

Bibliography Section

- ABDEL-GHANI, N. T., SHERIF, O. E. (Univ. Cairo, Fac. Med., Dept. Chem., Cairo Egypt) Potentiometric, conductimetric, spectrometric, thermogravimetric and magnetic studies of lanthanum complexes with some symmetric 1,5-dianyl-3-cyanoformazans *Thermochim. Acta* **156** (1989) 69
- ABOUL-GHEIT, A. K., SUMMAN, A. M. AHMED, M. A., MOUSA, M. A. (Umm. Al Qura Univ., Fac. Appl. Sci. Engn., Dept. Chem., POB 3711 Makkah Al Mukarramah Saudi Arabia) Investigation of zeolite-Y forms using differential scanning calorimetry and electrical conductivity *Thermochim. Acta* **158** (1990) 53
- ABDELHALIM, A. S., AFIFY, N., ABDELMONEM, N. (AEA, Nrc. Inchass, Dept. Met., Cairo Egypt) Thermal decomposition of ammonium cerous carbonate *J. Thermal Anal.* **35** (1989) 903
- ACEVEDO, I. L., KATZ, M. (Nacl. Tucuman, Fac. Ciencias Exactas, Inst. Ingn. Quim. Catedra Fisicoquim., Avda Independencia 1800, RA-4000 Tucuman Argentina) Molar excess volumes and partial molar excess volumes of n-butylamine with chloroalkanes at different temperatures *Thermochim. Acta* **156** (1989) 199
- ACHTERMANN, H. J., BAHR, H. D., BOSE, T. K. (Univ. Hanover, Inst. Thermodyn., D-3000 Hanover Fed. Rep. Ger.) An optical method for the determination of the (pressure, amount-of-substance density, temperature) relation. Measurements on ethene in the temperature range from 283.15 to 373.15 K at pressures up to 30 MPa *J. Chem. Thermodyn.* **21** (1989) 1023
- ACREE, W. E., TUCKER, S. A., CRETELLA, L. E. (Univ. N Texas Dept. Chem. Denton TX 76203 USA) Thermodynamic properties of ternary non-electrolyte solutions. Part 2. Prediction of infinite dilute activity coefficients and solubilities based on the various NIBS and microscopic partition models *Thermochim. Acta* **158** (1990) 11
- AGRAWAL, R. K. (Adv. Energy Mat. Res. 5735 Tiaber Creek PI Dr MS-206, Houston TX 77084 USA) The compensation effect. A fact or a fiction *J. Thermal Anal.* **35** (1989) 909
- ALBA, C., BUSSE, L. E., LIST, D. J., ANGELL, C. A. (Lab. Chim. Phys. Paris, Rue Pierre Marie Curie, F-7523, Paris France) Thermodynamic aspects of the vitrification of toluene, and xylene isomers, and the fragility of liquid hydrocarbons *J. Chem. Phys.* **92** (1989) 617
- ALEGRIA, A. E., MUNOZ, C., RODRIGUEZ, M. S. (Univ. Puerto Rico, Dept. Chem., Cuh. Stn., Humacao PR 00661 USA) Thermodynamics of disproportionation and heats of hydration of 1,4-benzosemiquinone and 1,4-naphtho-semiquinone at pH 7.1 *J. Phys. Chem.* **94** (1990) 930
- ALHAKKAK, J. S., BARBOOTI, M. M. (Petr. Res. Inst., Sci. Res. Council, POB 10039 Baghdad Iraq) Thermogravimetric study on typha (*tuphaangustifolia* L.) *J. Thermal Anal.* **35** (1989) 815
- ALIEV, F. M., POJIVILKO, K. S., ZGONNIK, V. N. (Inst. Fine Mech. Opt., Dept. Phys., Leningrad 197101 USSR) SAKS and DSC: studies of surface and size effects for

- poly (vinyl stearate) *Eur. Polym. J.* **26** (1990) 101
- ALIGULIEV, R. M., KHITTEVA, D. M., IBRAGIMOV, K. D., OGANYAN, V. A., NUVIEV, R. A. (All Union Olefin Extract. Proc. Technol. Res. Inst., Moscow USSR) Features of the structure of relaxators of ethylene-alpha-olefine copolymers in the low temperatures region *Vysokomol. Soedin. Ser. A SSSR* **31** (1989) 907
- ALIMOV, D. T., OMELCHENKO, A. I., KHABIBULLAEV, P. K. (Acad. Sci. USSR, Special Design Bur. Op. Otf., Tashkent, Uzbekistan UZSSR) Thermophysical processes of diffusion electromass transfer in the thermal oxidation of laser-heated metals
- ALLAN, J. R., CARSON, B. R., GERRARD, D. L., HOEY, S. (Napier Polytech., Dept. Appl. Chem. Sci., Edinburgh Scotland) The thermal, spectral and magnetic studies of succinic acid compounds of some transition metal ions *Thermochim. Acta* **158** (1990) 91
- ALLAN, J. R., PATON, A. D., TURVEY, K., GERRARD, D. L., HOEY, S. (Napier Polytech., Dept. Appl. Chem. Sci., Edinburgh, Scotland) Thermal and electrical studies of silicon phthalocyanine dichloride and tris(2,4-pentanedionato) silicon chloride hydrochloride *Thermochim. Acta* **155** (1989) 203
- ALLAYAROV, S. R., ASAMOV, M. K., SUMINA, I. V., BARKALOV, I. M. (VI Lenin State Univ., Polymer Chem. Lab., Tashkent Uzbekistan USSR) Thermal conversion of long-lived perfluoro-2,4-dimethyl-3-ethyl-3-pentyl radical *Izv. Vyssh. Uch. Zav. Khim. Khim. T.* **32** (1989) 34
- ALNOT, P., CASSUTO, A., KING, D. A. (Thomson CSF, LCR Domaine Corbeville, F-91401 Orsay France) Decomposition (and synthesis) of ammonia on W{100}. A thermal molecular beam study *Faraday Discuss Chem. Soc.* **87** (1989) 291
- ALONSO, R., CORRALES, J. A. (Univ. Oviedo, Ets. Ingn. Minas, Dept. Energia, Oviedo Spain) Excess molar volumes of (methylcyclohexane + an alkanol) at 298.15 K II. Results for 2-methylpropan-1-ol and butan-2-ol *J. Chem. Thermodyn.* **21** (1989) 1213
- AL-SAMMERRAI, D., AL-NAJJAR, H. (Petr. Res. Inst., POB 10039 Baghdad Iraq) Determination and study of thermal stabilities of surface-active compounds occurring naturally in Iraqi crude oils *Thermochim. Acta* **155** (1989) 241
- ALVES, S. S. (Inst. Super. Tech., Dept. Engn. Quim., P-1096 Lisbon Portugal) Simple estimation of the temperature error in thermogravimetric experiments *Thermochim. Acta* **157** (1990) 249
- ALVES, S. S., FIGUEIREDO, J. L. (Inst. Nacl. Invest. Cientif., Fac. Engn., Ctr. Engn. Quim. P-4099 Oporto Portugal) Kinetics of cellulose pyrolysis modelled by three consecutive first-order reactions *J. Anal. Appl. Pyrol.* **17** (1989) 37
- AMENGUAL, A., TORRA, V., ISALGUE, A., MARCO, F. (Univ. Illes Balears, Dept. Fis., E-07071 Palma de Mallorca Spain) Analysis of a martensitic transformation by optical microscopy, acoustic emission detection, resistance measurements and differential scanning calorimetry *Thermochim. Acta* **155** (1989) 115
- AMIGO, A., LEGIDO, J. L., BRAVO, R., ANDRADE, P. (Univ. Santiago, Fac. Fis., Dept. Fis. Aplicada, E-15706 Santiago De Compo Spain) Excess molar enthalpies of (heptan-1-ol + an n-alkane) at 298.15 and 308.15 K *J. Chem. Thermodyn.* **21** (1989) 1207
- ANSARA, I. (Ecole Natl. Super. Electrochim. Electromet. Grenoble, Thermodynam. Physico-Chim. Met., BP 75, F-38402 St. Martin Dheres France) Thermodynamic modelling of solution phases and phase diagram calculations *Pure Appl. Chem.* **62** (1989) 71
- ARAKI, N. (Shizuoka Univ., Fac. Engn., Hamamatsu, Shizuoka 432 Japan) Effect of radiation heat transfer on thermal diffusivity measurements *Int. J. Thermophys.* **11** (1990) 329
- ARAVINDAKSHAN, K. K., MURALEEDHARAN, K. (Univ. Calicut, Dept. Chem., Calicut 673635 Kerala India) Thermal

- decomposition kinetics of 2-furaldehyde thiosemicarbazone complexes of cadmium (II) and mercury (II) *Thermochim. Acta* **155** (1989) 247
- ARENA, G., CALI, R., MACCARRONE, G., PURELLO, R. (Univ. Messina, Ist. Chim. Analit, Salita Sperone 31, 98116 S, I-98100 Messina Italy) Critical review of the calorimetric method for equilibrium constant determination *Thermochim. Acta* **155** (1988) 353
- ARENA, G., IMPELLIZZERI, G., MACCARRONE, G., PAPPALARDO, G., SCIOTTO, D., RIZZARELLI, E. (Univ. Messina, Ist. Chim. Analit. Salita Sperone 31, 98116 S Agata Messina, I-98100 Messina Italy) Non-covalent interactions in cyclopeptide proton complex formation in aqueous solution *Thermochim. Acta* **154** (1989) 97
- ARUGA, R., ZERBINATI, O. (Univ. Turin, Dept. Chim. Analit., Via Giuria 5, I-10125 Italy) Thermodynamic study of phytobiological processes. Coordinative fixation of boron by carbohydrates *Ann. Chim.* **80** (1990) 61
- ASWAR, A. S., BHAVE, N. S. (Nagpur Univ., Dept. Chem., Nagpur 440010 Maharashtra India) Thermal degradation of some new coordination polymers *Thermochim. Acta* **157** (1990) 233
- BAGGA, S. L., JAIN, R. K., GUR, I. S., BHATNAGAR, H. L. (Kurukshetra Univ., Dept. Chem., Kurukshetra 132119 Haryana India) Thermal and spectroscopic studies on flame-retardant cotton cellulose modified with THPC - urea - ADP and its transition metal complexes *British Polym. J.* **22** (1990) 107
- BAGRYANSKII, V. A., PUSHCHAEVA, L. M., TOLKACHEV, V. A. (Acad. Sci. USSR, Inst. Chem. Kinet. Combust, Novosibirsk USSR) Relation of the size of a matrix molecule with kinetics of oxidation of radicals in low-temperature organic glasses *Vysokomol. Soedin. Ser. A SSSR* **31** (1989) 892
- BALAKIN, V. M., VYDRIN, A. F., VYDRINA, T. S., KUTS, M. V. (Ural Wood Technol. Inst., Sverdlovsk USSR) Thermal degradation of crosslinked polymers with pyridinium and quinolinium fragments *Vysokomol. Soedin. Ser B SSSR* **31** (1989) 840
- BAIDAKOV, V. G., KAVERIA, A. M. (Acad. Sci. USSR, Inst. Thermophys., Sverdlovsk 620219 USSR) Ultrasonic speed in superheated liquid oxygen *J. Chem. Thermodyn.* **21** (1989) 1159
- BALBI, N. (Univ. Corse, Helioenerget. Lab., Route Sanguinaires Vignola, F-20000 Ajaccio France) Dynamic thermal analysis of a physical-chemical system (French) *J. Thermal Anal.* **35** (1989) 933
- BAO, X. Y., SETSER, D. W. (Kansas State Univ. Agr. Appl. Sci., Dept. Chem., Manhattan KS 66506 USA) Temperature dependence of the electronic-to-vibrational quenching rate constants of $NF(b^1\Sigma^+)$ *J. Phys. Chem.* **93** (1989) 8162
- BARDI, G., TRIONFETTI, G. (Cnr., Ctr. Termodinam. Chim. Alte Temp., Rome Italy) Vapour pressure and sublimation enthalpy of zinc selenide and zinc telluride by thermogravimetric Knudsen-effusion method *Thermochim. Acta* **157** (1990) 287
- BASSI, P. S., RANDHAWA, B. S., KAUR, S. (Guru Narak Dev. Engrn. Coll., Dept. Chem., Amritsar 143005 Punjab India) Thermal decomposition of magnesium malonate trihydrate *J. Thermal Anal.* **35** (1989) 735
- BENNETT, B., RAYNES, W. T. (Univ. Sheffield, Dept. Chem., Sheffield S3 7HF, S Yorkshire England) Temperature dependent carbon-13 and proton isotope shifts of some isotopolmers of methane *Spectrochim. Acta* **45** (1989) 1267
- BENSEMRA, N., HOANG, T., GUYOT, A. (Cnrs, Mat. Organ. Lab., BP 24, F-69390 Vernaison France) Thermal dehydrochlorination and stabilization of poly(vinyl chloride) in solution. Part V. Influence of structural defects in the polymer *Polym. Degrad. Stabil.* **28** (1990) 173
- BERANT, Z., KARPAS, Z., SHAHAL, O. (Nucl. Res. Ctr. Negev, Dept. Phys., POB 9001, IL-84190 Bur Stera Israel) Effect of

- temperature and clustering on mobility of ions in CO₂ *J. Phys. Chem.* **93** (1989) 7529
- BEREZOVSKII, G. A., PAUKOV, I. E., BURKHANOV, G. S., CHISTYAKOV, O. D. (LU Karpov Inst. Phys. Chem., Moscow 103064 USSR) Yttrium calorimetry at the 8-300 K temperature range *Zh. Fis. Khim. SSSR* **63** (1989) 3141 BERNING, G. L. P. (Univ. Orange Free State, Dept. Phys., POB 339, Bloemfontein 9301 South Africa) The room temperature oxidation of Cr, Si and CrSi₂ *Appl. Surf. Sci.* **40** (1989) 209
- BERSHTEIN, V. A., YEGOROVA, L. M., YEGOROV, V. M., SINANI, A. B. (AF Joffe Physicotech. Inst., Leningrad USSR) Study of effects of polymers plasticization by DSC method and possibilities of their prediction *Vysokomol. Soedin. Ser. A SSSR* **31** (1989) 2482
- BHATTACHARYA, C., MAITI, N., MANDAL, B. M., BHATTACHARYYA, S. N. (Indian Assoc. Cultivat. Sci., Aerosp. Med. Unit., Calcutta 700032 W Bengal India) Thermodynamic characterization of miscible blends from very similar polymers by inverse gas chromatography. The poly(ethyl acrylate) -poly(vinyl propionate) system *Macromolecules* **22** (1989) 4062
- BILIBIN, A. Y., TENKOVTSSEV, A. V., PIRANEV, O. N. (Acad. Sci. USSR, Inst. Macromolec. Cpds., Leningrad USSR) Thermotropic polyesters. 5. Liquid-crystalline segmented polyesters containing non-rigid mesogenic units with variable geometry *Macromol. Chem.* **190** (1989) 3013
- BILLANI, J., FLEISCHMANN, E. (Univ. Min. Met. Leoben, Inst. Chem. Phys. Technol. Kunststoffe, Franz Josef str. 18, A-8700 Leoben Austria) Influence of injection rate and melt temperature on polypropylene during injection moulding without packing *Polym. Degrad. Stabil.* **28** (1990) 67
- BIN OTHMAN, R., BUCKMAN, N. G., HILL, J. O., MAGEE, R. J. A thermometric titration study of the interaction of Al³⁺, Cd²⁺, Pb²⁺ and Zn²⁺ with ethylenediaminetetraacetic acid *Thermochim. Acta* **157** (1990) 335
- BLOCH, J., SWISSA, E., MINTZ, M. H. (Nucl. Res. Ctr. Negev, POB 9001, IL-84190 Beer Sheva Israel) Heat induced surface modifications affecting initial hydriding kinetics in uranium *Z. Phys. Chem. Neue Folge* **164** (1989) 1193
- BOBRIN, A. S., ANIKEEV, V. I., YERMAKOVA, A., KIRILLOV, V. A. (Novosibirsk Catalysis Inst., Novosibirsk 630090 USSR) High-temperature reduction of 502 by methane at various CH₄/SO₂ ratios *React. Kinet. Catal. Lett.* **40** (1989) 363
- BOINON, B., AINAD-TABET, D., MONTHEARD, J. P. (Univ. St. Etienne, Fac. Sci. Tech., Organ. Macromol. Chem. Lab., 23 Rue Docteur Paul Michelon, F-42023 St. Etienne 2 France) Thermal degradation of polyortho-chloromethylstyrene and polymethachloromethylstyrene *Polym. Degrad. Stabil.* **28** (1990) 197
- BONNET, M., ROGEZ, J., CASTANET, R. (Cnrs, Ctr. Thermodynam. Microcalorimetric, 26 Rue 141 ème Ria, F-13003 Marseille France) EMF investigation of Al-Si, Al-Fe-Si and Al-Ni-Si liquid alloys *Thermochim. Acta* **155** (1989) 39
- BRANDANI, V., RE, G. D., GIACOMO, D., GAMBACCIANI, L. (Univ. Aquila, Dip. Chim. Ingn. Chim. Mat., I-67040 Monteluco Di Roio Italy) Thermodynamic properties of polar fluids from a perturbed-dipolar-hard-sphere equation of state: mixtures *Fluid Phase Equilibria* **51** (1989) 23
- BRAXTON, B. K., RYTTING, J. H. (Glaxo Inc., Pharmaceut Dev., Res. Triangle PK, NC 27709 USA) Solubilities and solution thermodynamics of several substituted melamines *Thermochim. Acta* **154** (1989) 27
- BRUMLEVE, T. R., MUCKLEJOHN, S. A., O'BRIEN, N. W. (Apl. Engr. Mat. Inc., 406 N Busey Ave, Urbana IL 61801 USA) The preparation and vapour pressures of the indium (1) halides and the standard molar Gibbs free energy change for formation of InX from In(g) and X₂(g), (X = Cl, Br, I) *J. Chem. Thermodyn.* **21** (1989) 1193
- BRZYSKA, W., WANCZOWSKAFONFARA, D. (Marie Curie Sklodowska Univ.,

