

## Bibliography Section

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- AARON, J. J., TINE, A., VILLIERS, C., PÁRKÁNYI, C., BOUIN, D. (Univ. Dakar, Fac. Sci., Dept. Chim., Dakar, Senegambia): Electronic absorption and fluorescence spectra of indole derivatives. Quantitative treatment of the substituent effects and a theoretical study. *Croat. Chem. Acta* **56** (1983) 157
- ACHARYA, K., NAYAK, B. (Indian Inst. Technol., Dept. Chem. Kharagpur, 721302 W Bengal, India): Acid dissociation constants of monobromoanilinium ions in formamide. *Thermochim. Acta* **66** (1983) 377
- ADAMOVICZ, L., ZIELENKIEWICZ, W. (Polish Acad. Sci., Inst. Phys. Chem., Warsaw, 42 Poland): Thermal curve interpretation by spectral resolution into a basic set of rectangular pulse curves. 3. Resolution into other pulse curves. *J. Thermal Anal.* **26** (1983) 39
- AGHERGHINEI, I., LUCA, C., MIHAILA, G. (Petru Poni Inst. Macromolec. Chem., Iasi, Romania): Thermogravimetric analysis of inclusion compounds of perhydrotriphenylene with higher normal-alcohols. *J. Thermal Anal.* **26** (1983) 1
- AHRLAND, S., NILSSON, K., TAGESSON, B. (Univ. Lund, Ctr. Chem., S-22007 Lund 7 Sweden): Thermodynamics of the copper(II) halide and thiocyanate complex formation in acetonitrile. *Acta Chem. Scand.* **37** (1983) 193
- ALEKSANDROV, Y. A., LEBEDEV, S. A., KUZNETSOVA, N. V., TARAKANOVA, N. V. (N. I. Lobachevskii State Univ., Chem. Res. Inst., Gorki, USSR): Thermal decomposition of cadmium alkyl diperoxides in aromatic hydrocarbons. *Zh. Obshch. Khim.* **53** (1983) 1564 (in Russian)
- ALEKSEEV, A. I.: Thermodynamic and experimental analysis of the system  $\text{CaO}-\text{Al}_2\text{O}_3-\text{Na}_2\text{O}-\text{H}_2\text{O}$  at 25–95°C. *J. Appl. Chem. USSR transl. Zh. Prikl. Khim.* **55** (1982) 2260
- ALEKSEEV, A. I., BARINOVA, L. D.: Values of the thermodynamic properties of the double carbonate  $\text{Na}_2\text{CO}_3 \cdot \text{MgCO}_3$ . *J. Appl. Chem. USSR transl. Zh. Prikl. Khim.* **56** (1983) 5
- ALEXANDER, A. J., GOGGIN, P. L., COOKE, M. (Univ. Alberta, Dept. Chem., Edmonton, Alberta, T6G 2G2 Canada): A Fourier-transform infrared spectrometric study of the pyrosynthesis of nickel tetracarbonyl and iron pentacarbonyl by combustion of tobacco. *Anal. Chim. Acta* **151** (1983) 1
- ALLEGRA, G., BRUZZONE, M. (Politecn. Milan, Ist. Chim., I-20133 Milan, Italy): Effect of entropy of melting on strain-induced crystallization. *Macromolecules* **16** (1983) 1167
- ALLEN, N. S., FATINIKUN, K. O., HENMAN, T. J. (Manchester Polytech., John Dalton Fac. Technol., Dept. Chem., Manchester, M1 5GD Lancs, England): Thermal and photochemical oxidation of polypropylene. Influence of residual catalyst levels in unestablished diluent and gas phase polymers. *Eur. Polym. J.* **19** (1983) 551
- AL-NIEMA, S. A., ADAM, G. A., AL GATTA, H. K. (c/o G. A. Adam, Univ. Basrah, Coll. Sci., Dept. Chem., Basrah, Iraq): Synthesis and characterisation of some new plasticisers. *Thermochim. Acta* **68** (1983) 35
