J. Phys. Chem.* 93(1989) 1709
- VENIAMINOV, A. V., BURUKOVA, Y. E., KAZANNIKOVA, A. V. (SI Vavilov State Opt. Inst., Leningrad USSR) Diffusion of substituted anthracene molecules in amorphous polymers. Effect of the kinetic element volume and glass transition temperature. *Vysokomol. Soedin. SSSR* 31(1989) 68
- VESELY, F., BARCEL, P., ZÁBRANSKY, M., SVOBODA, V. (Prague Inst. Chem. Technol. Dept. Phys. Chem., CS-16628 Prague 6 Czechoslovakia) Heat capacities of 4-methyl-2-pentanone, 2,6-dimethyl-4-heptanones, 1-hexanol, 1-heptanol and 1-octanol in the temperature range 298–318 K *Collection* 54(1989)602
- VINCENT, C., DAZORD, J., VINCENT, H., BOUIX, J. (Univ. Lyon 1, Physicochim. Minerale Lab 1, CNRS, UA 116, 43 Blvd 11 Novembre 1918, F-69621 Villeurbanne France) Etude thermodynamique et expérimentale de la stoechiométrie du carbure de titane déposé par réaction entre un substrat

- de graphite et un mélange gazeux de tétrachlorure de titane et d'hydrogène *Thermochim. Acta* 138(1989)8
- VISIC, M., MEKJAVIC, J. (Univ. Split, Fac. Technol., Phys. Chem. Lab., Teslina 10, YU-58000 Split Yugoslavia) Thermodynamics of the cell Cd(S) + Hg(CdCl<sub>2</sub>)aq, m[AgCl]Ag *J. Chem. Thermodyn.* 21(1989) 139
- VITALI, G., BERCHIESI, G. (Univ. Camerino, Dip. Sci. Chim., Via S Agostino 1, I-62032 Camerino Italy) Solubility data of some sodium salts in 2-hydroxyacetamide *Thermochim. Acta* 142(1989)13
- VOLKOV, V. L., ZAKHAROVA, G. S. (Acad. Sci. USSR, Ural Sci. Ctr., Inst. Chem., Sverdlovsk USSR) Thermodynamic properties of xerogels of polyvanadiummolybdic acid *Zh. Obshch. Khim. SSSR* 59 (1989)27
- VOORHEES, P. W., JOHNSON, W. C. (Northwestern Univ., Dept. Mat. Sci. Engn. Evanston IL 60208 USA) The thermodynamics of a coherent interface *J. Chem. Phys.* 90 (1983)2793
- WANG, B. N., TAN, F., HU, R. H. (Chinese Acad. Sci., Inst. Chem., Beijing Peoples R China) Thermodynamic study of the phase transitions of the mesogens and the homologous trends of their melting entropies *Thermochim. Acta* 139(1989)83
- WANG, L., BENSON, G. C., LU, B. C. Y. (Univ. Ottawa, Dept. Chem. Engn., 770 King Edward Ave, Ottawa Ontario Canada K1N 9 BN) Excess volumes for (di-n-propylether + n-alkanol) at 298.15 K *J. Chem. Thermodyn.* 21(1989)147
- WANG, L., BENSON, G. C., LU, B. C. Y. (Univ. Ottawa, Dept. Chem. Engn., 770 King Edward Ave, Ottawa Ontario Canada K1N 9B4) Excess enthalpies and excess volumes for (di-n-propyl ether + a cycloalkane) *J. Chem. Thermodyn.* 21(1989)67
- WIEK, R. (Silesia Tech. Univ., Inst. Kent Tech., PL-44100 Gliwice Poland) The thermal decomposition of the liquid phase during the combustion of heavy oil droplets *Fuel* 68(1989)37
- WOSTENHOLM, G. H., DARBY, M. I., JAMES, B. W., YATES, B. (Univ. Salford, Dept. Pure Appl. Phys., Salford M5 4WS Lancs England) Apparatus for the absolute measurement of the linear thermal expansion coefficient of solids over a wide temperature range *J. Phys. E* 22(1989)222
- WHU, G., TASHIRO, K., KOBAYASHI, M., KOMATSU, T., NAKAGAWA, K. (Osaka Univ. Fac. Sci., Dept. Macromolec. Sci., Toyonaka Osaka 560 Japan) A study on mechanical deformation of highly oriented poly(oxymethylene) by vibrational spectroscopy and X-ray diffraction stress and temperature dependences of Young's modulus *Macromolecules* 22(1989)758