- Inst. Chem., Dept. Inorgan. Gen. Chem., PL-20031 Lublin Poland) Thermal decomposition of zinc(II) benzenedicarboxylates **J. Thermal Anal.** **35** (1989) 727
- BUDKULEY, J. S., PATIL, K. C. (Goa Univ., Dept. Chem., Goa 403005 India) Synthesis and thermoanalytical properties of mixed metal sulfite hydrazinate hydrates I. **Syn. Reactiv. Inorg. Metal-Org. C** **19** (1989) 909
- BUGAEVSKII, A. A., DILAVERAKI, E., LOGINOVA, L. P., KHOLIN, Y. V., VAIS, V. L. (AM Gorkii State Univ., Kharkov Ukraine USSR) Thermodynamics of 4d-10-ion interaction with 1,10-phenanthroline in aqueous solutions **Zh. Fis. Khim. SSSR** **63** (1989) 2881
- CACCAMO, C., MALESCIO, G. (Univ. Messina, Ist. Fis. Teorica, I-98100 Messina Italy) Thermodynamic and structural properties of the charged hard-sphere model of polyelectrolytes: integral equation theory results **J. Phys. Chem.** **94** (1990) 909
- CAMINO, G., MARTINASSO, G., COSTA, L., GOBETTO, R. (Dip. Chim. Inorgan. Chim. Fis. Chim. Mat., Via P Giuria 7, I-10125 Turin Italy) Thermal degradation of pentaerythritol diphosphate, model compound for fire retardant intumescent systems: Part II. Intumescence step **Polym. Degrad. Stabil.** **28** (1990) 17
- CASIELLES, A. G., PANDO, C., RENUNCI, J. A. R., CHRISTENSEN, J. J., IZATT, R. M. (Univ. Oviedo, Dept. Phys. Analyt. Chem., E-33007 Oviedo Spain) Prediction of the excess enthalpies of the carbon dioxide + hexane + toluene system at high temperatures and pressures using the Peng-Robinson equation of state **Thermochim. Acta** **154** (1989) 57
- CECHINI, J. O., PALERMO, A., LÖFFLER, D. (Univ. Nacl. Mar Plata, Inst. Mat. Sci. Technol., Intema, Conicet, Juan B Justo 4302, RA-7600 Mar del Plata Argentina) Kinetics of maleic anhydride vaporisation **Thermochim. Acta** **158** (1990) 87
- CEIPIDOR, U. B., BUCCI, R., CARUNCHIO, V., MAGRI, A. D. (Univ. La Sapienza, Dip. Chim., P. A. Moro, I-00185 Rome Italy) Using thermoanalytical data Part 1. The power of kinetic parameters determined from thermogravimetry to describe the experimental behaviour of the sample **Thermochim. Acta** **158** (1990) 125
- CESTEROS, L. C., QUINTANA, J. R., FERNANDEZ, J. A., KATIME, I. A. (Univ. Pais Vasco, Fac. Ciencias, Dept. Quim. Fis., Nuevos Mat. Grp., Apartado 644 Bilbao Spain) Miscibility of poly(ethylene oxide) with poly (N-vinyl pyrrolidone): DMTA and DTA studies **J. Polym. Sci. B** **27** (1989) 2567
- CETRULLO, J., BERNAL, I., WENDLANDT, W. W. (Univ. Houston, Dept. Chem., Houston TX 77204 USA) The thermal light emission of cis-[Co(en)₂(NO₂)₂]NO₂ and cis- and trans-[Co(en)₂(NO₂)₂]NO₃ **Thermochim. Acta** **157** (1990) 395
- CHABANEL, M. (Lab. Spectrochim. Ions, 2 Rue Houssinière, F-44072 Nantes France) Ionic aggregates of 1-1 salts in non-aqueous solutions: structure, thermodynamics and solvation **Pure Appl. Chem.** **62** (1990) 35
- CHAN, H. S. O., TEO, M. Y. B., KHOR, E., LIM, C. N. (Natl. Univ. Singapore, Dept. Chem., Singapore 0511 Singapore) Thermal analysis of conducting polymers. 1. Thermogravimetry of acid-doped polyanilines **J. Thermal Anal.** **35** (1989) 765
- CHANG, S. J., CHEN, M. S., CHANG, R. S., CHEN, S. M., TSAI, H. B. (Technol. Res. Inst., Union Chem. Lass, 321 Kuang Fu Rd., Sec. 2., Hsinchu 30042 Taiwan) Copolyesters. III. Thermal degradation of poly(butylene terephthalate-co-adipate)s **J. Appl. Polym. Sci.** **39** (1990) 225
- CHAO, J. P., DAI, M., WANG, Y. X. (Henan Inst. Chem., Solut. Chem. Res. Lab., Zhengzhou Peoples R China) Studies of thermodynamic properties of binary mixtures containing an alcohol. XII. Excess molar enthalpies of (an alkan-1-ol + N, N-dimethylformamide or dimethyl sulfoxide at 298.15 K **J. Chem. Thermodyn.** **21** (1989) 1169

- CHAROENREIN, S., REID, D. S. (Univ. Calif. Davis, Dept. Food Sci. Technol., Davis CA 95616 USA) The use of DSC to study the kinetics of heterogeneous and homogeneous nucleation of ice in aqueous systems *Thermochim. Acta* **156** (1989) 373
- CHARSLEY, E. L., WARRINGTON, S. B., JONES, G. K., MCGHIE, A. R. (Leeds Polytechn., Anan. Consultancy Serv., Leeds LS1 3H3, W Yorkshire England) Thermogravimetry-mass spectrometry using a simple capillary interface *Amer. Lab.* **22** (1990) 21
- CHAUDHARY, S. K., KATTI, S. S. (Natl. Chem. Lab., Div. Phys. Chem., Poona 411008 Maharashtra India) Excess enthalpies of n-alcohols (C1-C4) and n-alkanes (C6-C8) with 1,2-dichloroethane at 303.15 K *Thermochim. Acta* **158** (1990) 99
- CHEVALIER, P. Y. (Domaine Univ. Grenoble, BP 66, F-38402 St. Martin Dheres France) A thermodynamic evaluation of the Au-Sb and Au-Ti systems *Thermochim. Acta* **155** (1989) 211
- CHEVALIER, P. Y. (Domaine Univ. Grenoble, BP 66, F-38402 St. Martin Dheres France) A thermodynamic evaluation of the Ge-In, Ge-Pb, Ge-Sb, Ge-Tl and Ge-Zn systems *Thermochim. Acta* **155** (1989) 227
- CHEVALIER, P. Y. (Thermodata, Domaine Univ. Grenoble, BP 66, F-38402 St. Martin Dheres France) A thermodynamic evaluation of the Cu-Tl system *Thermochim. Acta* **156** (1989) 383
- CHIANTORE, O., COSTEMIGLIA, M. P. L., GUAITA, M., RENDINA, G. (Univ. Turin, Dip. Chim. Inorgan. Chim. Fis. Chim. Mat., Via P Giuria 7, I-10125 Turin Italy) Thermal degradation of polybutadiene. 1. Reactions at temperatures lower than 250°C *Macromol. Chem.* **190** (1989) 3143
- CHIRICO, R. D., KNIPMEYER, S. E., NGUYEN, A., STEELE, W. V. (IIT, Res. Inst., Natl. Inst. Petr. Energy Res., POB 2128 Bartlesville OK 74005 USA) The thermodynamic properties of biphenyl *J. Chem. Thermodyn.* **21** (1989) 1307
- CHOUDHARY, V. R., SRINIVASAN, K. R., SINGH, A. P. (Natl. Chem. Lab., Div. Chem. Engn., Poona 411008 Maharashtra India) Temperature programmed desorption of aromatic hydrocarbons on silicalite-1 and 2SM -5-type zeolites *Zeolites* **10** (1990) 16
- CHULVI, C., ORTIZ, R. M., PERELLO, L., ROMERO, M. A. (Univ. Valencia, Fac. Pharm., Dept. Inorgan., Valencia Spain) Thermal studies on cinoxacin complexes. Part II. Thermal behaviour of some metal complexer of cinoxanin *Thermochim. Acta* **156** (1989) 393
- CLARK, M. B., BURKHARDT, C. A., GARDELLA, J. A. (Suny Coll. Buffalo, Dept. Chem., Buffalo NY 14214 USA) Surface studies of polymer blends. 3. An ESCA, IR and DSC study of poly(ϵ -caprolactone)/poly(vinylchloride) homopolymer blends *Macromolecules* **22** (1989) 4495
- COCERO, M. J., MATO, F., GARCIA, IL, COBOS, J. C. (Univ. Valladolid, Dept. Ingn. Quim., E-47011 Valladolid Spain) Thermodynamics of binary mixtures containing organic carbonates. 3. Isothermal vapor-liquid equilibria for diethyl carbonate + cyclohexane + benzene, or + tetrachloromethane *J. Chem. Eng. Data* **34** (1989) 443
- COOMBS, P. G., MUNIR, Z. A. (Univ. Calif. Davis, Div. Mat. Sci. Engn., Davis CA 95616 USA) The decomposition of iron(III) sulfate in air *J. Thermal Anal.* **35** (1989) 967
- CORDFUNKE, E. H. P., KONINGS, R. J. M. (Netherlands Energy Res. Fdn., Ecn., Petten Netherlands) Enthalpy increments of barium zirconate, BaZrO₃, and an assessment of its thermochemical properties *Thermochim. Acta* **156** (1989) 45
- CORDFUNKE, E. H. P., KONINGS, R. J. M., LAAN, R. R. (Netherlands Energy Res. Fdn., Petten Netherlands) Enthalpy increments of silver from 560 to 900 K *Thermochim. Acta* **157** (1990) 315
- CUMMING, J. W. (Babcock Energy Ltd., Res. Ctr., High st., Renfrew Scotland) A DTG combustion study on anthracitic and other coal chars *Thermochim. Acta* **155** (1989) 151

- CURINI, R., D'ASCENZO, G., FRAIOLI, A., MARINO, A., MESSINA, B., LAGANA, A. (Univ. Camerino, Dept. Chem. Sci., I-62032 Camerino Italy) Instrumental multi-parametric study of the maturing of therapeutic muds of some Italian spas *Thermochim. Acta* **157** (1990) 377
- DAVIS, M. I. (Univ. Texas, Dept. Chem., El Paso TX 79968 USA) Analysis and interpretation of excess molar properties of amphiphile + water systems. 1. Excess molar volumes VE for 1-propanol + water *Thermochim. Acta* **157** (1990) 295
- DE CANDIA, F., RUSSO, R., VITTORIA, V. (Univ. Salerno, Fac. Ingn., I-84100 Salerno Italy) Thermal and dynamic -mechanical behaviour of syndiotactic polystyrene. Preliminary results *J. Polym. Sci. C* **28** (1989) 47
- DE GOEDE, R., ROSMALEN, G. M., HAKVOORT, G. (Mannesmann Anlagenbau AG, Messo Chem. Tech., Theodorstr. 90, D-4000 Dusseldorf 30 Fed. Rep. Ger.) Solid-liquid equilibria in para/meta-xylene and para/ortho-xylene binary mixtures at atmospheric pressure *Thermochim. Acta* **156** (1989) 299
- DEMIDOVA, E. D., ZLOMANOV, V. I., MAKAROV, A. V. (MV Lomonosov State Univ., Chair Chem., Moscow 117234 USSR) Thermodynamic properties of $Pb_{1-x}Sn_xTe$ and $PbSe_{1-x}Tex$ solid solutions *Zh. Fis. Khim. SSSR* **63** (1989) 2872
- DIMA, E., REES, L. V. C. (Univ. London Imperial Coll. Sci. Technol., Dept. Chem., Phys. Chem. Lab, London SW7 ZAY England) Temperature - programmed desorption of ammonia from Na- and H-Y zeolites: desorption energies derived from analyses of t.p.d. profiles by two new methods *Zeolites* **10** (1990) 8
- DITTMAR, E., CAPRON, R. (Uer Med. Pharm., Phys. Lab., BP 97, F-76803 St. Etienne France) Determination of the quantity of fumes produced during thermal degradation of polymers by measurement of optical density. Influence of ventilation in the case of a polyurethane foam *Polym. Degrad. Stabil.* **28** (1990) 89
- DUNKIN, I. R., LYNCH, M. A., WITHNALL, R., BOULTON, A. J., HENDERSON, N. (Univ. Strathclyde, Dept. Pure Appl. Chem., 295 Cathedral st, Glasgow G1 1XL Scotland) The thermal decomposition of 1-methyl-1, 2, 3-benzotriazin-4(1H)-one: matrix isolation of the reactive intermediates *J. Chem. Soc. Chem. Commun.* **22** (1989) 1777
- DUNN, J. G., DE, G. C., O'CONNOR, B. H. (Curtin Univ. Technol., Sch. Appl. Chem., Perth WA Australia) The effect of experimental variables on the mechanism of the oxidation of pyrite. Part 2. Oxidation of particles of size 90-125 μm *Thermochim. Acta* **155** (1989) 135
- DUNSTAN, P. O., SANTOS, L. C. R. (Univ. Estadual Campinas, Inst. Quim., CP 6154, BR-13081 Campinas SP Brazil) Thermochemistry of amide and thioamide complexes of arsenic trihalides *Thermochim. Acta* **156** (1989) 163
- DUS, R., NOWICKA, E., WOLFRAM, Z. (Polish Acad. Sci., Inst. Phys. Chem., ul. Kasprzaka 44-52, Warsaw 42 Poland) Low temperature surface phenomena during palladium hydride formation and decomposition *Z. Phys. Chem. Neue Folge* **164** (1989) 1187
- DUSCHEK, W., KLEINRAHM, R., WAGRER, W., JAESCHKE, M. (Ruhr Univ. Bochum, Inst. Thermodyn. Fluidodynam., D-4630 Bochum Fed. Rep. Ger.) Measurement of the (pressure, density, temperature) relation of Ekofisk natural gas in the temperature range from 273.15 to 323.15 K at pressures up to 8 MPa *J. Chem. Thermodyn.* **21** (1989) 1079
- DUTT, A. K. (McGill Univ., Dept. Chem., Otto Maass Chem. Bldg., 801 Sherbrooke W Montreal, Quebec Canada H3A 2K6) Linear thermodynamic analysis of the reversible Selkov model: an interpretation of the Chatelier-like principle for local concentration fluctuations near thermodynamic equilibrium *J. Chem. Phys.* **92** (1990) 3058
- EARNEST, C. M. (Berry Coll., Dept. Chem., MT Berry Stn., Rome GA, 30149 USA) The