- ALPERIN, D. M., CARMINATTI, H., IDOYAGA-VARGAS, V., COUSO, R. O. (c/o H. Carminatti, Univ. Buenos Aires, Inst. Invest. Bioquim. FON Campomar, RA-1428 Buenos Aires, Argentina): Thermal-ultraviolet method for differential detection of recovery of organic compounds in thin-layer chromatography. *J. Chromatogr.* **265** (1983) 193

- ALT, H. G., MAHMOND, K. A., REST, A. J. (Univ. Bayreuth, Anorgan. Chem. Lab., D-8580 Bayreuth, GFR): Photolysis of the cyclopentadienyl(hydrido) complexes  $C_5H_5(CO)_3H$  (M = Cr, Mo, W) in matrices and in solution characterization of  $[C_5H_5W(CO)_2H]_2$ . *Angew. Chem. Int. Ed.* **22** (1983) 544
- ANDRIEVSKII, R. A., KHROMOV, Y. F., SVISTUNOV, D. E., YURKOVA, R. S.: Partial thermodynamic characteristics of titanium nitride. *Zh. Fiz. Khim.* **57** (1983) 1641 (in Russian)
- ANKAWI, A. A., BARK, L. S. (Univ. Salford, Ramage Labs., Salford, M5 4 WT Lancs, England): The determination of the oral form of 5-chloro-7-iodo-8 hydroxyquinoline (Clioquinol). *J. Thermal Anal.* **26** (1983) 139
- ANTONINI, E., BRUNORI, M., COLOSIMO, A., KUIPER, H. A., ZOLLA, L. (Univ. Rome, Ctr. Molec Biol., Inst. Chem., I-00185 Rome, Italy): Kinetic and thermodynamic parameters for oxygen binding to the allosteric states of panulines interruptus hemacyanim. *Biophys. Chem.* **18** (1983) 117
- ARATSKOVA, A. A., KISELEV, A. V., YASHIN, I. (Acad. Sci. USSR, Inst. Phys. Chem., Surface Chem. Lab., Moscow, 117071 USSR): Thermodynamic characteristics of the activity of selected chromatographic sorbents. *Chromatographia* **17** (1983) 315
- ARBAD, B. R. (Deogiri Coll., Dept. Chem., Aurangabad, 431001 India): Thermodynamic of complex formation: stabilities of complexes of copper(II) with dipeptides in aqueous media. *Indian J. Chem. A* **22** (1983) 507
- ARENA, G., BONOMO, R. P., MUSUMECI, S., PURRELLO, R., RIZZARELLI, E., SAMMARTANO, S. (c/o E. Rizzarelli, Univ. Catania, Ist. Dipartimentale Chim. and Chim. Ind., I-95125 Catania, Italy): Thermodynamic and spectroscopic properties of mixed-ligand complexes of copper(II) with pyridine 2,2-bipyridyl and 2,2'-6'-2'-terpyridyl in aqueous solution. *J. Chem. Soc. Dalton Trans. Inorg. Chem.* (1983) 1279
- ARENA, G., CALI, R., CUCINOTTA, V., MUSUMECI, S., RIZZARELLI, E., SAMMARTANO, S. (c/o E. Rizzarelli, Univ. Catania, Ist. Dipartimentale Chim. and Chim. Ind., I-95125 Catania, Italy): Thermodynamics of metal complexes with ligand-ligand interaction, simple and mixed complexes of copper(II) and zinc(II) with adenosine-5'-triphosphate and L-triptophan or L-alanine. *J. Chem. Soc. Dalton Trans. Inorg. Chem.* (1983) 1271
- ASADOV, M. M. (Acad. Sci. AzSSR, Inst. Phys., Baku, AzSSR): Thermodynamic properties of Hg-Te-Se ternary system. *Zh. Fiz. Khim.* **57** (1983) 1795 (in Russian)