- YAMAMOTO, S. (Shimadzu Corp., 1 Nishinokyo Kuwabara Cho, Nakagou Ku, Kyoto Japan) The time energy uncertainty principle and thermal activation *J. Phys. Chem.* 270(1989)17
- YANG, D. K., KRIGBAUM, W. R. (E Tek. Dynam. Inc., 1885 Lundy Ave, San Jose CA 95131 USA) Rheological studies of thermotropic liquid crystal copolymers: P-hydroxybenzoic acid/2-hydroxy-6-naphthoic acid *J. Polym. Sci. B* 27 (1989)819
- YANG, J., PITZER, K. S. (Univ. Calif. Berkeley, Dept. Chem., Berkeley CA 94720 USA): Thermodynamics of aqueous uranyl sulfate to 559 K *J. Solut. Chem.* 18(1989)189
- YEGOROCHKIN, G. A., SEMCHIKOV, Y. D., SMIRNOVA, L. A., KNYAZEVA, T. Y., TIKHONOVA, Z. A., KARYAKIN, N. V., SVESHNIKOVA, T. G. (NI Lobachevskii State Univ., Chem. Res. Inst. Gorki USSR) Thermodynamic analysis of features of copolymerization of styrene with acrylonitrile and N-vinylpyrrolidone with vinyl acetate *Vysokomol. Soedin. SSSR* 31(1989)46
- YOKOYAMA, K., YOKOYAMA, M. (Univ. Tokyo, Adv. Sci. Technol. Res. Ctr., Meguro Ku, Tokyo 153 Japan) Thermochromic behaviours and ionization potentials of organopolysilanes *Solid State Commun.* 70 (1989)24

- YONKER, C. R., SMITH, R. D. (Batella Mem Inst., Pacific NW Labs, Dept. Chem. Sci., Chem. Methods Separat Grp., Richland WA 99352 USA) Thermochromic shifts in supercritical fluids *J. Phys. Chem.* 93(1989) 1261
- YOON, H., KIM, H., YU, H. (Univ. Wisconsin, Dept. Chem., Madison WI 53706 USA) Polyelectrolyte tracer diffusion in a thermoreversible gel: Structural probe across the gelation of gelatin *Macromolecules* 22(1989) 848
- YUTINA, G. A., GROMOVA, V. V., ILYNA, T. V., CHESNOKOVA, I. G., POLINA, M. V. (Lensoviet Technol. Inst., Leningrad USSR) Main paths of thermal decomposition of neopentylpolyol esters *J. Appl. Chem. Engl. Tr.* 61(1988)1022
- ZHELYASKOV, V., GEORGIEV, G., NICKOLOV, ZH., MITEVA, M. (Univ. Sofia, Fac. Phys., BU-1126 Sofia Bulgaria) Raman temperature study of 12-crown-4 using Fourier deconvolution of CH stretching spectra *Spectrosc. Lett.* 22(1989)15
- ZHOGIN, I. L., YAKOBSON, B. I. (Acad. Sci. USSR, Inst. Solid State Chem. Mineral Ores Proc., Novosibirsk USSR) Limit of fragile destruction at crystal thermolysis *Izv. Sibir. Otd. Akad. Nauk, Khim.* 6 (1988)14
- ZHOGINA, E. V., PAPINA, T. S., KOLESOV, V. P., IVANOVA, T. Y. (Moscow State Univ. Dept. Chem., B-234, Moscow 119899 USSR) Enthalpy of formation of perfluoro-2,7-dimethyloctane *Thermochim. Acta* 139 (1989)43
- ZIELIŃSKI, R., IKEDA, S., NOMURA, H., KATO, S. (Acad. Econ., Inst. Commod. Sci. Dept. Gen. Analyt. Chem., PL-60967 Poznan Poland) Effect of temperature on micelle formation in aqueous solutions of alkyltrimethylammonium bromides *J. Colloid Interface Sci.* 129(1989)175
- ZIMINA, N. K., MOLCHANOV, N. F. (Moscow Railroad Transport Engn. Inst., Moscow USSR) Thermal accomodation in the gas-metal system. 1. Hydrogen *Zh. Fis. Khim. SSSR* 63(1989)60
- ZULFIQUAR, S., AKKtar, N., ZULFIQUAR, M., McNEILL, I. C. (Univ. Glasgow, Dept. Chem., Glasgow G12 BQQ Scotland) Thermal degradation of poly(2-methoxy-ethyl methacrylate) *Polym. Degrad. Stabil.* 23 (1989)299
- ZUOYUN, H., XINGZHOU, H., GANG, S. Study of the mechanism of thermal degradation of poly(vinyl chloride) *Polym. Degrad. Stabil.* 24(1989)127