- use and extended lifetimes of microfurnaces for thermogravimetry. Part I. Construction, application, and cleaning *Thermochim. Acta* **158** (199) 157
- EARNEST, C. M., KINZER, D. (Berry Coll., Dept. Chem., MT Berry Stn., Rome GA, 30149 USA) The use and extended lifetimes of microfurnaces for thermogravimetry. Part II. Repair of broken furnace stems *Thermochim. Acta* **158** (1990) 167
- EDER, M., WLOCHOWICZ, A. (Tech. Univ. Lodz, Inst. Text., Findera 32, PL-90924 Lodz Poland) Crystallization kinetics of polyamide 6 containing pigments *J. Thermal Anal.* **35** (1989) 751
- ELSEMONGY, M. M., MCPHERSON, R. (Umm Al Qura Univ., Fac. Educ., Dept. Chem., Al Taif City Saudi Arabia) Gibbs free energies of transfer of the alkali-metal chlorides from water into t-butyl alcohol - water mixtures *Thermochim. Acta* **158** (1990) 107
- ELSHAFIE, A., ABDEL-AAL, A. (Menoufia Univ., Fac. Sci., Dept. Phys., Manoufia Egypt) Effect of the electric field on the D. C. conductivity of bulk glassy Te50 As50-x Sx alloys *Thermochim. Acta* **155** (1989) 97
- ELWELL, D., ANDERSEN, E., DILS, R. R. (Hughes Aircraft Co., 500 Super Ave, Newport Beach, CA 92658 USA) Temperature oscillations in silicon melts *J. Cryst. Growth* **98** (1989) 667
- EMAM, M. E. M. (Mansoura Univ., Fac. Sci., Dept. Chem., Mansoura Egypt) Effect of the working conditions on the values of the kinetic parameters of the thermal decompositions of some complexes *J. Thermal Anal.* **35** (1989) 775
- ENOKIDA, T., HIROHASHI, R. (Chiba Univ., Grad. Sch. Sci. Technol., Yayoi Cho, Chiba 260 Japan) Crystal phase and thermal transformation of oxotitanium phthalocyanines *Nippon Kagaku Kaishi* **2** (1990) 211
- ESTESO, M. A., MERIDA, F. L., GRANDOSO, D. M. (Univ. La Laguna, Dept. Quim. Fis., La Laguna Spain) Ionic interactions in aqueous solutions of organic electrolytes. Activity coefficients for (sodium chloride + sodium hydrogen malonate) (aq) at 298.15 K. Application of Scatchard's and of Pitzer's equation *J. Chem. Thermodyn.* **21** (1989) 1279
- FAIGL, F., SIMON, K., LOPATA, A., KOZSDA, E., HARGITAI, L., CZUGLER, M., ÁCS, M., FOGASSY, E. (Hungarian Acad. Sci., Organ. Chem. Technol. Res. Grp. POB 91, H-1521 Budapest Hungary) A combined DSC, X-ray diffraction, and molecular modelling study of chiral discrimination in the purification of enantiometric mixtures of cis-permethrinic acid *J. Chem. Soc.* **1** (1990) 57
- FEDOSOV, S. N., SERGEEVA, A. Y. (MV Lomonosov Technol. Inst., Odessa Ukraine USSR) Temperature - field hysteresis of pyroactivity in polyvinylidene fluoride *Vysokomol. Soedin. Ser. B SSSR* **31** (1989) 870
- FELIX, N. S., GIRGIS, B. S. (Cent. Met. Res. Dev. Inst., Dokki Cairo Egypt) Isothermal and nonisothermal gravimetry of nontronite dehydroxylation *J. Thermal Anal.* **35** (1989) 743
- FERNANDEZ, C. F. G., HORNO, J., CABALLERO, F. G. A network thermodynamic model for transient effects in electrokinetic energy conversion *Collection* **54** (1989) 2330
- FUKUDA, Y., TOMITA, A., TAKEUCHI, N. (Osaka Sangyo Univ., Nakagaito 3-1-1, Daito, Osaka 574 Japan) Thermoluminescence and thermally stimulated exoelectron emission of Ca2B5O9Cl activated with divalent europium or lead *Phys. Status Solidi* **115** (1989) K 251
- FUKUSAKO, S. (Hokkaido Univ., Dept. Mech. Engn., Sapporo Hokkaido 060 Japan) Thermophysical properties of ice, snow and sea ice *Int. J. Thermophys.* **11** (1990) 353
- FUNAZUKURI, T., HUDKINS, R. R., SILVESTON, P. L. (Yokohama Natl. Univ., Dept. Chem. Engn., Yokohama Kanagawa 240 Japan) Production of olefins from flash pyrolysis of cellulose-containing material *J. Anal. Appl. Pyrol* **17** (1989) 47

- GABER, M., ISSA, R. M., ALY, F. A., AYAD, M. I. (Tanta Univ. Denmark, Acoust. Lab. Bldg. 352 DK-2800 Lyngby Denmark) Studies of Ti(IV) and Zr(IV) chelates with N2O2 Schiff bases of 2-hydroxy-1-naphthaldehyde with aromatic diamines *Thermochim. Acta* **155** (1989) 309
- GALLARDO, M. A., VICENTA, G. I., VELASCO, I., OTIN, S. (Univ. Saragossa, Fac. Ciencias, Dept. Quim. Organ. Quim. Fis., Zaragoza Spain) Excess volumes of some (1-chloroalkane or 1-bromoalkane + benzene)s at 298.15 K *J. Chem. Thermodyn.* **21** (1989) 1101
- GARBA, B., EBOATU, N. A. (Univ. Sokoto, Dept. Chem., PMB 2346 Sokoto Nigeria) Effect of flame-retardant treatment on the thermal behavior of some tropical timbers *J. Appl. Polym. Sci.* **39** (1990) 109
- GARCIA-BAONZA, V., ALONSO, C. M., DELGADO, N. J. Equation of state and derived thermodynamic properties of liquid tetramethylsilane from 198 to 298 K and pressures up to 102 MPa *J. Chem. Thermodyn.* **21** (1989) 1045
- GARG, B. S., GHOSH, S., JAIN, V. K., SINGH, P. K. (Univ. Delhi, Dept. Chem., Delhi 110007 India) Evaluation of thermodynamic parameters of bivalent metal complexes of 2-hydroxyacetophenone thiosemicarbazone *Thermochim. Acta* **157** (1990) 365
- GHANEM, A. M., PORTER, R. S. (Univ. Massachusetts, Dept. Polym. Sci. Engn., Mat. Res. Lab., Amherst, MA 01003 USA) Cold crystallization and thermal shrinkage of uniaxially drawn poly(ethylene 2,6-naphthalate) by solid-state coextrusion *J. Polym. Sci. B* **27** (1989) 2587
- GHOGOMU, P. M., DELLACHERIE, J., BALESSENT, D. (Ecole Natl. Super. Ind. Chim., Thermodyn. Chim. Appl. Lab, 1 Rue Grandville, BP 451, F-54001 Nancy France) Impurity effects on the solubility of high molecular weight normal alkanes in ethylbenzene *Thermochim. Acta* **157** (1990) 241
- HAGEMAN, P. R., TANG, X., DECROON, M. H. J. M., GILING, L. J. (Catholic Univ. Nijmegen, RIM, Dept. Exptl. Solid State Phys., 6525 Ed Nijmegen Netherlands) Temperature dependence of silicon doping of GaAs by SiH₄ and Si₂H₆ in atmospheric pressure metalorganic chemical vapour deposition *J. Cryst. Growth* **98** (1989) 249
- HAIDER, S. Z., MALIK, K. M. A., KHAN, H. S., RAHMAN, A., WADSTEN, T. (Dhaka Univ., Dept. Chem., Dhaka 2 Bangladesh) Preparation, characterisation, infrared and thermal properties of some adducts of bis(8-hydroxyquinolino) dioxouranium(VI) *J. Thermal Anal.* **35** (1989) 873
- HALAWANI, K. H. M., WELLS, C. F. (Univ. Birmingham, Dept. Chem., POB 363, Birmingham B15 2TT, W Midlands England) Ionic solvation in water + co-solvent mixtures. Part 19. Free energies of transfer of single ions from water into mixtures of water with polyhydroxy compounds: an examination of the assumption used in determining $\Delta G_1(i)$ *Thermochim. Acta* **155** (1989) 57
- HAN, J. I., LEE, J. Y. (Korea Adv. Inst. Sci. Technol., Dept. Mat. Sci. Engn., POB 131 Seoul 131 South Korea) Thermal desorption study of LaNi₅ degraded by pressure cycling *Z. Phys. Chem. Neue Folge* **164** (1989) 1291
- HANABUSA, K., SUZUKI, T., KOYAMA, T., SHIRAI, H., KUROSE, A. (Shinshu Univ., Dept. Funct. Polymer Sci., Ueda 386 Japan) Synthesis and properties of thermotropic liquid crystalline polymers containing copper bis(β -diketonate) *Polym. J.* **22** (1990) 183
- HANABUSA, K., YANAGISAWA, K., HIGASHI, J. I., SHIRAI, H., HAYAKAWA, T., HOJO, N. (Shinshu Univ., Dept. Funct. Polymer Sci., Ueda 386 Japan) Thermotropic liquid crystalline poly(L-glutamate) esters with long alkyl chain containing aromatic segment at terminal position *J. Polym. Sci. A* **28** (1990) 825
- HANDA, Y. P., YAMAMURO, O., OGUNI, M. SUGA, H. (Natl. Res. Council Canada,

- Dept. Chem., Ottawa Ontario Canada K1A 0R9) Low-temperature heat capacities of xenon and krypton clathrate hydrates *J. Chem. Thermodyn.* **21** (1989) 1249
- HANLEY, H. J. M., EVANS, D. J. (NIST, Div. Thermophys., Boulder Co 80303 USA) Non-Newtonian molecular dynamics and thermophysical properties *Int. J. Thermophys.* **11** (1990) 381
- HANSEN, L. D., CRIDDLE, R. S. (Brigham Young Univ., Dept. Chem., Provo UT 84602 USA) Batch-injection attachment for the Hart DSC *Thermochim. Acta* **154** (1989) 81
- HARRUNA, I. I., POLK, M. B. (Morris Brown Coll., Dept. Chem., Atlanta GA 30314 USA) Thermotropic homopolyester. 1. Synthesis and characterization of homopolyesters containing the mesogenic unit, bicyclo [2,2,2] oct-2-ene *J. Polym. Sci. A* **28** (1990) 285
- HARSTA, A., CARLSSON, J. O. (Univ. Uppsala, Dept. Inorgan. Chem., Thin Film Surface Chem. Grp., Box 531, S-75121 Uppsala Sweden) Thermodynamic investigation of CVD of the superconducting phase in the Bi-Sr-Ca-Cu-O system using halide precursors *J. Cryst. Growth* **98** (1989) 561
- HATTEY, R. H. M., FRANKS, F., GREEN, M. (Pafra Ltd., Div. Biopreservat., 150 Cambridge Sci. Pk., Cambridge CB4 4GG England) A novel data acquisition, retention and examination system (DARES) for differential scanning calorimetry *Thermochim. Acta* **156** (1989) 247
- HATTA, I. (Nagoya Univ., Dept. Appl. Phys., Nagoya 46401 Japan) Thermal diffusivity measurements of thin films and multi-layered composites *Int. J. Thermophys.* **11** (1990) 293
- HEUMANN, K. G., RADLEIN, N. (Univ. Regensburg, Inst. Anorgan. Chem., Univ. str. 31, D-8400 Regensburg Fed. Rep. Ger.) Negative thermal ionization mass spectrometry of selenium. 3. Selenium trace determination in food samples *Fresenius Z. Anal. Chem.* **335** (1989) 751
- HEUMANN, K. G., WACHSMANN, M. (Univ. Regensburg, Inst. Anorgan. Chem., Univ. str. 31, D-8400 Regensburg Fed. Rep. Ger.) Negative thermal ionization mass spectrometry of selenium. 4. Selenium trace determination in sediments and related samples *Fresenius Z. Anal. Chem.* **335** (1989) 755
- HEUNG, L. K. (Dupont Co., Savannah River Lab., Aiken SC 29808 USA) Heat transfer and kinetics of a metal hydride reactor *Z. Phys. Chem. Neue Folge* **164** (1989) 1415
- HILAIRE, B., VERDU, J. (Aerospatiale, Ctr. Rech. L. Bleriot, 12 Rue Pasteur, F-92152 Suresnes France) DSC study of polynadimides (French) *Bull. Soc. Chim. Belg.* **98** (1989) 729
- HILL, J. O., KORCE, S. (La Trobe Univ., Dept. Chem., Bundoora, Vic 3083 Australia) A thermometric titrimetry study of Fe^{3+} (SCN^- and Ag^+) SCN^- systems *Thermochim. Acta* **154** (1989) 49
- HIRATA, T. (Natl. Res. Inst. Met., 2-312 Nakameguro, Meguro Ku, Tokyo Japan) Thermal desorption of hydrogen from Fe Ti1.1400.03 *Z. Phys. Chem. Neue Folge* **164** (1989) 1331
- HIRSH, A., BENT, T., ERBE, E. (Amer. Red. Cross, Holland Labs, 15601 Crabbs Branch Way Rockville, MD 20855 USA) Localization and characterization of intracellular liquid-liquid phase separations in deeply frozen. *Populus* using electron microscopy, dynamic mechanical analysis and differential scanning calorimetry *Thermochim. Acta* **155** (1989) 163
- HOFFMAN, D. M., MATTHEWS, F. M., PRUNEDA, C. O. (Univ. Calif. Lawrence Livermore Natl. Lab, Dept. Chem. Mat. Sci., Div. Chem. Sci., Livermore CA 94550 USA) Dynamic mechanical and thermal analysis of crystallinity development in Kel-F 800 and TATB/Kel-F 800 plastic bonded explosives. Part. I. Kel-F 800 *Thermochim. Acta* **156** (1989) 3
- HOFFMANN, G., POLISZKO, S., HILCZER, T. (Acad. Agr. Poznan, Dept. Phys., Poznan Poland) Model approach to dielectric thermal analysis of wood modified with polymer *J. Appl. Polym. Sci.* **39** (1990) 153
- HORNSEY, R. I. (Univ. Oxford, Dept. Engn. Sci., Oxford OX1 3PJ England) The high-

- temperature behaviour of gallium and indium liquid metal ion sources *Appl. Phys. A* **49** (1989) 697
- HOUSE, J. E., BECK, D. G. (Illinois State Univ., Dept. Chem., Normal IL 61761 USA) Sensitivity of the mechanism determined by isothermal methods to errors in α *Thermochim. Acta* **156** (1989) 101
- HOUSE, J. E., MARQUARDT, L. A. (Illinois State Univ., Dept. Chem., Normal IL 61761 USA) Synthesis and thermal decomposition of dithiocyanatobis (piperidine) cadmium (II) *Thermochim. Acta* **155** (1989) 277
- HSIAO, B. S., SHAW, M. T., SAMULSKI, E. T. (Dupont Co., Pioneering Res. Lab., Explt. Stn., Wilmington DE 19880 USA) Study of a thermotropic liquid crystalline polyester at elevated pressures *J. Polym. Sci. B* **28** (1990) 189
- HULL, J. R. (Argonne Natl. Lab., Div. Mat. Components Technol., 9700 S Cass Ave, Argonne 12 60439 USA) High temperature superconducting current leads for cryogenic apparatus *Cryogenics* **29** (1989) 116
- ICHIHARA, S., NAKAMURA, S., TODOKI, M., KANETSUNA, H. (Mitsubishi Petrochem. Co. Ltd., Dept. Res. Dev. Coordinat., Marunouchi 2 Chome, Chiyoda Ku, Tokyo 100 Japan) Thermal analysis of polymer samples by a round-robin method IV. Analysis of factors affecting the reproducibility of transition temperature measurements *Thermochim. Acta* **155** (1989) 339
- IGNATIOUS, F., MATHIS, C. (Inst. Charles Sadron Crm., Ecole Applicat. Hautes Polymers, Cnrs Ulp., 6 Rue Boussingault, F-67083 Strasbourg France) Thermal aging of tetraalkyl ammonium doped polyacetylenes *Macromolecules* **23** (1990) 70
- INOUE, K., NAKAMURA, H., ARIYOSHI, S., TAKAGI, M., TANIGAKI, T. (Ehime Univ., Fac. Engn., Dept. Ind. Chem., Matsuyama, Ehime 790 Japan) Heat-resistant polymers prepared from [(4'-(2-vinyl)-4-biphenyl)oxy] pentachlorocyclotriphosphazene *Macromolecules* **22** (1989) 4466
- IRING, M., TUDÖS, F. (Hungarian Acad. Sci., Cent. Res. Inst. Chem., POB 17, H-1525 Budapest Hungary) Thermal oxidation of polyethylene and polypropylene; effects of chemical structure and reaction conditions on the oxidation process *Prog. Polym. Sci.* **15** (1990) 217
- IZATT, R. M., WU, G. (Brigham Young Univ., Dept. Chem., Provo UT 84602 USA) Complexation of cryptand-222 and 18-crown 6 with some alkali metal ions in several dioxane-water solvent mixtures *Thermochim. Acta* **154** (1989) 161
- JAIN, A. K., GUPTA, V. K., GUPTA, R. (Univ. Roorkee, Dept. Chem., Roorkee 247667, Uttar Pradesh India) Thermodynamic and related studies for the oxidation of sulphur drugs by periodate *Thermochim. Acta* **155** (1989) 77
- JANIÁK, T., BLAZEJOWSKI, J. (Univ. Gdansk, Inst. Chem., PL-80952 Gdansk Poland) Thermal features, thermochemistry and kinetics of the thermal dissociation of hexachlorostannates of aromatic mono-amines *Thermochim. Acta* **156** (1989) 27
- JASIM, F., BARBOOTI, M. M. (Univ. Baghdad, Coll. Sci., Dept. Chem., Baghdad Iraq) Thermoanalytical behaviour of nitrosodicyanmethamide tetrapyrroline complexes of Mn²⁺, Cu²⁺ and Zn²⁺ *Thermochim. Acta* **158** (1990) 47
- JENNINGS, J. R. (ICI CP Grp, Dept. Res. Technol., Billingham Catalysis Ctr Belasis Ave, Billingham TS23 1LB Cleveland England) Thermal decomposition of zirconium tetra- π -allyl and catalysis by the products *J. Mol. Catal.* **58** (1990) 95
- JIANG, T., JIANG, A. R., ZHOU, Q. W. (Fudan Univ., Dept. Chem., Shanghai Peoples R China) Studies on the thermal stability of peroxomolybdate [K₄Mo₄O₁₂(O₂)₂] and peroxotungstate [K₄W₄O₁₂(O₂)₂·2H₂O] *Acta Chim. Sin.* **47** (1989) 1170
- JIN, J. I., CHOI, H. S., CHOI, E. J., JOON, C. J. (Univ. Korea, Coll. Sci., Dept. Chem., 1 Anam Dong, Seoul 136701 South Korea) Main chain thermotropic polyesters having