- ASATIANI, L. P., EL-AGAMEY, A. A., DIAB, M. A. (Tbilisi State Univ., Tbilisi, GeSSR): Synthesis and thermal analysis of some oligomeric silicon derivatives of ferrocene. *J. Polym. Sci. Polym. Chem. Ed.* **21** (1983) 2539
- AVAEV, A. A. (Vologda Polytech. Inst., Dept. Higher Math., Vologda, USSR): Mathematical model of the vulcanization process of polymeric coatings on fabrics under connective heat-exchange conditions. *Izv. Vyssh. Uch. Zav.* **26** (1983) 869 (in Russian)
- AVVAKUMOV, E. G., KOSOVA, N. A., ALEKSANDROV, V. V. (Acad. Sci. USSR, Inst. Solid State Chem. and Raw Mineral Proc., Novosibirsk, USSR): The influence of mechanical activation on decomposition of lead dioxide. *Izv. Sibirsk. Otdel. Akad. Nauk A* (1983) 25 (in Russian)
- BAEV, A. K., FEDULOVA, L. G. (S. M. Kirov Technol. Inst., Minsk, BeSSR): Thermodynamic study of the complex formation process in the nickel carbonyl-iron pentacarbonyl system. *Zh. Fiz. Khim.* **57** (1983) 1905 (in Russian)
- BAKANOV, S. P., VYSOTSKII, V. V. (Acad. Sci. USSR, Inst. Phys. Chem., Dept. Surface Phenomena, Moscow, V-71 USSR): Thermal polarization of solids in a rarefied gas flow. *Colloid J. USSR* transl. *Kolloidn. Zh.* **44** (1982) 1014
- BAKLANOV, A. V., KOSTYGIN, V. A., PETROV, A. K. (Acad. Sci. USSR, Inst. Chem. Kinet. and Combust, Novosibirsk, USSR): Determination of the kinetic parameters for the thermal decomposition of 1-chloro-2-fluoroethane, 1-chloro-3-fluoropropane and 1-chloro-4-fluorobutane. *Kinet. Catal.* transl. *Kinet. Katal.* **23** (1982) 886
- BALINT, I., SEGAL, E., BUCUR, I., CHIRULESCU, T. (Polytech. Inst. Bucharest,

- Fac. Chem. Engn., Chair Phys. Chem. and Electrochem. Technol., Bucharest, Romania): Non-isothermal kinetics in thermal desorption. *Thermochim. Acta* 67 (1983) 103
- BANERJEE, B., BISWAS, P. K., CHAUDHURI, N. R. (c/o N. R. Chaudhuri, Indian Assoc. Cultivat. Sci., Dept. Inorgan. Chem., Calcutta, 700032 W Bengal, India): Thermal studies of nickel(II) hydrazine complexes in solid state. *Bull. Chem. Soc. Jap.* 56 (1983) 2509
- BANYAVICHYS, R. B., BARAUSHAS, A. I., AMBRAZYAVICHYUS, A. V., ASHADSKII, A. A. (A Snechkus Polytech. Inst., Kailinas, USSR): Study of regularities of viscoelastic behaviour of heat-resistant polymers. *Vysokomol. Soedin.* 25 (1983) 1436
- BARBE, W., RÜCHARDT, C. (c/o C. Ruchardt, Univ. Freiburg, Chem. Lab., D-7800 Freiburg, GFR): Aliphatic azocompounds. 14. Kinetic analysis of the thermal decomposition of aliphatic azonitriles. *Makromol. Chem.-Macro Chem. Phys.* 184 (1983) 1235
- BARBUCCI, R., CASOLARO, M., BARONE, V., FERROTI, P., TRAMONTINI, M. (Univ. Siena, Ist. Chim. Gen., I-53100 Siena, Italy): Macroinorganics. 9. Enthalpies of protonation and copper(III) complex formation of some poly(amido amines). *Macromolecules* 16 (1983) 1159