- flexible spacers. Influence of ester group linking order between mesogenic unit and flexible spacer *J. Polym. Sci. B* **28** (1990) 531
- JOHNSON, D. J., KARACAN, I., TOMKA, J. G. (Univ. Leeds, Dept. Text. Ind., Text Phys. Lab., Leeds LS2 9J5, W Yorkshire England) Thermotropic polyesters: modelling of the meridional diffraction patterns of poly(p-oxybenzoate-co-p-phenylene isophthalate) fibres *Polymer* **31** (1990) 8
- JONES, J. C. (Univ. New S Wales, Sch. Chem. Engn. Ind. Chem., POB 1, Kensington NSW 2033 Australia) The self-heating and ignition of vegetation debris. 3. Heat transfer measurements *Fuel* **69** (1990) 399
- JUNQUERA, E., AICART, E., TARDAJOS, G. (Univ. Complutense Madrid, Fac. Ciencias Quim., Dept. Quim., Fis., E-28040 Madrid Spain) Speed of sound and isentropic compressibility of (1-chlorobutane + n-undecane or n-dodecane or n-tetradecane or n-hexadecane) at 298.15 K *J. Chem. Thermodyn.* **21** (1989) 1223
- KALRA, K. C., SINGH, K. C., SPAH, D. C. (Maharshi Dayanand Univ. Rohtak, Dept. Chem., Rohtak 124001 India) Ultrasonic speeds and isentropic compressibilities of (1,2-dibromoethane + an aromatic hydrocarbon) at 298.15 K *J. Chem. Thermodyn.* **21** (1989) 1243
- KAMIMOTO, M. (Electrotech. Lab., 1-1-4 Umezono Sakura, Ibaraki 305 Japan) The possibility of high-temperature heat capacity measurements by differential scanning calorimetry *Int. J. Thermophys.* **11** (1990) 305
- KAMINSKA, A., SANYAL, S., KACZMAREK, H. (Nicholas Copernicus Univ., Inst. Chem., PL-87100 Torun Poland) Thermal and photochemical stability of polystyrene and its blends with polyvinyl chloride *J. Thermal Anal.* **35** (1989) 781
- KARSTENS, T., ROSSBACH, V. (Univ. Hamburg, Inst. Tech. Makromolek. Chem., D-2000 Hamburg 13, Fed. Rep. Ger.) Thermo-oxidative degradation of polyamide 6 and 6.6. Kinetics of the formation and inhibition of UV/VIS-active chromophores *Macromol. Chem.* **190** (1989) 3033
- KASHIMA, T., ETOH, K. (Toyobo Co. Ltd., Katata Res. Ctr., 1-1 Katata 2 Chome, Otsu 52002 Japan) Heat durability of terephthalate copolyester *Kobunshi Ronbunshu* **47** (1990) 125
- KASPRZYCKA-GUTTMAN WILCZURA, H. (Univ. Warsaw, Dept. Chem., Pasteura 1, PL-0293 Warsaw Poland) Application of the Prigogine-Flory-Patterson and extended real associated solution method to molar excess heat of mixing of pyridine base-n-alkane mixtures *Thermochim. Acta* **158** (1990) 1
- KASSEM, Y. M., MAHDY, A. N., ABADIR, M. F. (Univ. Cairo, Coll. Engn., Dept. Chem. Engn., Giza Egypt) The PbO₂-PbO-V₂ system in air *Thermochim. Acta* **156** (1989) 211
- KASZÁS, G., PUSKÁS, J. E., KENNEDY, J. P. (Univ. Akron, Inst. Polymer Res., Akron OH 44325 USA) New thermoplastic elastomers of rubbery polyisobutylene and glassy cyclopolyisoprene segments *J. Appl. Polym. Sci.* **39** (1990) 119
- KATSOULOS, G. A., TOSSIDIS, L. A., SIGALAS, M. P., HADJIKOSTAS, C. C. (Aristotelian Univ. Salonika, Dept. Gen. Inorgan. Chem., GR-54006 Salonika Greece) Carbodithioato derivatives of weak nitrogenous nucleophiles. III. Mass spectra and thermal decomposition kinetics of some nickel(II) amide N-carbodithioates *Thermochim. Acta* **158** (1990) 23
- KATZENBERGER, O., DEBUYST, R., DECANNIERE, P., DEJEHET, F., APERS, D., BARABAS, M. (Univ. Cologne, Inst. Geol. Zulpicherstr. 49, D-5000 Cologne 1 Fed. Rep. Ger.) Temperature experiments on mollusc samples. An approach to ESR signal identification *Appl. Radiat. Isot.* **40** (1989) 1113
- KAWAI, S., ARAKAWA, K. (Mitsubishi Kasei Co., Dept. Coal Liquefact. Dev., Marunonchi 2-5-2, Chiyoda Ku, Tokyo 100 Japan) Statistical thermodynamic study of liquid organic compounds *Bull. Chem. Soc. Jpn.* **63** (1990) 307

- KEGEL, W. K., MITTENBURG, J. C., VERLAAN, M. C., SCHNIJFF, A. (State Univ. Utrecht, Dept. Gen. Chem., Chem. Thermodyn. Grp., Padualaan 8, 3584 CH, Utrecht Netherlands) Limit cycle relations between the heat production rate and key intermediate concentrations in the oscillating Belousov-Zhabotinskii and Briggs-Rauscher reactions *Thermochim. Acta* 157 (1990) 369
- KHADIKAR, P. V., GHADERIAN, T., SURI, P., SAPRE, N. (3 Khatipura, Indore 452007 India) Dehydration kinetics of the copper (II) chelate of salicylhydrazide: a thermogravimetric study *Thermochim. Acta* 157 (1990) 203
- KHAN, H. A., MANNAN, M., LEE, L. L., STARLING, K. E. (Univ. Oklahoma, Sch. Chem. Engn. Mat. Sci., Norman OK 73019 USA) Mixture equation of state: composition dependence *Int. J. Thermophys.* 11 (1990) 373
- KIM, T. J., KIM, H. K., CHANG, S. K., PARK, H. L., CHUNG, C. H. (Yousei Univ., Dept. Phys., Seoul 120 South Korea) Heat exchanger method (HEM) grown GaAs single crystals and their homogeneity *J. Cryst. Growth* 98 (1989) 531
- KIM, Y. J., KOU, S. (Univ. Wisconsin, Dept. Mat. Sci. Engn., Madison WI 53706 USA) Thermocapillary convection in zone-melting crystal growth. An open-boat physical simulation *J. Cryst. Growth* 98 (1989) 637
- KIRÁLY, Z., DÉKÁNY, I. (József Attila Univ., Dept. Colloid Chem., H-6720 Szeged Hungary) Thermodynamics of multilayer adsorption of aqueous butanol solution onto printex and graphitised printed earson blacks *J. Chem. Soc. Faraday Trans.* 85 (1989) 3373
- KIRKLIN, D. R., CHURNEY, K. L., DOMALSKI, E. S. (NBS Ctr. Chem. Technol., Div. Chem. Thermodynam., Gaithersburg MD 20899 USA) Enthalpy of combustion of 1,4-dimethylcubane dicarboxylate *J. Chem. Thermodyn.* 21 (1989) 1105
- KNIPMEYER, S. E., ARCHER, D. G., CHIRICO, R. D., GAMMON, B. E., HOSSENLOPP, I. A., NGUYEN, A., SMITH, N. K., STEELE, W. V., STRUBE, M. M. (Natl. Inst. Petrol. Energy Res., IIT Res. Inst., Bartlesville OK 74005 USA) High-temperature enthalpy and critical property measurements using a differential scanning calorimeter *Fluid Phase Eq.* 52 (1989) 185
- KONINGS, R. J. M., CORDFUNKE, E. H. P., SHAVIV, R., WESTRUM, E. F. (Netherlands Energy Res. Fdn., Petten Netherlands) The thermochemical and thermophysical functions of solid Sr(OH)₂ and β-Ba(OH)₂ *Thermochim. Acta* 157 (1990) 307
- KOUKITU, A., HASEGAWA, Y., SEKI, H., SCHONHERR, E. (Tokyo Univ. Agr. Technol., Fac. Technol., Dept. Ind. Chem., Koganei Tokyo 184 Japan) Thermodynamic analysis of the MOVPE and MBE growth of pentanary III-V alloy semiconductors *J. Cryst. Growth* 98 (1989) 697
- KOWALSKI, B. (Agr. Univ. Warsaw, Dept. Food Technol., 26-30 Rakowiecka str., PL-02528 Warsaw Poland) Determination of oxidative stability of edible vegetable oils by pressure differential scanning calorimetry *Thermochim. Acta* 156 (1989) 347
- KRACHLER, R., IPSEK, H., KOMAREK, K. I. (Univ. Vienna, Inst. Inorgan. Chem., Wahringerstr. 42, A-1090 Vienna Austria) Thermodynamics of intermetallic B₂-phases. A generalized model *J. Phys. Chem. Solids* 50 (1989) 1127
- KROZER, A., KASEMO, B. (Chalmers Univ. Technol., Dept. Phys. S-41296 Gothenburg Sweden) Thermodynamics and kinetics of the H/Mg system at low pressures and temperatures *Z. Phys. Chem. Neue Folge* 164 (1989) 1257
- KSIAZCZAK, A. (Warsaw Polytech. Inst., Dept. Phys. Chem., PL-00664 Warsaw Poland) Vapour pressures of binary three phase (solid + liquid + vapour) mixtures. IV. Melting temperatures of the solid phases of n-octadecane and of n-nonadecane *J. Chem. Thermodyn.* 21 (1989) 1231
- KSIAZCZAK, A. (Warsaw Polytech. Inst., Dept. Phys. Chem., PL-00664 Warsaw Poland) Vapour pressures of binary three-

- phase (solid + liquid + vapour) mixtures. V. (Phenol + benzene), (p-methylphenol + benzene), and (p-chlorophenol + benzene) *J. Chem. Thermodyn.* **21** (1989) 1237
- KUMARI, D. (Pandalai Coatings Co., 837 6th Ave, Brackenridge PA 15014 USA) The enthalpy of crystallization of asphalts *Thermochim. Acta* **158** (1990) 71
- KÜCÜKBAYRAK, S., KADIOGLU, E. (Istanbul Tech. Univ., Dept. Chem. Engn., Istanbul Turkey) Effect of pyrolysis on the proximate and ultimate analysis of lignite *Thermochim. Acta* **155** (1989) 1
- LAIRD, J. L., LIOLIOS, G. (Dupont Co., Akron, OH USA) Thermal analysis techniques for the rubber laboratory *Amer. Lab.* **22** (1990) 46
- LAIVINS, G. V. (Univ. Laval, Ctr. Rech. Sci. Inga. Macromolec., Dept. Chim., Quebec City, Quebec Canada G1K 7P4) Analysis of the interactions in an in situ composite: poly (alkylene terephthalates) reinforced with thermotropic liquid crystalline polyesters *Macromolecules* **22** (1989) 3974
- LAMPARCZYK, H., WESDOWSKI, M. (Med. Acad. Gdansk, Fac. Pharm., K Marksa 107, PL-80416 Gdansk Poland) Application of principal component analysis and thermoanalytical methods in evaluation of edible fish oils *Thermochim. Acta* **155** (1989) 327
- LANGFELDEROVA, H., LINKESOVA, M., AMBROVIC, P., RIEDLMAJEROVA, A. (Slovak Tech. Univ., Dept. Inorgan. Chem., CS-81237 Bratislava Czechoslovakia) On the relationship between the structures of Cu(II) complexes and their chemical transformations *J. Thermal Anal.* **35** (1989) 857
- LATTIMER, R. P. (BF Goodrich Co., Ctr. Res. Dev., 9921 Brecksville Rd., Brecksville OH 44141 USA) Editorial essay: analytical pyrolysis - What's in a name? *J. Anal. Appl. Pyrol.* **17** (1989) 1
- LEBRAS, M., DELOBEL, R., DESCRES-SAIN, R., LEROY, J. M. (Univ. Sci. Technol. Flanders Artois, Ecole Natl. Super Chim. Lille, Phys. Chim. Solides, BP 108 F-59652 Villeneuve Dascq France) Fireproofing of thermoplastic polymers. Intumescent formulations. Development mechanism and characterization of carbon containing coatings (French) *Bull. Soc. Chim. Belg.* **98** (1989) 735
- LEE, S. B., TAKATA, T., ENDO, T. (Tokyo Inst. Technol., Resources Utilizat. Res. Lab., Nagatsuta Cho, Midori Ku, Yokohama Kanagawa 227 Japan) (p-methoxybenzyl)- and (α -methylbenzyl)-p-cyanopyridinium hexafluoroantimonates: activated latent thermal catalysts *Macromolecules* **23** (1990) 431
- LEERMAKERS, F. A. M., SCHEUTJENS, M. H. M. (Wageningen Univ. Agr., Dept. Phys. Colloid Chem., Dreijenplein 6, 6703 HB Wageningen Netherlands) Statistical thermodynamics of association colloids. 2. Lipid Vesicles *J. Phys. Chem.* **93** (1989) 7417
- LEITE, N. F., FRANZAN, A. H., TORRES-FILHO, A., MIRANDA, L. C. M. (Minist. Ciencia Technol., Inst. Pesquisas Espaciais Associado Sensores Mat. Lab., Caixa Postal 515, BR 12201 Sao Jose Campos, SP Brazil) Dielectric constant, optical transmission, and thermal diffusivity monitoring of iodine - impregnated polystyrene films *J. Appl. Polym. Sci.* **39** (1990) 1361
- LETCHER, T. M., SISWANA, P. M., WATT, P., RADLOFF, S. (Rhodes Univ., Dept. Chem., Grahamstown 6140 South Africa) Phase equilibria for (an alkanol + p-xylene + water) at 298.15 K *J. Chem. Thermodyn.* **21** (1989) 1053
- LEWIS, E. A., HART, R. M., GREENFIELD, H. (Hart Sci. Inc., 177 W 300 S, Provo UT 84601 USA) Design and testing of a new isothermal flow gas calorimeter: the Hart field-deployable natural gas energy meter *Thermochim. Acta* **154** (1989) 167
- LINDNER, D. L. (Sandia Natl. Labs, Livermore CA 94550 USA) Isothermal decomposition of uranium hydride *J. Less-Common Metals* **157** (1990) 139
- LIU, L. B., SUMITA, M., MIYASAKA, K. (Tokyo Inst. Technol., Dept. Organ. Polymer Mat., Meguro Ku, Tokyo 152 Japan) Characterization of fatigue of segmented polyurethane by using ther-

- moluminescence and pulse NMR *J. Macromol. Sci. B* **28** (1989) 309
- LORENZANA, M. T., LEGIDO, J. L., JIMÉNEZ, E., FERNÁNDEZ, J., PIAS, L., ORTEGA, J., PAZ, A. (Univ. Santiago, Dept. Fis. Aplicada, Campus Univ., E-15706 Santiago Spain) Thermodynamic properties of (a propyl ester + an n-alkane) at 298.15 K. I. $\{x\text{C}_2\text{H}_5\text{CO}_2\text{C}_3\text{H}_7 + (1-x)\text{C}_n\text{H}_{2n+2}\}$, ($n = 6$ to 10) *J. Chem. Thermodyn.* **21** (1989) 1017
- LUBKOWSKI, J., BLAZEJOWSKI, J., (Univ. Gdansk, Inst. Chem., PL-80952 Gdansk Poland) Thermal properties and thermochemistry of alkanaminium bromides *Thermochim. Acta* **157** (1990) 259
- LUBKOWSKI, J., BLAZEJOWSKI, J., CZERWINSKI, A., BOROWSKI, E. (Univ. Gdansk, Inst. Chem., PL-80952 Gdansk Poland) Thermal behaviour and stability of amphotericin B *Thermochim. Acta* **155** (1989) 29
- LUBKOWSKI, J., JANIAK, T., CZERMINSKI, J., BLAZEJOWSKI, J. (Univ. Gdansk, Inst. Chem., PL-80952 Gdansk Poland) Thermoanalytical investigations of some chloro-organic pesticides and related compounds *Thermochim. Acta* **155** (1989) 7
- LVOV, B. V., NIKOLAEV, V. G., NORMAN, E. A., KOCHAROVA, N. V., ROMANOVA, N. P. (MI Kalinin Polytech. Inst., Leningrad 195251 USSR) Sensitivity calculation for atomic absorption with a thermostatic oven containing a platform *J. Anal. Chem. USSR* **44** (1989) 652
- LYONS, A. M., PEARCE, E. M., MUISCE, A. M. (ATT Bell Labs, Murray Hill, NJ 07974 USA) Thermal decomposition of poly(2-vinylpyridine). Effect of complexation with copper chloride *J. Polym. Sci. A* **28** (1990) 245
- MA, C. C. M., HSIUE, L. T., WU, W. G., LIU, W. L. (Natl. Tsing Hua Univ., Inst. Chem. Engr., Hsinchu 30043 Taiwan) Rheological and morphological properties of thermal-aged poly(phenylene sulfide) resin *J. Appl. Polym. Sci.* **39** (1990) 1399
- MA, S. P., HILL, J. O., HENG, S. (La Trobe Univ., Dept. Chem., Bundoora, Vic 3083 Australia) A thermal analysis study of the pyrolysis of Victorian brown coal *J. Thermal Anal.* **35** (1989) 977
- MACHIDA, M., EGUCHI, K., ARAI, H. (Kyushu Univ. 39, Grad. Sch. Engr. Sci., Dept. Mat. Sci. Technol., 6-1 Kasuga Koen, Kasuga, Fukuoka 816 Japan) Catalytic properties of $\text{BaMA}_{11}\text{O}_{19-\alpha}$ ($M = \text{Cr, Mn, Fe, Co}$ and Ni) for high-temperature catalytic combustion *J. Catal.* **120** (1989) 377
- MAHABADI, H. K., ALEXANDRU, L. (Xerox Res. Ctr. Canada Ltd., 2660 Speakman Dr, Mississauga Ontario Canada L5K 2L1) Thermotropic liquid crystalline polymers with low thermal transitions. 1. Low melting thermotropic liquid crystalline homo-polycarbonate and Co-polycarbonate *J. Polym. Sci. A* **28** (1990) 231
- MAJCHRZAK, M. W., WARKENTIN, J. (McMaster Univ., Dept. Chem., Hamilton, Ontario Canada L8S 4M1) Thermolysis of 2-acyloxy- Δ^3 -1, 3, 4-oxadiazolines. Evidence for a preferred sense of cycloreversion to carbonyl ylides and for fast 1,4-sigmatropic ylide rearrangement *Can. J. Chem.* **67** (1989) 1753
- MAKINO, T. (Kyoto Univ., Dept. Engr. Sci., Kyoto 606 Japan) Present research on thermal radiation properties and characteristics of materials *Int. J. Thermophys.* **11** (1990) 339
- MAKURIN, Y. N., NIKONENKO, E. A., KASIMOV, G. G., ZHELONKIN, N. A. (SM Kirov Polytech. Inst., Sverdlovsk USSR) Study of the thermolysis of Fe-II, Co-II, Ni-II, Zn-II oxalate dihydrates by thermogravimetry and mass spectrometric analysis method *Zh. Neorg. Khim. SSR* **34** (1989) 2754
- MALAEV, V. V., STEPANOV, V. F. (LY Karpov Phys. Chem. Res. Inst., Moscow USSR) Temperature dependence of creep and relaxation processes in irradiated polyethylene terephthalate *High Energ. Chem.* **23** (1989) 188
- MALLELA, S. P., GEANANGEL, R. A., WENDLANDT, W. W. (Univ. Houston, Dept. Chem., Houston TX 77204 USA)

- Thermal decomposition of $(\text{CH}_3)_2\text{SnX}_2$ ($X = \text{F}, \text{SO}_3\text{F}, \text{or } \text{SO}_3\text{CF}_3$) *Thermochim. Acta* **156** (1989) 239
- MALLON, J. J., KANTOR, S. W. (Univ. Massachusetts, Dept. Polymer Sci. Engn., Mat. Lab., Amherst MA 01003 USA) Thermotropic hydrocarbon side-chain liquid-crystalline polymers. 3. Characterization of liquid-crystalline phases *Macromolecules* **23** (1990) 1249
- MANEVA, M., GEORGIEV, M. (Higher Inst. Chem. Technol., Dept. Inorgan. Chem., BU-1156 Sofia Bulgaria) Synthesis and properties of beryllium iodates. 4. Thermal and calorimetric investigations of $\text{Be}(\text{IO}_3)_2 \cdot 2\text{H}_2\text{O} \cdot 6\text{H}_2\text{O}$ *J. Thermal Anal.* **35** (1989) 867
- MANRING, L. E., SOGAH, D. Y., COHEN, G. M. (Dupont Co, Exptl. Stn., Dept. Cent. Res. Dev., Wilmington DE 19898 USA) Thermal degradation of poly(methyl methacrylate). 3. Polymer with head - to - head linkages *Macromolecules* **22** (1989) 4652
- MARINI, A., BERBENNI, V., MASSAROTTI, V., MARGHERITIS, C. (Univ. Pavia, Dep. Chim. Fis., Cnr, Ctr. Studio Termodinam., I-27100 Pavia Italy) The effect of heat flux DSC measurement of physico-chemical properties of the sample *Thermochim. Acta* **156** (1989) 259
- MARONGIO, B., PORCEDDA, S. (Univ. Cagliari, Dip. Sci. Chim., Via Osped 72, I-09100 Cagliari Italy) Excess enthalpies of some binary mixtures: a contribution to the study of the Cl-O specific interaction *Thermochim. Acta* **155** (1989) 317
- MARONGUI, B., PORCEDDA, S. (Dip. Sci. Chim., Via Ospedale 72, I-09100 Cagliari Italy) Excess enthalpies of some tertiary amine + n-alkane or cyclohexane mixtures *Thermochim. Acta* **158** (1990) 61
- MARTIN-ZARZA, P., GILI, P., MEDINA, A., VALENZUELA, C., BERNALTE, A. (Univ. La Laguna, Dept. Quim. Inorgan., La Laguna Spain) Thermal studies of Co(II), Ni(II) and Cu(II) complexes with Schiff base derivatives of 1H-indole-3-ethylene-salicylaldimine *Thermochim. Acta* **156** (1989) 231
- MASOUD, M. S., ZAKI, Z., ISMAIL, F. M. (Univ. Alexandria, Fac. Sci., Dept. Chem., Alexandria Egypt) conducting properties of some new azo-nitroso complexes *Thermochim. Acta* **156** (1989) 225
- MASUDA, Y., MATSUDA, T., KUME, H., IHARA, Y. (Nigata Univ., Dept. Gen. Educ., Nigata 95021 Japan) The kinetics of the thermally induced isomerization of some nickel(II) complexes containing butanediamines in a solid phase *Thermochim. Acta* **156** (1989) 137
- MASUDA, Y., NAGAGATA, K. (Nigata Univ., Dept. Gen. Educ., Nigata 95021 Japan) The effect of water vapour pressure on the kinetics of the thermal dehydration of zinc formate dihydrate *Thermochim. Acta* **155** (1989) 255
- MATHESON, J. D., HANSEN, L. D., EATOUGH, D. J., LEWIS, E. A. (Brigham Young Univ., Dept. Chem., Provo UT 84602 USA) Calorimetric titration analysis of a coal derived liquid: determination of phenolic, pyridinic, and carboxylic compounds *Thermochim. Acta* **154** (1989) 145
- MATHOT, V. B. F., PIJPER, M. F. J. (DSM Res. Patents, POB 18, 6160 MD Geleen Netherlands) Molecular structure, melting behaviour and crystallinity of 1-octene-based very low density polyethylenes (VLDPEs) as studied by fractionation and heat capacity measurements with DSC *J. Appl. Polym. Sci.* **39** (1990) 979
- MAURY, F., HATIM, Z., REYNES, A., MORANCHO, R. (Ecole Natl. Super. Chim. Toulouse, Cnrs UA 445, 118 Route Narbonne, F-31077 Toulouse France) Pyrolysis of various organosilazanes used as single precursor of SiN_xC_y : H films in OMCVD process *J. Anal. Appl. Pyrol.* **17** (1989) 67
- MCELROY, P. J., BATTINO, R., DOWD, M. K. (Univ. Canterbury, Dept. Chem. Proc. Engn., Christchurch 1 New Zealand) Compression -factor measurements on methane, carbon dioxide, and (methane + carbon dioxide) using a weighing method *J. Chem. Thermodyn.* **21** (1989) 1287
- MCNEILL, I. C., ZULFIQAR, M., KOUSAR, T. (Univ. Glasgow, Dept. Chem., Polymer

- Res. Grp., Glasgow G12 8QQ Scotland) A detailed investigation of the products of the thermal degradation of polystyrene *Polym. Degrad. Stabil.* **28** (1990) 131
- MEHL, P. (Amer. Red Cross, Holland Lab Res. Dev., Transplantat Lab., Crabbs Branch Way, Rockville MD 20855 USA) Isothermal and non-isothermal crystallization during warming in aqueous solutions of 1,3-butanediol: comparison of calorimetry and cryomicroscopy *Thermochim. Acta* **155** (1989) 187
- MEHR, S. R., EATOUGH, D.J., HANSEN, L. D., LEWIS, E. A., DAVIS, J. A. (Brigham Young Univ., Provo UT 84602 USA) Calorimetry of heterogeneous systems: H⁺ binding to TiO₂ in NaCl *Thermochim. Acta* **154** (1989) 129
- MIJOVIC, J., LEE, C. H. (Polytech. Inst. New York, Dept. Chem. Engn., 333 Jay St., Brooklyn NY 11201 USA) A comparison of chemorheological models for thermoset cure *J. Appl. Polym. Sci.* **38** (1989) 2156
- MITSUMI, T., HIDA, M., FUJIMURA, Y. (Criminal Sci. Lab. Aichi Prefecture, Naka Ku, Nagoya Japan) Determination of alkaloidal narcotics by pyrolysis-gas chromatography *J. Anal. Appl. Pyrol.* **17** (1989) 83
- MILTENBURG, J. C., CUEVAS-DIARTE, M. A. The influence of sample mass, heating rate and heat transfer coefficient on the form of DSC curves *Thermochim. Acta* **156** (1989) 291
- MILLER, UJ. D., HU, J. S., JIN, R. (Univ. Utah, Dept. Met. Met. Engn., Salt Lake City UT 84112 USA) Thermochemistry of oleate adsorption at the fluorite/water interface *Colloid Surface* **42** (1989) 71
- MOHARIL, S. V., DESHMUKH, B. T., MUTHAL, P. L. (Nagpur Univ., Dept. Phys., Nagpur 440010 Maharashtra India) On the possibility of using organic phosphors in thermoluminescence dosimetry *J. Polym. Sci. B* **27** (1989) 2577
- MONTAUDO, G., PUGLISI, C., BICAK, N., ORZESZKO, A. (Univ. Catania, Dip. Sci. Chim., Viale A Doria 6, I-95125 Catania Italy) Thermal degradation of new copolymers from pyromellitic anhydride *Polymer* **30** (1989) 2237
- MORALES, J. J. (Univ. Extremadura, Fac. Ciencias, Dept. Fis., E-06071 Badajoz Spain) Governing equation for the temperature distribution in a transparent plastic bar *Thermochim. Acta* **157** (1990) 221
- MORTERRA, C., ORIO, L. (Univ. Turin, Dip. Chim. Inorgan., I-10125 Turin Italy) Surface characterization of zirconium oxide. II. The interaction with carbon dioxide at ambient temperature *Mater. Chem. Phys.* **24** (1990) 247
- MOTAKEF, S. (MIT, Dept. Mech. Engn., Cambridge MA 02139 USA) Thermoelastic study of GaAs in vertical gradient freeze configuration. Limits to the optimum growth rate and approaches to its augmentation *J. Cryst. Growth* **98** (1989) 711
- MOTOKO-KWETE, SEGERS, D., DORIKENS, M., VANPRAET, L. D., CLAUWS, P., LEMAHIEU, I. (Positron Ctr., Nucl. Phys. Lab., Proeftuinstr. 86, B-9000 Ghent Belgium) Temperature characteristics on positron trapping at defects in electron irradiated silicon *Appl. Phys. A* **49** (1989) 659
- MOUSA, M. A., SUMMAN, A. M., AHMED, M. A. (Benha Univ., Fac. Sci., Dept. Chem., Benha Egypt) Electrical conduction in some γ -irradiated and unirradiated metal-zinc ferrites *Thermochim. Acta* **158** (1990) 17
- MUDRETSOVA, S. N., VASILEVA, I. A., FILIPPOVA, Z. V. (MV Lomonosov State Univ., Inst. Chem., Moscow 117234 USSR) Thermodynamic properties of yttrium caprite *Zh. Fis. Khim. SSSR* **63** (1989) 3108
- MULLER, R. (Acad. Sci. GDR, Cent. Inst. Inorgan. Chem., Rudower Chaussee 5, DDR-1199 Berlin Ger. Dem. Rep.) The influence of grain size on the overall kinetics of surface-induced glass crystallization *J. Thermal Anal.* **35** (1989) 823
- MÜLLER, F. W., SCHILLER, K., JÄNCHEN, U., MARX, J. (Th. Carl Schorlemmer Leuna Merseburg, Sekt. Chem., DDR-4200 Merseburg Ger. Dem. Rep.)