- BARNES, P. A., STEPHENSEN, G., WARRINGTON, S. E. (Leeds Polytech., Sch. HLTH and Appl. Sci., Chem. Sect., Leeds LS1 3HE W Yorkshire, England): The use of TA-GLC-MS as a quantitative specific EGA technique for the investigation of complex thermal decomposition reactions the thermal decomposition of calcium propanoate. *J. Thermal Anal.* 25 (1982) 299
- BARTON, D., HODGETT, M., SKIRVING, P., WHELTON, M., WINTER, K., VARDY, C. (New Univ., Newfoundland, Dept. Chem., St. Johns, Newfoundland, A 18 37 Canada): The thermal decomposition of azobenzene. *Can. J. Chem.* 61 (1983) 1712
- BECKMANN, W., ROUQUERD, F., BECKMANN, H. (Tech. Univ. Braunschweig, Inst. Phys. Chem., D-3300 Braunschweig, GFR): Calorimetric determination of the heats of dissolution of stearic acid in some organic solvents. *Thermochim. Acta* 66 (1983) 295
- BEKMURATOVA, E. M., POZHANOV, S. L., KHABIBULLAEV, P. K.: Thermodynamic parameters of formation reactions of alkali hydrates and halogenous ions. *Zh. Fiz. Khim.* 57 (1983) 1928 (in Russian)
- BENEDETTI, A. V., CILENSE, M., VOLLET, D. R., MONTONE, R. C. (Univ. Nacl. Estadual São Paulo Inst. Quim. Araraquara, Dept. Fis. Quim., BR-14800 Araraquara, Sp. Brazil): Thermodynamic properties of liquid mixtures. III. Acetone-water. *Thermochim. Acta* 66 (1983) 219
- BERNAL, S., BOTANA, F. J., GARCIA, R., RODRIQUEZ-IZQUIERDO, I. M. (Univ. Cadiz, Fac. Ciencias, Dept. Quim. Inorgan., Cadiz, Spain): Thermal evolution of a sample of La<sub>2</sub>O<sub>3</sub> exposed to the atmosphere. *Thermochim. Acta* 66 (1983) 139
- BEYER, R. P. (Us Bur Mines, Albany Res. Ctr., POB 70 Albany, Oreg., 97321 USA): Heat capacity of zinc oxyulfate from 7.5 to 309.4 K with a transition from 270 to 306 K. *J. Chem. Thermodyn.* 15 (1983) 835
- BEYER, R. P., FERRANTE, M. J., MRAZEK, R. V. (Us Bur Mines, Albany, Oreg., 97321 USA): An automated calorimeter for heat-capacity measurements from 5 to 300 K. The heat capacity of cadmium sulfide from 5.37 to 310.8 K and the relative enthalpy to 1103.4 K. *J. Chem. Thermodyn.* 15 (1983) 827
- BHADANI, S. N., TSENG, S., GRAY, D. G. (c/o D. G. Gray, Pulp and Paper Res. Inst. Canada, Montreal, Quebec, H3A 2A7 Canada): Lyotropic and thermotropic liquid-crystalline phase formation from fractions of a semiflexible cellulosic polymer. *Makromol. Chem.-Macro Chem. Phys.* 184 (1983) 1727
- BHATIA, V. K., SRIVASTAVA, G. S., GARG, V. K., GUPTA, Y. K., RAWAT, S. S., SINGH, J. (Indian Inst. Petr., Dehra Dun, 248005 Uttar Pradesh, India): Study of laticiferous (latex-bearing) plants as potential petro-crops. *Fuel* 62 (1983) 953
- BINNEWIES, M. (Univ. Münster, Inst. Anorgan. Chem., D-4400 Münster, GFR): The formation and stability of gaseous POCl. *Thermochim. Acta* 67 (1983) 387
- BLACHNIK, R., ENNINGA, E. (Univ. Gesamthsch. Siegen, Fachbereich Chem. Biol., D-5900 Siegen, 21 GFR): Thermochemical investigations on mixtures of some lanthanoids

- halides with CuCl, AgCl, TlCl. *Z. Anorg. Allg. Chem.* **503** (1983) 133