- Temperature dependence of ammonia diffusion in polymer films *Angew. Macromol. Chem.* **174** (1990) 41
- NAGASHIMA, A. (Keio Univ., Dept. Mech. Engn., 3-14-1 Hiyoshi Yokohama Kanagawa 223 Japan) Viscosity, thermal conductivity, and surface tension of high-temperature melts *Int. J. Thermophys.* **11** (1990) 417
- NAGATA, I. (Kanazawa Univ., Dept. Chem. Engn., Div. Phys. Sci., Kodat-Suno 2, Kanazawa, Ishikawa 920 Japan) Correlation of quaternary liquid-liquid equilibrium data by means of a modification of the UNIQUAC model *Thermochim. Acta* **155** (1989) 263
- NAGAYAMA, K., TAKADA, T. (Rikkyo Univ., Dept. Chem., Toshima Ku, Tokyo 171 Japan) Direct combination of thermogravimetric analyser and atomic absorption spectrometer for detection of atomic vapour in thermal analysis *Thermochim. Acta* **156** (1989) 11
- NAPOHITANO, R., PIROZZI, B., VARRIALE, V. (Naples Univ., Dep. Chim., Via Mezzocannone 4, I-80134 Naples Italy) Temperature dependence of the thermodynamic stability of the two crystalline α forms of isotactic polypropylene *J. Polym. Sci. B* **28** (1990) 139
- NARLIKAR, A. V., AGARWAL, S. K., RAO, C. V. (Natl. Phys. Lab., Hillside Rd, New Delhi 110012 India) High-temperature superconducting cuprates: substitutional and related studies *Synthet. Metal.* **33** (1989) 141
- NAUMANN, R., EMONS, H. H. (Bergakad. Freiberg, Sekt. Chem., DDR-9200 Freiberg Ger. Dem. Rep.) Results of thermal analysis for investigation of salt hydrates as latent heat-storage materials *J. Thermal Anal.* **35** (1989) 1009
- NEFEDOV, V. I., SOKOLOV, A. N. (NS Kurnakov Gen. Inorgan. Chem. Inst., Moscow USSR) Degradation of high-temperature superconductors under chemical effect *Zh. Neorg. Khim. SSSR* **34** (1989) 2723
- NESTEROV, A. Y., MUZHEV, V. V., GORICHKO, V. V. (Acad. Sci. UKSSR, Inst. Chem. Macromolec. Cpds., Kiev Ukraine USSR) Features of thermodynamic behaviour of polymethyl methacrylate - polyvinyl acetate-styrene-acrylonitrile copolymer triple mixture *Vysokomol. Soedin. Ser. B SSSR* **31** (1989) 855
- NEVSKII, A. V., SHORMANOV, V. A., KRESTOV, G. A. (Acad. Sci. USSR, Inst. Crystallogr., Moscow 117333 USSR) Thermodynamics of nickel(II) ion complexation with ethylenediamine in aqueous ethanol solvents *Koord. Khim.* **15** (1989) 1576
- NIKOLAENKO, I. V., NOSOVA, V. V. (TG Shevchenko State Univ., Kiev Ukraine USSR) Enthalpy of the mixing of gadolinium with manganese and iron *Ukr. Khim. Zh. SSSR* **55** (1989) 1260
- NORVISZ, J., SMIESZEK, Z., KOLENDA, Z. (Inst. Nonferrous Met., PL-44100 Gliwice Poland) Apparent linear relationship, compensation law and others Part I. *Thermochim. Acta* **156** (1989) 313
- NORWISZ, J., SMIESZEK, Z., KOLENDA, Z. (Inst. Nonferrous Met., PL-44100 Gliwice Poland) Apparent linear relationship, compensation law and others. Part II. *Thermochim. Acta* **156** (1989) 321
- NOTZ, K. J., HAAS, P. A. (Oak Ridge Natl. Lab., Div. Chem. Technol., POB 2008, Bldg. 4500N, Oak Ridge TN 37831 USA) Synthesis and thermal decomposition of the double salts of uranyl nitrate-ammonium nitrate *Thermochim. Acta* **155** (1989) 283
- OCHKIN, A. V., SERGIEVSKII, V. V. (DI Mendeleev Chem. Technol. Inst., Moscow USSR) Thermodynamics of extraction of amines and salts of substituted ammonium bases by solutions *Usp. Khim. SSSR* **58** (1989) 1451
- OGAWA, S., YOSHIDA, T., KOUZAKI, T., OKUDA, S., TSUKAMOTO, K. (Matsushita Elect. Ind. Co. Ltd., Semicond. Res. Ctr., 3-15 Yagumo Nakamachi, Moriguchi Osaka 570 Japan) Thermal instability of the TiSi₂/Si structure -impurity effects *Appl. Surf. Sci.* **41-2** (1989) 290
- OGUNI, M., HIKAWA, H., SUGA, H. (Tokyo Inst. Technol., Fac. Sci., Dept. Chem., Meguro Ku, Tokyo 152 Japan) Enthalpy relaxation in vapor-deposited

- butyronitrile *Thermochim. Acta* **158** (1990) 143
- OKAZ, A. M., MAHMOUD, N. S., ELOSAIRY, M. (Univ. Alexandria, Fac. Engn., Dept. Engn. Phys. Math., Alexandria Egypt) Thermal and electrical properties of dilute Cr-Ni base alloys *J. Thermal Anal.* **35** (1989) 919
- OPERTI, L., TEWS, E. C., MAC MAHON, T. J., FREISER, B. S. (Purdue Univ., Dept. Chem., W Lafayette IN 47907 USA) Thermochemical properties of gas-phase MgOH and MgO determined by Fourier transform mass spectrometry *J. Amer. Chem. Soc.* **111** (1989) 9152
- ORAL, B., LEE, Y. C., VOOK, R. W. (Phys. Dept., Solid State Sci. Technol. Lab., Syracuse NY 13244 USA) Thermal desorption spectroscopy investigation of CO adsorption on Cu/Pd (111) surfaces *App. Surface Sci.* **44** (1990) 65
- OSCARSON, J. L., DAM, R. H., CHRISTENSEN, J. J., IZATT, R. M. (Brigham Young Univ., Dept. Chem., Provo UT 84602 USA) Enthalpies of absorption of hydrogen sulfide in aqueous diethanolamine solutions *Thermochim. Acta* **154** (1989) 89
- OSCARSON, J. L., WU, G., FAUX, P. W., IZATT, R. M., CHRISTENSEN, J. J. (Brigham Young Univ., Dept. Chem., Provo UT 84602 USA) Thermodynamics of protonation of alkanolamines in aqueous solution to 325°C *Thermochim. Acta* **154** (1989) 49
- OTAKE, K., INOMATA, H., KONNO, M., SAITO, S. (Tohoku Univ., Dept. Molec. Chem. Engn., Aoba Ku, Sendai, Miyagi 980 Japan) Thermal analysis of the volume phase transition with N-isopropylacrylamide gels *Macromolecules* **23** (1990) 283
- OTSUKA, K., MURAKAMI, Y., WADA, Y., SAID, A. A., MORIKAWA, A. (Tokyo Inst. Technol., Dept. Chem. Engn., Meguro Ku, Tokyo 152 Japan) Oxidative couplings of methane, ethane, and propane with sodium peroxide at low temperatures *J. Catal.* **121** (1990) 122
- OTT, J. B., NEELY, B. J., PURDY, J. E., OWEN, R. L. (Brigham Young Univ., Dept. Chem., Provo UT 84602 USA) Excess enthalpies for ethane + acetonitrile at 298.15, 323.15 and 348.15 K and at 7.5 and 15 MPa *Thermochim. Acta* **154** (1989) 71
- PALEPU, R., CLARKE, J. (Univ. Coll. Cape Breton, Dept. Chem., Sydney NS Canada B1P 6L2) Viscosities and densities of 2, 2, 2-trifluoroethanol + water at various temperatures *Thermochim. Acta* **156** (1989) 359
- PALKIN, V. A., KUZINA, T. A., KUZMINA, N. N. (NS Kurnakov Gen. Inorgan. Chem. Inst., Moscow USSR) Thermodynamic properties and internal rotation of groups NH₃ for trans-[Pt(NH₃)₄Cl₂]-[PtCl₄] *Zh. Neorg. Khim. SSSR* **34** (1989) 2887
- PAN, R., NAIR, M. V., WUNDERLICH, B. (Rensselaer Polytech. Inst., Dept. Chem., Troy NY 12180 USA) On the Cp to Cu conversion of solid linear macromolecules-II. *J. Thermal Anal.* **35** (1989) 955
- PARASHAR, R., MARWAHA, R. K., ALI, M. A., LAKHANPAL, M. L. (Punjab Univ., Dept. Chem., Chandigarh 160014 India) Thermochemical studies on partially miscible binary liquid mixtures of aniline with n-hexane, n-heptane and water *Indian J. Chem.* **29** (1990) 177
- PARK, H., PEARCE, E. M., KWEI, T. K. (Polytech. Inst. New York, Dept. Chem., Brooklyn NY 11201 USA) Thermal oxidation of blends of polystyrene and poly(vinyl methyl ether) *Macromolecules* **23** (1990) 434
- PASQUEVICH, D. M., CAREIRO, A. (Consejo Nacl. Invest. Cient. Tecn., Ctr. Atom Bariloche, Div. Met., RA-8400, Bariloche RN Argentina) A thermogravimetric analyser for corrosive atmospheres and its application to the chlorination of ZrO₂-C mixtures *Thermochim. Acta* **156** (1989) 275
- PAWLAK, Z., GIERSZ, E., URBANCZYK, G., IZATT, R. M., OSCARSON, J. L. (Brigham Young Univ., Dept. Chem., Provo UT 84607 USA) Calorimetric, EMF and conductometric studies of engine oils *Thermochim. Acta* **154** (1989) 187

- PETROVA, L., GUROVA, K. (Sci. Polymer Ctr., Sofia Bulgaria) Thermal study of some sulphosuccinates *J. Thermal Anal.* **35** (1989) 885
- PHILLIPS, J., GATTE, R. R. (Penn State Univ., Dept. Chem. Engr., 133 Fenske Lab., University PK, PA 16802 USA) Microcalorimetric study of oxygen adsorption on graphite-supported rhodium microcrystals *Thermochim. Acta* **154** (1989) 13
- PIACENTE, V., FERRO, D., DELLA, G. G. (Univ. La Sapienza, Dip. Chim., P. A. Moro 5, I-00185 Rome Italy) Sublimation enthalpy of eleven alkyl derivatives of urea *Thermochim. Acta* **158** (1990) 79
- PIKKARAINEN, L. (Univ. Oulu, Dept. Chem., SF-90570 Oulu Finland) Excess enthalpies of (2, 2, 2-trifluoroethanol + formamide or N-methylformamide or N, N-dimethylformamide) *J. Chem. Thermodyn.* **21** (1989) 1177
- PIRILÄ-HONKANEN, P., RUOSTESUO, P. (Univ. Oulu, Dept. Chem., SF-90570 Oulu Finland) Thermodynamic and spectroscopic properties of 2-pyrrolidinones. 4. Excess molar volumes of 2-pyrrolidinone + benzyl alcohol, + 1,4-dioxane, + hexamethylphosphotriamide at 303.15 K and 323.15 K *Thermochim. Acta* **156** (1989) 129
- POLLACK, G. L., KENNAN, R. P., HIMM, J. F., STUMP, D. R. (Michigan State Univ., Dept. Phys. Stron, E Lansing MI 48824 USA) Diffusion of xenon in liquid alkanes: temperature dependence measurements with a new method. Stokes-Einstein and hard sphere theories *J. Chem. Phys.* **52** (1989) 625
- POMONIS, P. J., SDUKOS, A. T. (Univ. Ioannina, Dept. Chem., GR-45110 Ioannina Greece) A prediction rule for the standard enthalpies of formation ($-\Delta H_f^\circ$) of phosphate alkali salts $M_{n+2}H_nP_nO_{3n+1}$ *Thermochim. Acta* **158** (1990) 33
- PRODANOVIC, D., DUMIC, M., ZIVKOVIC, Z. D. (ITNMS, Inst. Met. Technol., YU-11000 Belgrade Yugoslavia) The kinetics of dehydroxylation and mullitization of Zettlitz kaolin in the presence of calcium(II) as an ingredient *Thermochim. Acta* **156** (1989) 61
- PRODANOVIC, D., STAMATOVIC, M., ZIVKOVIC, Z. D. (ITNMS, Inst. Met. Technol., YU-11000 Belgrade Yugoslavia) Kinetics of dehydration process of aluminium hydrate formed in the kaolin-aluminium powder system *Thermochim. Acta* **156** (1989) 53
- PRULIÈRE, G., DOUZOU, P. (Inst. Biol. Phys. Chim., Inra, Inserm, U310 Unite Rech., 13 Rue Pierre Marie Curie, F-75005 Paris France) Sd-gel processing of actin to obtain homogeneous glasses at low temperatures *Biophys. Chem.* **34** (1989) 311
- PYARTMAN, AL. K., BIZUNOK, M. B., BELOUSOV, E. A. (Lensovet Technol. Inst., Leningrad USSR) Thermodynamics of the formation of hexadimethylsulfoxidechromium(III) and hexacarbamidechromium(III) chloride, bromide, nitrate and thiocyanate associates *Koord. Khim.* **15** (1989) 1660
- QI, G., HAGAKI, K., MEY, S., SPENCER, P. J. (Ne Univ. Technol., Shenyang Peoples R China) Heat content measurement and thermodynamic evaluation of the Cu-La system *Z. Metallk.* **80** (1989) 883
- QUAN, X., BAIR, H. E., JOHNSON, G. E. (ATT Bell Labs, Murray Hill NJ 07974 USA) Thermal characterization of block copolymer interfaces *Macromolecules* **22** (1989) 4631
- QUANG, N. X., THOANG, H. S., SIPEK, M. (Czechoslovak Acad. Sci., Inst. Chem. Proc. Fundamentals, CS-16502 Praque-6 Czechoslovakia) Some relations between thermodynamic and kinetic parameters in heterogeneous catalysis *Collection* **54** (1989) 2970
- RABIE, S. M., ABDEL, HAKEEM, N., MOHARRAM, M. A. (Natl. Res. Ctr., Dept. Phys., Spect. Lab., Cairo Egypt) Effect of γ -irradiation and temperature on the structure of metal chloride-treated poly(vinyl alcohol) *J. Appl. Polym. Sci.* **38** (1989) 2269

- RAO, N. K., ANANTHASWAMY, J. (Sri Venkateswara Univ., Postgrad. Ctr., Dept. Chem., Cuppadah 516004 India) Thermodynamics of electrolyte solutions: activity and osmotic coefficients of aqueous NaCl-MgCl₂-H₂O system at different temperatures by the EMF method *Proc. Indian Acad. Sci. Chem. Sci.* **101** (1989) 433
- REDFORD, K., TIBBALLS, J. E., MCPHERSON, R. (Senter Ind. Forskning, PB 124 Blindern, N-0314 Oslo 3 Norway) Calorimetric data for α -AlMnSi and the α -to- β decomposition *Thermochim. Acta* **158** (1990) 115
- REKHARSKY, M. V. (MV Lomonosov State Univ., Moscow 117234 USSR) A simple microcalorimetric analytical cell *Thermochim. Acta* **156** (1989) 189
- REKHARSKY, M. V., SIKPORENKO, Y. B., POLITSA, E. N., BELYAEV, S. V. (MV Lomonosov State Univ., Moscow 117234 USSR) Microcalorimetric detection of L-asparagine and L-glutamine in solution using L-asparaginase from *E. coli* *Thermochim. Acta* **156** (1989) 193
- REY, F. J., MARTINGIL, J., GONZALES, A., MARTINGIL, F. J. (Univ. Valladolid, Ets. Ingn. Ind., Valladolid Spain) Kinetic analysis of thermal decomposition of praseodymium(III) nitrate hexahydrate *J. Thermal Anal.* **35** (1989) 805
- RODANTE, F., FANTAUZZI, F. (Univ. La Sapienza, Dip. Ingn. Chim. Mat. Mat. Prime Met., via Del Castro Laurenziano 7, I-00161 Rome Italy) Thermodynamics of dipeptides. Part II. Influence of methyl groups on the α free carboxyl and amino groups. Study of a symmetrical system *Thermochim. Acta* **157** (1990) 279
- ROGERS, D. W., DEJROONGRUANG, K. (Long Isl. Univ., Dept. Chem., Brooklyn NY 11201 USA) Enthalpies of hydrogenation of the dimethylpentenes, ethylpentenes, methylethylbutene, and trimethylbutene *J. Chem. Thermodyn.* **21** (1989) 1115
- ROGOV, V. A., SEREBRYAKOV, V. F., DOBRYNKIN, N. M., POPOVSKII, V. V. (Novosibirsk Catalysis Inst., Novosibirsk 630090 USSR) Temperature programmed desorption study of acetone -2-C-14 interaction with CuO surface *React. Kinet. Catal. Lett.* **40** (1989) 195
- ROMANI, L., BRAVO, R., LEGIDO, J. J., AMIGO, A., FERNANDEZ, J., ANDRADE, M. I. P. (Univ. Santiago De Compostela, Fac. Fis., Dept. Fis. Apl., Santiago Spain) DARC analysis of binary mixtures. Excess enthalpies of ketone + alkane and ketone + alcohol systems *Thermochim. Acta* **156** (1989) 21
- ROY, S., GHOSH, A., CHAUDHURI, N. R. (Indian Assoc. Cultivat. Sci., Dept. Inorgan. Chem., Calcutta 700032 W Bengal India) Solid state thermal studies of nickel(II) diamine complexes *Thermochim. Acta* **155** (1989) 297
- ROYCHOWDHURY, S. B., KOROPCHAK, J. A. (SO Illinois Univ., Dept. Chem. Biochem., Carbondale IL 62901 USA) Thermospray enhanced inductively coupled plasma atomic emission spectroscopy detection for liquid chromatography *Anal. Chem.* **62** (1990) 484
- RYCHLY, J., PAVLINEC, J. (Slovak Acad. Sci., Inst. Polymer, CS-84236 Bratislava Czechoslovakia) Thermal degradation of free radically prepared poly(methyl methacrylate). A nonisothermal weight loss study *Polym. Degrad. Stabil.* **28** (1990) 1
- RYTTEL, A. (Tech. Univ. Rzeszow, Fac. Chem., PL-35959 Rzeszow Poland) Thermal properties of copolymers of alkyl methacrylates with triallyl cyanurate *Acta Polym.* **40** (1989) 690
- SAFRONOV, V. V., SHARONOV, K. G., ROZHNOV, A. M., ALENIN, V. I., SIDOROV, S. A. (VV Kuibyshev Polytech. Inst., Kuibyshev USSR) Thermodynamics of the synthesis of tert-amyl-methyl ether (TAME) *J. Appl. Chem. USSR* **62** (1989) 763
- SAIBENE, S., BUTZ, T., LERF, A. (Tech. Univ. Munich, Dept. Phys., D-8046 Garching Fed. Rep. Ger.) Thermal decomposition and oxidation of HfTe₅ single crystals *Ber. Bunsen Ges. Phys. Chem.* **93** (1989) 1359
- SAITO, H., TSUTSUMI, D., INOUE, T. (Tokyo Inst. Technol., Dept. Organ.