- BLAINE, R. L., FAIR, P. G. (Dupont Co., Div. Clin. and Instrument. Syst., Wilmington, Del., 19898 USA): Estimate of the "true" magnetic transition temperatures for the ICTA reference materials GM 761. *Thermochim. Acta* **67** (1983) 233
- BLAZEJOWSKI, J., SZYCHLINSKI, J., KOWALEWSKA, E. (Univ. Gdansk, Inst. Chem., PL-80952 Gdansk, Poland): Thermal reactions of Ied(IV) chloride complexes in the solid state. V. Thermolysis of mono-n-alkylammonium hexachloroplumbates. *Thermochim. Acta* **66** (1983) 197
- BODDINGTON, T., GRAY, P., FENG, C. G. (c/o P. Gray, Univ. Leeds, Sch. Chem., Leeds, LS2 9JT W Yorkshire, England): Thermal explosion, times to ignition and near-critical behaviour in uniform temperature systems. 2. Generalized dependences of rates on temperature and concentration. *J. Chem. Soc. Faraday Trans. II* **79** (1983) 1299
- BODDINGTON, T., GRAY, P. SCOTT, S. (Univ. Leeds, Sch. Chem., Leeds LS2 9JT W Yorkshire, England): Comment: temperature profiles for reactions with self-heating thermal explosion in the sphere. *Can. J. Chem.* **61** (1983) 1944.
- BOMMANAVAR, A., MONTANO, P. A. (W Virginia Univ., Dept. Phys., Morgantown, W. Va., 26506 USA): Pyrite decomposition in fresh blackswille coal: effect of additives. *Fuel* **62** (1983) 932
- BONNER, O. D., NUNN, N. M., WANG, J. M. (Univ. S Carolina, Dept. Chem., Columbia, S. C., 29208 USA): Excess enthalpy and entropy of aqueous methyl-substituted ammonium nitrate and tetramethylguanidinium nitrate. *Thermochim. Acta* **67** (1983) 205
- BOPP, R. C., GAUR, U., KAMBOUR, R. P., WUNDERLICH, B. (Rensselaer Polytech. Inst., Dept. Chem., Troy, N. Y., 12181 USA): Effect of bromination on the thermal properties of poly(2,6-dimethyl-1,4-phenylene oxide). *J. Thermal Anal.* **25** (1982) 243
- BORDAS, S., GELI, M., CLAVAGUERA-MORA, M. T., CLAVAGUERA, N. (Univ. Autonoma Barcelona, Fac. Ciencias, Bellaterra, Spain): Calorimetric study of crystallization in  $(\text{GeSe}_2)_x(\text{GeTe}_4)_{1-x}$  glasses. *J. Non-Cryst. Solids* **57** (1983) 195
- BORZONE, G., BORSESE, A., ZANICCHI, G., FERRO, R. (Univ. Genoa, Ist. Chim. Gen., I-16126 Genoa, Italy): Determination of heats of formation of praseodymium antimonides. *J. Thermal Anal.* **25** (1982) 433
- BOSSI, A., CATTALANI, A., GABRASSI, F., PETRINI, G., ZANDERIGHI, L. (c/o F. Gabrassi, Ctr. Ricerche Novara, Ist. Guido Donegani Spa, Via G. Fauser 4, I-28100 Novara, Italy): The interaction of ruthenium with a MgO matrix. *J. Thermal Anal.* **26** (1983) 81
- BOUDART, M. (Stanford Univ., Dept. Chem. Engr. Stanford, Calif., 94305 USA): Thermodynamic and kinetic coupling of chain and catalytic reactions. *J. Phys. Chem.* **87** (1983) 2786
- BRADLEY, D. J., PITZER, K. S.: Thermodynamics of electrolytes. 12. Dielectric properties of water and Debye-Hückel parameters to 350 °C and 1 Kbar. *J. Phys. Chem.* **87** (1983) 3798
- BRAR, A. S., SANDHU, H. S., SANDHU, S. S. (Indian Inst. Technol., Dept. Chem. New Delhi, 110016 India): Mössbauer studies of thermal decomposition of metal(II) hexacyanoferrates(II). *J. Thermal Anal.* **26** (1983) 7
- BRZYSKA, W., KULA, A. (Marie Curie Skłodowska Univ., Inst. Chem., Dept. Inorgan. and Gen. Chem., PL-20031 Lublin, Poland): Thermal decomposition of Y, La and light lanthanide ferulates. *J. Thermal Anal.* **25** (1982) 531
- BUDHOV, V. P., OTRADINA, G. A., RYVKIN, G. A., FEDOROVICH, Y. A. (Plastpolymer Sci. Ind. Assoc., Moscow, USSR): On specific change of molecular mass of copolymer of vinylidene fluoride with tetrafluoroethylene under durable action of high temperature. *Vysokomol. Soedin. B* **25** (1983) 530 (in Russian)
- BURFIELD, D. R., LIM, K. L. (Univ. Malaya, Dept. Chem., Kuala Lumpur, 2211 Malaysia): Differential scanning calorimetry analysis of natural rubber and related polyisoprenes. Measurement of the glass transition temperature. *Macromolecules* **16** (1983) 1170
- CABANI, S., CECCANTI, N., CONTI, G. (Univ. Pisa, Inst. Phys. Chem., I-56100 Pisa,

- Italy): Thermodynamic studies on the addition of molecular oxygen to cobalt(II) complexes. 1. The cobalt(II) ethylenediamine-oxygen system in aqueous solution at 25°C. *J. Chem. Soc. Dalton Trans. Inorg. Chem.* (1983) 1247
- CAMPANELLI, A. R., FERRO, D., GIGLIO, E., IMPERATORI, P., PIACENTE, V. (Univ. Rome, Ist. Chim. Fis., I-00185 Rome, Italy): Thermal and X-ray study of sodium deoxycholate crystal and fibre. *Thermochim. Acta* 67 (1983) 223
- CAMPBELL, D. A., ZOCHOWSKI, Z. M., WYATT, P. A. H. (Univ. St. Andrews, Dept. Chem., St. Andrews, KY 16 9ST Fife, Scotland): The phase diagram of the system  $\text{La}_2(\text{SO}_4)_3$   $\text{Ag}_2\text{SO}_4$ . *Thermochim. Acta* 67 (1983) 73
- CARIATI, F., ERRE, L., MICERA, G., PANZANELLI, A., PIU, P. (c/o A. Panzanelli, Univ. Sassari, Ist. Chim. Gen. and Inorgan., I-07100 Sassari, Italy): Interaction of metal with humic-like models. 2. Thermal properties of hexaaquametal(III) bis(2,6-dihydroxybenzoate) dihydrate complexes. *Thermochim. Acta* 66 (1983) 1
- CASTAGNOLO, M., PETRELLA, G., INGLESE, A., SACCO, A., DELLA MONICA, M. (Univ. Bari, Dept. Chem., I-70126 Bari, Italy): Enthalpies of solution of some univalent electrolytes in hexamethylphosphotriamide at 298.15 K. *J. Chem. Soc. Faraday Trans. 1* 79 (1983) 2211
- CASTANET, R., CHASTEL, R., BERGMAN, C. (CNRS, Ctr. Thermodynam. and Microcalorimetric, 26 Rue 141 EME Ria, F-13003 Marseille, France): Thermodynamic investigation of (a transition metal + germanium or silicon)II. (Palladium + silicon) alloys. *J. Chem. Thermodyn.* 15 (1983) 773
- CHAUVET, A., MASSE, J. (Fac. Pharm. Montpellier, Chim. Gen. and Minerale Lab., F-34060 Montpellier, France): Interactions de substances psychotropes a l'état solide. I. Etude des mélanges binaires phenprobamate acide acétylsalicylique et méprobamate(I)—acide acétylsalicylique. *Thermochim. Acta* 66 (1983) 11