- Polymer Mat., Meguro Ku, Tokyo 152 Japan) Temperature dependence of the flory interaction parameter in a single-phase mixture of poly(hydroxy ether of bisphenol-A) and poly(ether sulfone) *Polym. J.* **22** (1990) 128
- SALMAN, S. R., AL-JARRAH, M. M. F., ABAS, K. (Univ. Baghdad, Coll. Sci., Dept. Chem., Baghdad Iraq) Thermal behaviour of poly- α -methylstyrene prepared in various solvents *Polym. Degrad. Stabil.* **28** (1990) 209
- SANAHUJA, A., GOMEZ-ESTÉVEZ, J. L. (Univ. Barcelona, Fac. Fis., Dept. Fis. Fonamental, Diagonal 647, E-08028 Barcelona Spain) Enthalpies of solution of RbCl in water at 298.15 K and low molalities *Thermochim. Acta* **156** (1989) 85
- SARKAR, S., ADHIKARI, M. S., BANERJEE, M., KONAR, R. S. (Reg. Engr. Coll., Dept. Chem., Durgapur 713209 W Bengal India) Mechanism of persulfate decomposition in aqueous solution at 50-degrees-C in the presence of vinyl acetate and nitrogen *J. Appl. Polym. Sci.* **39** (1990) 1061
- SAWABY, A., RABIE, S. M. (Natl. Res. Ctr., Dept. Phys., Altahrir St., Cairo Egypt) Temperature and gamma-radiation effects on the electrical conductivity of ZnCl₂ treated polyvinylalcohol *Isotopenpraxis* **25** (1989) 511
- SCHEFFER, B., DEKKER, N. J. J., MANGNUS, P. J., MOULIJN, J. A. (Univ. Amsterdam, Inst. Chem. Technol., Nieuwe Achtergracht 166, 1018 WV Amsterdam Netherlands) A temperature-programmed reduction. Study of sulfided Co-Mo/Al₂O₃ hydrodesulfurization catalysts *J. Catal.* **121** (1990) 31
- SCHEFFER, B., MANGNUS, P. J., MOULIJN, J. A. (Univ. Amsterdam, Inst. Chem. Technol., Nieuwe Achtergracht 166, 1018 WV Amsterdam Netherlands) A temperature-programmed sulfiding study of NiO-WO₃/Al₂O₃ catalysts *J. Catal.* **121** (1990) 18
- SCHLOTZHAUER, W. S., ARRENDALE, R. F., SEVERSON, R. F., CHORTYK, O. T. (Usda Ars, Tobacco Qual. Safety Res. Unit., POB 5677, Athens GA 30613 USA) Characterization of thermolysis products of cuticular wax compounds of green tobacco leaf *J. Anal. Appl. Pyrol.* **17** (1989) 25
- SEKI, T., ICHIMURA, K. (Res. Inst. Polymers Text., 1-1-4 Higashi, Tsukuba Ibaraki 305 Japan) Thermal isomerization behaviors of a spiropyran in bilayers immobilized with a linear polymer and a smectitic clay *Macromolecules* **23** (1990) 31
- SENGERS, J. M. H. L. (NIST, Div. Thermophys., Gaithersburg MD 20899 USA) Thermodynamic properties of aqueous solutions at high temperatures: needs, methods, and challenges *Int. J. Thermophys.* **11** (1990) 399
- SHARMA, R. K., JHA, N. S., SINDHWANI, S. K. (Univ. Delhi, Dept. Chem., Delhi 110007 India) A study of the chelation behavior of bivalent metal complexes of biologically active 2-hydroxy-1,4-naphthoquinone monoxime (HNQM) in dioxan-water mixtures *Thermochim. Acta* **156** (1989) 267
- SHARMA, R. K., JHA, K. K., SINDHWANI, S. K. (Univ. Delhi, Vallabhbai Patel Chest Inst., Dept. Chem., Delhi 110007 India) Thermodynamic stabilities of lanthanide complexes with 3-hydroxy-2-methyl-1,4-naphthoquinone (HMNQ) *Thermochim. Acta* **155** (1989) 377
- SHAW, S. J., PERRY, G. S. (Atom Weap. Res. Estab., Reading RG7 4PR Berks England) LiCl-ZnCl₂ phase diagram *Thermochim. Acta* **155** (1989) 87
- SHAW, S. J., PERRY, G. S. (Atom Weap. Estab., Reading RG7 4PR, Berks England) NaCl-ZnCl₂ phase diagram *Thermochim. Acta* **157** (1990) 329
- SHIBAEV, L. A., SAZANOV, Y. N., STEPANOV, N. G., BOIKO, A. A. (Acad. Sci. USSR, Inst. Macromolec Cpd., Leningrad USSR) Mass-spectrometric analysis of polymers based on furyl alcohol-polyamic acid compositions *J. Thermal Anal.* **35** (1989) 947
- SHIMASAKI, C., MUTON, Y., TSUKURIMICHI, E., YOSHIMURA, T. (Toyama Univ., Fac. Engr., Dept. Ind. Chem., Gofu Ku, Toyoma 930 Japan) Ther-

- mal decomposition and mass spectra of phosphoramidate esters **Bull. Chem. Soc. Jpn.** **63** (1990) 370
- SHIMIZU, T., FUKUSHIMA, J. (Tokyo Univ., Agr. Technol., Fac. Engn., 2-24-16, Kaganci Tokyo 184 Japan) Thermogravimetric reduction of lanthanum strontium iron perovskite oxides with carbon monoxide **Thermochim. Acta** **156** (1989) 179
- SHIMOMURA, O., SUZUKI, M. (Yamanashi Univ., Fac. Engn., 3-11 Takeda 4, Kofu, Yamanashi 400 Japan) The increase of temperature range in the region of supersaturation of KDP solution by addition of impurity **J. Cryst. Growth** **98** (1989) 850
- SHIOMI, T., HAMADA, R., NASAKO, T., YONEDA, K., IMAI, K., NAKAJIMA, A. (Kyoto Univ., Dept. Polymer Chem., Kyoto 606 Japan) Thermodynamics of polymer blends of poly(vinyl methyl ether) and polystyrene **Macromolecules** **23** (1990) 229
- SHIOMI, T., HAMADA, F., NASAKO, T., YONEDA, K., IMAI, K., NAKAJIMA, A. (Kyoto Univ., Dept. Polymer Chem., Kyoto 606 Japan) Thermodynamics of polymer blends of poly(vinyl methyl ether) and polystyrene **Macromolecules** **25** (1990) 229
- SHIOMI, T., HAMADA, F., MICHIOICHI, M., NASAKO, T., NAKAJIMA, A. (Nagaoka Univ. Technol., Dept. Mat. Sci., Technol., Nagaoka Nigata 94021 Japan) Thermodynamics of oligomer blends of poly(methylphenylsiloxane) and polystyrene **Polymer** **31** (1990) 448
- SHUREN, F., HAILIN, W., ZHISHENG, G., YIN, Z. (Acad. Sinica, Guangzhu Inst. Chem., Guangzhou Peoples R China) Thermal behaviour of the anticancer drug carboxyethylgermanium sesquioxide **J. Thermal Anal.** **35** (1989) 791
- SIGRIST, K. (Acad. Sci. GDR, Cent. Inst. Phys. Chem., Rudower Chaussee 5, DDR-1199 Berlin Ger. Dem. Rep.) The irreversible thermodynamics of nickel-carbonyl formation (German) **Z. Phys. Chem.** **271** (1990) 17
- SLJPKES, A. H., ROSSUM, P., RAAD, J. S., SOMSEN, G. (Free Univ. Amsterdam, Dept. Chem., Deboelelaan 1083, 1081 Hv Amsterdam Netherlands) Heat capacities and volumes of some polybasic carboxylic acids in water at 298.15 K **J. Chem. Thermophys.** **21** (1989) 1061
- SILLION, B. (Ctr. Etude Mat. Organ. Technol. Avancee, BP 3, F-69390 Vernaison France) Thermostable polymers. New trends in thermoplastics and thermosets (French) **Bull. Soc. Chim. Belg.** **98** (1989) 577
- SILLION, B., MERCIER, R., AUDIGIER, D., PASCAL, T. (Ctr. Etude Mat. Organ. Technol. Avancee, BP 3, F-69390 Vernaison France) Study of a fluorinated imide thermosetting resin with nadimide functional groups (French) **Bull. Soc. Chim. Belg.** **98** (1989) 751
- SIMMONS, J. A. (Polytech. Cent. London, Fac. Engn. Sci., 115 New Cavendish st., London W1M 8JS England) Thermal effects in irradiated amino acids **Appl. Radiat. Isot.** **40** (1989) 901
- SIMON, G. P. (Monash Univ., Dept. Mat. Engn., Clayton Vic 3168 Australia) The thermally stimulated current technique applied to side-chain liquid-crystal polymers **Polymer** **30** (1989) 2227
- SINGH, K. C., KALRA, K. C., KUMAR, P. (Maharshi Dayanand Univ. Rohtak, Dept. Chem., Rohtak 124001 India) Thermodynamics of molecular interactions of ethyl iodide with aromatic hydrocarbons at 308.15 K **Indian J. Chem.** **29** (1990) 124
- SINHA, S. G., DESHPANDE, N. D., DESHPANDE, D. A. (Inst. Sci., Dept. Phys., Nagpur 440001 Maharashtra India) Dehydration of crystalline $\text{CoSO}_4 \cdot 7\text{H}_2\text{O}$ **Thermochim. Acta** **156** (1989) 1
- SIPOWSKA, J. T., GRAHAM, R. C., NEELY, B. J., OTT, J. B., IZATT, R. M. (Brigham Young Univ., Dept. Chem., Provo UT 84602 USA) Excess enthalpies for (ethane + methanol) at 298.15 and 348.15 K and 7.5 and 15 MPa, and at 323.15 K at 7.5, 10, and 15 MPa **J. Chem. Thermodyn.** **21** (1989) 1085
- SKOVBY, M. H. B., LESSEL, R., KOPS, J. (Tech. Univ. Denmark, Inst. Kemiind., DK-2800 Lyngby Denmark) Thermal properties of some fully aromatic thermotropic liquid

- crystal polyesters *J. Polym. Sci. A* **28** (1990) 75
- SLANINA, Z. (Czechoslovak Acad., J. Heyrovsky Inst. Phys. Chem. Electrochem., Dolejskova 3, CS-18223 Prague 8 Czechoslovakia) Towards molecular-thermodynamic aspects of postulated Pd/D low-temperature nuclear fusion: a useful example of a failure of the conventional translational partition function *Thermochim. Acta* **156** (1989) 285
- SOKOLL, R., HOBERT, H., SCHMUCK, I. (Univ. Jena, Sekt. Chem., Lessingstr. 10, DDR-6900 Jena Ger. Dem. Rep.) Thermal desorption and infrared studies of amines adsorbed on SiO₂, Al₂O₃, Fe₂O₃, MgO, and CaO. I. Diethylamine and triethylamine *J. Catal.* **121** (1990) 153
- SOKOLOVA, E. I., PADURETS, L. N., SHILOV, A. L. (NS Kurnakov Gen. Inorgan. Chem. Inst., Moscow USSR) Thermolysis of TiFe-hydrides *Zh. Neorg. Khim. SSSR* **34** (1989) 3021
- SPEAR, K. E., KIRKX, R. R. (Penn State Univ., University PK, PA 16802 USA) Role of high temperature chemistry in CVD (chemical vapor deposition) processing *Pure Appl. Chem.* **62** (1989) 89
- SPRINGBORG, J., WILKINS, P. C., WILKINS, R. G. (Royal Vet. Agr. Univ., Dept. Chem., Thorvaldsensvej 40, DK-1871 Frederiksberg C, Denmark) Kinetics and thermodynamics of the reaction of deoxyhemerythrin with nitric oxide *Acta Chem. Scand.* **43** (1989) 967
- STANDER, F., VUUREN, C. P. J. (POB 904399, Faerie Glen 0043 South Africa) Observations on the role of structural disorder in the thermal reactions of ammonium hexavanadate *Thermochim. Acta* **157** (1990) 357
- STANDER, P. P., VUUREN, C. P. J. (POB 904399, Faerie Glen 0043 South Africa) The high temperature oxidation of FeV₂O₄ *Thermochim. Acta* **157** (1990) 347
- STEELE, W. V., CHIRICO, R. D., HOSSENLOPP, I. A., HGUYEN, A., SMITH, N. K. (IIT Res. Inst., Natl. Inst. Petr. Energy Res., POB 2128, Bartlesville OK 74005 USA) The thermodynamic properties of 1, 2, 3, 4- and 5, 6, 7, 8-tetrahydroquinolines *J. Chem. Thermodyn.* **21** (1989) 1121
- STEWART, M. G., MOY, E., CHANG, G., ZINGG, W., NEUMANN, A. W. (Univ. Toronto, Dept. Mech. Engn., Toronto Ontario Canada M5S 1A4) Thermodynamic model for cell spreading *Colloid Surface* **42** (1989) 215
- STONER, C. E., BRILL, T. B. (Univ. Delaware, Dept. Chem., Newark DE, 19716 USA) Thermal decomposition of energetic materials. 34. Decarbonylation, decarboxylation, and coupling reactions of metal propiolates, M[O₂CC≡CH] *Inorg. Chem.* **28** (1989) 4500
- STRIEBICH, R. C., RUBEY, W. A. (Univ. Dayton, Res. Inst., Dayton OH, 45469 USA) A system for thermal diagnostic studies *Amer. Lab.* **22** (1990) 64
- STUCHLY, V. (Czechoslovak Acad. Sci., Inst. Chem. Proc. Fundamentals, CS-16502 Prague 6 Czechoslovakia) Parametric sensitivity of complex temperature programmed desorption, reaction and reduction *J. Thermal Anal.* **35** (1989) 837
- SUBER, L., TARLI, F., CHIOZZINI, G., ZUGARINI, M., RICCUCCI, C. (Cnr, Ist. Teoria Struttura Elettron Comportamento Spettrochim. Composti Coordinaz I-00016 Monterotondo Italy) Thermal behaviour of transition metal complexes of dithiocarbazic esters. 2. *J. Thermal Anal.* **35** (1989) 849
- SUGAHARA, H., NAGANO, J. (Yokohama Natl. Univ., Fac. Engn., Hodogaya Ku, Yokohama, Kanagawa 240 Japan) Thermal stability of WSiN-GaAs and Au-WSiN interfaces *Appl. Surf. Sci.* **41-2** (1989) 207
- SUN, J., FRISCH, H. L., CABASSO, I. (Suny Coll. Environm. Sci. Forestry, Polym. Res. Inst., Syracuse NY 13210 USA) Tracing the spontaneous mixing and mobility of miscible polymer blends using differential scanning calorimetry [cellulose acetate - poly(styrenephosphonate ester)] *J. Polym. Sci. B* **27** (1989) 2657
- SUPKES, A. H., SOMSEN, G. Enthalpies of dilution of benzamide, cyclohexanecarboxamide, and N-acetyl-N'-methyl-L-cyclohexylalaninamide dissolved in N,