- CHAUVET, A., MASSE, J. (Fac. Pharm. Montpellier, Chim. Gen. and Minerale Lab., F-34060 Montpellier, France): Interactions de substances psychotropes a l'état solide. II. Etude des mélanges binaires méprobamate(I)—chlorhydrate de d'anitriptylene(I), méprobamate(I)—chlorhydrate de clomipramine(I) et méprobamate(I)—dichlorhydrate de fluphèrazine. *Thermochim. Acta* 66 (1983) 25
- CHEN, Y. Y., OSHIMA, R., KUMANOTANI, J. (c/o J. Kumanotani, Univ. Tokyo, Inst. Ind. Sci., Minato ku, Tokyo, 106 Japan): Thermally derived dimers of o-vinylphenol: trans and cis-2'-hydroxy-4-methylflavans. *Bull. Chem. Soc. Jap.* 56 (1983) 2533
- CHERNAVSKII, P. A., DOBROSERDOVA, N. B., RUZNETSOVA, N. N., CHETINA, O. V., LUNIN, V. V. (M. V. Lomonosov State Univ., Fac. Chem., Moscow, 117234 USSR): Influence of the conditions of redox treatment on the surface state and catalytic properties of the intermetallic hydride of ZrNi in the hydrogenation of 1-hexene. *Kinet. Catal. transl. Kinet. Katal.* 23 (1982) 954
- CHERNOMORDIK, L. I., EGOROV, B. F., SHALYAPIN, N. K., GUR'EV, V. M.: Thermometric analysis of the quality of mixing of the feed in heterogeneous exothermic catalysis. *J. Appl. Chem. USSR transl. Zh. Prikl. Khim.* 56 (1983) 177
- CHOY, C. L., HO, M., PORTER, R. S. (Chinese Univ. Hong Kong, Dept. Phys., Shatin, Hong Kong): Thermal expansivity of oriented poly(ethylene terephthalate). *J. Polym. Sci. Polym. Phys. Ed.* 21 (1983) 1427
- CHRISTENSEN, J. J., CHRISTENSEN, S. P., SCHOFIELD, R. S., FAUX, P. W., HARDING, P. R. IZATT, R. M. (Brigham Young Univ., Dept. Chem. Engr., Provo, Utah, 84602 USA): The excess enthalpies of liquid freon-22 + N,N-dimethylacetamide mixtures from 3 + 3 to 423 K at 5,5 MPa. *Thermochim. Acta* 67 (1983) 315
- CHUCHANI, G., DOMINIQUEZ, R. M. (Inst. Venezolano Invest. Gent., Ctr. Quim., Caracas, 1010 A Venezuela): The kinetics and mechanisms of the gas-phase pyrolysis of ethyl 4-bromobutyrate. The ion-pair mechanism revisited. *Int. J. Chem. Kinet.* 15 (1983) 795
- CIBA, J., SYCZ, J., TRZCIONKA, J. (Silesian Tech. Univ., Dept. Analyt. and Gen. Chem., PL-44101 Gliwice, Poland): Study of the thermal properties of derivatives of sulfonamides. *J. Thermal Anal.* 26 (1983) 145
- CIFRA, P., ROMANOV, A. (Slovak Acad. Sci. Ctr. Chem. Res. Inst. Polymer, CS-84236

- Bratislava, Czechoslovakia): Thermodynamic model of association between polymer and small molecules in solution. *Polymer* **24** (1983) 234
- CLARK, P. D., HYNE, J. B., TYRER, J. D. (Univ. Calgary, Dept. Chem., Calgary, Alberta, T2N 1N4 Canada): Chemistry of organo-sulphur compound types in heavy oil sands. 1. High temperature hydrolysis and thermolysis of tetrahydrothiophene in relation to steam stimulation processes. *Fuel* **62** (1983) 959
- COLACIO-RODRIGUEZ, E., SALAS-PEREGRIN, J. M., SANCHEZ-SANCHEZ, M. P., MATA-ARJONA, A. (c/o J. M. Salas-Peregrin, Univ. Granada, Dept. Inorgan. Chem., Granada, Spain): Thermal studies on purine complexes. II. Thermal behaviour of some metal complexes of theophylline. *Thermochim. Acta* **66** (1983) 245