- N-dimethylformamide at 298.15 K *J. Chem. Thermodyn.* **21** (1989) 1301
- SZABÓ, K., MIKA, J. (ELTE Fizikai Kémiai Radiol. Tanszék, PF 32, H-1518 Budapest Hungary) Temperature dependence of electric double layer capacitance on liquid gallium electrodes *Magy. Kém. Foly.* **95** (1989) 427
- SZIRTES, L., POKO, Z., SHAKSHOOKI, S. K., AHMED, M., DEHAIR, A., BENHAMED, A. (Inst. Isotopes Has., POB 77, H-1525 Budapest Hungary) Thermal behaviour of mixed tetravalent metal salts. 1. Thermal decompositions of mixed zirconium titanium phosphates *J. Thermal Anal.* **35** (1989) 895
- TAKEDA, K., OGUNI, M., SUGA, H. (Shionogi Co. Ltd., Shionogi Res. Lab., 12-4 Sagisu 5-Chome, Fukushima Ku, Osaka 553 Japan) A DTA apparatus for vapour-deposited samples. Characterisation of some vapour-deposited hydrocarbons *Thermochim. Acta* **158** (1990) 195
- TAKENAKA, A., KOBAYASHI, H., TSUHIE, K., MOTOOKA, I., NARIAI, H. (Yonago Natl. Coll. Technol., Dept. Ind. Chem., Hikoma Cho, Yonago, Tottori 683 Japan) Thermal decomposition of ammonium copper(II) cyclo-hexaphosphate $\text{Cu}_2(\text{NH}_4)_2\text{P}_6\text{O}_{18} \cdot 8.5\text{H}_2\text{O}$ and ammonium calcium cyclo-hexaphosphate $\text{Ca}_2(\text{NH}_4)_{12}\text{P}_6\text{O}_{18} \cdot 7\text{H}_2\text{O}$ *Bull. Chem. Soc. Jpn.* **62** (1989) 3808
- TANAKA, S. (Natl. Chem. Lab. Ind., Yatabe, Ibaraki 305 Japan) Linear system theory of heat conduction calorimeter. Part 2. The inverse filter method in thermokinetics *Thermochim. Acta* **156** (1989) 117
- TAQUI KHAN, M. M., TAQUI KHAN, B., ALI, S. M. (Cent. Salt Marine Chem. Res. Inst., Discipline Coordinat. Chem. Homogeneous Catal., Bhavnagar 364002 Gujarat India) Thermodynamics of homogeneous hydrogenation. Part X. Thermodynamics of the homogeneous hydrogenation of cyclohexene catalysed by Ir(I) complexes of phosphine donor ligands *J. Mol. Catal.* **57** (1989) 29
- TAWFIK, A. (Tanta Univ., Fac. Sci., Dept. Phys., Tanta Egypt) Thermophysical properties of vanadium bronze polycrystals *J. Thermal Anal.* **35** (1989) 797
- THIAGARAJAN, R., SRIDHAR, S., RATRA, M. C. (Cent. Power Res. Inst., Div. Insulat., Bangalore 560012 India) Thermo-oxidative stability of polyethylene in the presence of ortho-cresol novolac *Polym. Degrad. Stabil.* **28** (1990) 153
- TITTOVA, K. V., KOLMAKOVA, E. I., ROSOLOVSKII, V. Y. (Acad. Sci. USSR, Inst. New Chem. Problems, Moscow V-71 USSR) Thermal and hydrolytic stability of $\text{KF} \cdot \text{H}_2\text{O}_2$ potassium fluoride peroxosolvate *Zh. Neorg. Khim. SSSR* **34** (1989) 3016
- TOSCANI, S., FIGUIERE, P., SZWARC, H. (Univ. Paris 11, Chim. Phys. Mat. Amorphes Lab., Cnrs, ura D1104 Bâtiment 490, F-91405 Orsay France) A magnetic-suspension apparatus to measure densities of liquids as a function of temperature at pressures up to 100 MPa. Application to n-heptane *J. Chem. Thermophys.* **21** (1989) 1263
- TROCHIMCZUK, A., KOLARZ, B. N. (Wroclaw Tech. Univ., Inst. Organ. Polymer Technol., Wyspianskiego 27, PL-50370 Wroclaw Poland) Thermal behaviour of acrylonitrile-butyl acrylate-divinylbenzene terpolymers *Polym. Commun.* **30** (1989) 369
- TSCHIERSKY, H., BALTES, W. (Tech. Univ. Berlin, Inst. Food Chem., D-1000 Berlin 12 Fed. Rep. Ger.) Curie-point pyrolysis and gas chromatography (mass spectrometry of 5,5'-oxydimethylenebis(2-furfural) *J. Anal. Appl. Pyrol.* **17** (1989) 91
- TSVETSKOVA, M. N., MALYGIN, A. A., KUCHAEVA, S. K., SKORIK, Y. I. (Leningrad Technol. Inst., Leningrad USSR) Pyrolysis of polydimethylsiloxane in glasses beaving phosphate groups *J. Appl. Chem. USSR* **62** (1989) 806
- TUGTEPE, M., ÖZGÜMÜS, S. (Istanbul Univ., Fac. Engn., Dept. Mech. Engn., Istanbul Turkey) Modified phenol-formaldehyde novolac resins: synthesis and thermal oxidative degradation. *J. Appl. Polym. Sci.* **39** (1990) 83

- TYE, R. P. (Holometrix Inc., Div. Thermaest, Cambridge MA 02139 USA) Measurements of thermal insulation performance: the challenge of the next decade *Int. J. Thermophys.* **11** (1990) 315
- UENO, A., NAKAMURA, J., ADACHI, K., OSA, T. (Tohoku Univ., Inst. Pharmaceut., Sendai, Miyagi 980 Japan) Temperature-induced reversal in helix sense of polyaspartates in solid film *Macromol. Chem. -Rap. Comm.* **10** (1989) 683
- URYU, T., SONG, J. C. (Univ. Tokyo, Inst. Ind. Sci., Minato Ku, Tokyo 106 Japan) Thermotropic liquid crystalline copoly(ester amide)s and copolyamides containing a flexible spacer in the main chain *Polym. J.* **21** (1989) 977
- UTSCHIK, H., GOTZSCHEL, K., JAHNIG, W. (Martin Luther Univ., Dept. Chem., DDR-4010 Halle Ger. Dem. Rep.) Thermoanalytical investigations on transition metal 2,4-dichlorophenoxyacetates *J. Thermal Anal.* **35** (1989) 925
- VALCARCE, R. V., SMITH, G. G., TORELL, J. M., EVANS, J. O. (Utah State Univ., Dept. Chem., Biochem., Logan UT 84322 USA) Differentiation of leafy spurge (*euphorbia esula* L) accessions based on chemical constitution using Curie-point pyrolysis- mass spectrometry-pattern recognition *J. Anal. Appl. Pyrol.* **17** (1989) 5
- VANTELON, J. P., BREILLAT, C., GABORIAUD, F., ALAOUÏ-SASSE, A. (Univ. Poitiers, Rech. Chim. Phys. Combust. Lab, Cnrs, UA 872, Domaine Defend, F-86800 St. Julien Lars France) Thermal degradation of Timahdit oil shales: behaviour in inert and oxidizing environments *Fuel* **69** (1990) 211
- VARMA, I. K., NAIR, M. V., KARAN, V. K. (Indian Inst. Technol., Ctr. Mat. Sci. Technol., New Delhi 110016 India) Thermal behaviour of copolymers of methyl methacrylate and isooctyl/iso-decyl methacrylate *J. Thermal Anal.* **35** (1989) 989
- VASILEV, V. G., LEBEDEV, B. V. (NI Lobachevskii State Univ., Chem. Res. Inst., Gorki USSR) Thermodynamics of butanal in O-330-K range *Zh. Obshch. Khim. SSSR* **59** (1989) 2415
- VINE, M. D., WORMALD, C. J. (Univ. Bristol, Sch. Chem., Bristol B58 1TS Avon England) The enthalpy of ethanol *J. Chem. Thermodyn.* **21** (1989) 1151
- VISWANATHAN, R., BALASUBRAMANIAN R., MATHEWS, C. K. (Indira Gandhi Ctr. Atom Res., Radiochem. Programme, Kalpakkam 603102 Tamil Nadu India) Vaporization thermodynamics of the metal-rich molybdenum telluride Mo₃Te₄: a high-temperature mass-spectrometric study *J. Chem. Thermodyn.* **21** (1989) 1183
- VOGLER, E. A. (Becton Dickinson Co., Res. Ctr., POB 12016, Res. Triangle PK, NC 27709 USA) A thermodynamic model of short-term cell adhesion in vitro *Colloid Surface* **42** (1989) 233
- WANG, D., WU, K., CAO, Y., ZHAI, R., GUO, X. (Chinese Acad. Sci., Dalian Inst. Chem. Phys., Catalysis Lab., POB 110, Dalian 116023 Peoples R China) The room temperature phase of propene on Rh(111): a caveat on thermal processing for the production of adsorbed phases at definite temperatures *Surface Sci.* **223** (1989) L 927
- WANG, X., GU, W., LU, L., YANG, X., HUA, W., SONG, Q., WU, P., HUANG, Y., MA, Y., CHAO, G., YANG, W. (E China Inst. Technol., Modern Chem. Lab., Nanjing Peoples R China) Reactions of H₂PtCl₆ on HY zeolite *Thermochim. Acta* **157** (1990) 321
- WATANABA, K. (Gunma Univ., Fac. Technol., Dept. Chem., Kiryu, Gunma 376 Japan) Current thermophysical properties research on refrigerant mixtures in Japan *Int. J. Thermophys.* **11** (1990) 432
- WATANABE, J., HAYASHI, M. (Tokyo Inst. Technol., Inst. Polymer Chem., Meguro Ku, Tokyo 152 Japan) Thermotropic liquid crystals of polyesters having a mesogenic p, p'-bibenzoate unit. 2. X-ray study on smectic mesophase structures of BB-5 and BB-6 *Macromolecules* **22** (1989) 4083

- WEI, Y., HSUEH, K. F. (Drexel Univ., Dept. Chem., Philadelphia PA 19104 USA) Thermal analysis of chemically synthesized polyaniline and effects of thermal aging on conductivity *J. Polym. Sci. A* 27 (1989) 4351
- WEIR, N. A., ARCT, J., MCCULLOCH, G. (Lakehead Univ., Dept. Chem., Thunder Bay, Ontario Canada P7B 5E1) Thermal degradation of keto polymers: Part II. - Poly (α -D-vinyl acetophenone) *Polym. Degrad. Stabil.* 28 (1990) 77
- WIBERG, K. B., CUNNINGHAM, W. C. (Yale Univ., Dept. Chem., New Haven, CT 06511 USA) Thermochemical studies of carbonyl reactions. 4. Enthalpies of hydrolysis of norbonyl ketals *J. Org. Chem.* 55 (1989) 679
- WILLIAMS, R. J., CARNAHAN, D. L. (Amer. Red Cross, Holland Res. Dev. Labs, 15601 Crabbs Branch Way Rockville MD 20855 USA) Association between ice nuclei acid fracture interfaces in sucrose: water glasses *Thermochim. Acta* 155 (1989) 103
- WILLIAMS, R. J., LEOPOLD, A. C. (Amer. Red Cross, Holland Res. Dev. Labs, 15601 Crabbs Branch Way Rockville MD 20855 USA) Glassy states in dormant corn embryos *Thermochim. Acta* 155 (1989) 109
- WILSON, L. J., MIKHAIL, S. A. (Canada Ctr. Mineral Energy Technol., Dept. Energy Mines Resources, Mineral Sci. Labs, Ottawa Ontario Canada K1A 0G1) Investigation of the oxidation of skutterudite by thermal analysis *Thermochim. Acta* 156 (1989) 107
- WOJCIK, A. B. (Marie Curie Skłodowska Univ., Inst. Chem., PL-20031 Lublin Poland) Porous bead aliphatic-aromatic methacrylate copolymers. VII. TG, DTA, DSC, and inverse gas chromatography studies *J. Appl. Polym. Sci.* 39 (1990) 179
- WOLCZYNSKI, W. (Polish Acad. Sci., Aleksander Krupkowski Inst. Met. Res., 25 Reymonta, PL-30059 Krakow Poland) Effect of temperature gradient on the lamellar structure formation *Cryst. Res. Tech.* 24 (1989) 1227
- WONG, H., CHENG, Y. C. (Univ. Hong Kong, Dept. Elect. Electr. Engn., Hong Kong) Temperature dependence of low-frequency noise in n-channel MOS transistors *Appl. Surf. Sci.* 39 (1989) 493
- WOOD, R. H. (Univ. Delaware, Dept. Chem. Biochem., Newark DE 19716 USA) Flow calorimetry and densitometry at high temperatures *Thermochim. Acta* 154 (1989) 1
- WYERS, G. P., CORDFUNKE, E. H. P., OUWELTJES, W. (Netherlands Energy Res. Fdn., POB 1, 1755 2G Petten Netherlands) The standard molar enthalpies of formation of the lithium zirconates *J. Chem. Thermodyn.* 21 (1989) 1095
- XIE, C. L., SUN, D. U., SONG, Z. H., QU, S. S., LIAO, Y. T., LIU, H. S. (Wuhan Univ., Dept. Chem., Wuhan Peoples R China) Thermochemical studies on cell metabolism. Part I. Thermal equations for the metabolism of resting cells *Thermochim. Acta* 158 (1990) 187
- YAMAMOTO, T., NOZAKI, K., HARA, T. (Yamaguchi Univ., Fac. Sci., Dept. Phys., Yamaguchi 753 Japan) X-ray and thermal studies on the rotator phases of normal higher alcohols C₁₇H₃₅OH, C₁₈H₃₇OH, and their mixtures *J. Chem. Phys.* 92 (1989) 631
- YAMAMURO, O., KURATOMI, N., MATSUO, T., SUGA, H. (Osaka Univ., Fac. Sci., Dept. Chem., Toyonaka Osaka 560 Japan) Heat capacity and phase transition of acetone clathrate hydrate *Solid State Commun.* 73 (1990) 317
- YANES, C., TEJEDA, P., MAESTRE, A. (Univ. Sevilla, Dept. Quim. Fis., Profesor Garcia Gonzalez S. N, E-41012 Sevilla Spain) Excess molar volumes and excess refractive indices of (cis-9-octadecenoic acid + n-hexane or cyclohexane or benzene or trichloroethene or tetrachloroethene) at 298.15 *J. Chem. Thermodyn.* 21 (1989) 1217
- YINGHONG, Z., JUNQIN, L., LINGMIN, Z. The isothermal section (500°C) of the phase diagram of the Al-Ho-Si ternary sys-

- tem. *J. Less. Common Metals* **157** (1990) 47
- YONG, W. J. (Nanjing Normal Univ., Dept. Chem., Nanjing 210024 Peoples R China) The GC study of the thermal decomposition of ammonium paramolybdate tetrahydrate in a hydrogen atmosphere *Thermochim. Acta* **158** (1990) 183
- YOSHIOKA, H., FUJITA, T., GOTO, A. (Shizuoka Coll. Pharmaceut. Sci., 2-2-1 Oshika, Shizuoka 422 Japan) Effect of glycyrrhizin on the phosphatidylcholine-water system ESR and calorimetric study *J. Colloid Interface Sci.* **133** (1989) 442
- YU, B. L. (Beijing Inst. Chem. Fibre Technol., Beijing 100013 Peoples R China) Thermoanalysis study of the lifetime of an auxiliary for chemical fibre *Thermochim. Acta* **158** (1990) 41
- ZAHN, D. R. T., RICHTER, W., MCLEAN, A. B., WILLIAMS, R. H., STEPHENS, C., MCGOVERN, I. T., CIMINO, R., BRAUN, W., ESSER, N. (Tech. Univ. Berlin, Inst. Festkorperphys., Hardenbergstr. 36, D-1000 Berlin 12 Fed. Rep. Ger.) Temperature effects on the formation of the Sb/InP(II0) interface *Appl. Surf. Sci.* **41-2** (1989) 179
- ZEBOLSKY, D. M. (Creighton Univ., Dept. Chem., Omaha NE 68178 USA) Calculation of H_m^E for binary mixtures: some consequences of the conversion of cubic equations of state to hard-sphere versions *Thermochim. Acta* **154** (1989) 107
- ZHANG, H., ZHANG, Z. (Beijing Univ., Dept. Chem., Beijing 100871 Peoples R China) Transition temperatures of thermotropic liquid-crystalline copolyesters *Macromol. Chem.* **190** (1989) 3167
- ZHANG, M. X., BACK, M. H. (Univ. Ottawa, Ottawa Carleton Chem. Inst., Dept. Chem., Ottawa Ontario Canada K1N 6N5) Rate constants for abstraction of hydrogen from ethylene by methyl and ethyl radicals over the temperature range 650-770 K *Int. J. Chem. Kin.* **22** (1990) 21
- ZHANG, Z. Y., YANG, M. L. (Northwestern Univ., Inst. Thermochem., Xian Peoples R China) Heat capacities and phase transitions of 1,1,1-trihydroxypropane and pentaerythritol over the superambient temperature range *Thermochim. Acta* **156** (1989) 157
- ZHITARIUK, N. I., KUZNETSOV, V. I., ZAGORETS, P. A. (Joint Inst. Nucl. Res., Nucl. React. Lab., POB 79 Moscow 101001 USSR) Temperature effects on the process of radiation-induced graft postpolymerization of styrene onto porous poly(ethylene terephthalate) films *Macromol. Chem.* **10** (1989) 613
- ZIVKOVIC, Z. D., MILOSAVLJEVIC, N., SESTÁK, J. (Univ. Belgrade, Tech. Fac. Bor, YU-19210 Bor Yugoslavia) Kinetics and mechanism of pyrite oxidation *Thermochim. Acta* **157** (1990) 215