- COONEY, J. D., DAY, M., WILES, D. M. (Nat. Res. Council Canada, Div. Chem., Ottawa, Ontario, K1A 0R6 Canada): Thermal degradation of poly(ethylene terephthalate): a kinetic analysis of thermogravimetric data. *J. Appl. Polym. Sci.* **28** (1983) 2887
- COQUET, E., CRETTEZ, J. M., PANNETIER, J., BOUILLLOT, J., DAMIEN, J. C. (Fac. Sci. Dijon, Opt. Reseau Kristallin Lab., F-21000 Dijon, France): Effect of temperature on interatomic distances in pyroelectric  $\alpha$ -LiIO<sub>3</sub>. *Acta Crystallogr. B* **39** (1983) 408
- CORAIN, B., BASATO, M., VISCATIA, G., ZANOTTI, G. (CNR, Ist. Chim. Analit., Ctr. Studio Stabilita and Reattivita Composti Coordinazione, I-35100 Padua, Italy): The reactivity of cyanogen towards compounds containing active hydrogens at carbon atoms. 3. Synthesis of bis[1-cyano-2-(1-iminoethyl) butane 1,3-dionato]copper(II) from cyanogen and bis(acetylacetonato) copper(II): kinetics thermodynamics and X-ray crystal structure. *J. Chem. Soc. Dalton Trans. Inorg. Chem.* (1983) 1217
- COSTA, L., CAMINO, G., TROSSARELLI, L. (Univ. Turin, Ist. Chim. Macromolec., I-10125 Turin, Italy): Thermal degradation of fire retardant chloroparaffin-metal compound mixtures. II. Bismuth compounds. *Polym. Degrad. Stabil.* **5** (1983) 355
- COSTA, L., CAMINO, G., TROSSARELLI, L. (Univ. Turin, Ist. Chim. Macromolec., I-10125 Turin, Italy): Thermal degradation of fire retardant chloroparaffin-metal compound mixtures. III. A comparison of the behaviours of antimony trioxide and bismuth compounds. *Polym. Degrad. Stabil.* **5** (1983) 367
- COWIE, J. M. G., FERGUSON, R., McEWEN, I. J., PEDRAM, M. Y. (Univ. Stirling, Dept. Chem., Stirling, FK9 4LA Scotland): Theoretical description of the heat capacity change at the lower glass transition temperature of poly(alkyl itaconates) exhibiting dual glass transition behavior. *Macromolecules* **16** (1983) 1155
- COWIE, J. M. G., McEWEN, I. J., PEDRAM, M. Y. (Univ. Stirling, Dept. Chem., Stirling, FK9 4LA Scotland): Heat capacity measurement on polymers and copolymers of itaconic acid esters exhibiting two glass transitions. *Macromolecules* **16** (1983) 1151
- CUDEY, G., SCHUFFENECKER, L., BOURDET, J. B., LOZAR, J. (Univ. Sci. and Technol. Houari Boumediene, Inst. Chim., Thermodynam. Solut. Lab., Dar El Beida, Algeria): Etude par potentiométrie et par calorimétrie des équilibres de substitution par les ions bromines des atomes de chlore des complexes de l'or trivalent en milieux aqueux a 25 °C. *Thermochim. Acta* **67** (1983) 1
- DAUENGAUER, S. A., SAZANOV, Y. N., SHIBAEV, L. A., BULINA, T. M., STEPANOV, N. G. (Acad. Sci. USSR, Inst. Macromolec. Cpds, Leningrad, USSR): Complexes of acid amides with polar aprotic solvents. 2. Thermal analysis of the complexes of bis(N-phenyl)-pyromellitic acid amide with dimethylformamide, dimethylacetamides, N-methylpyrrolidone and dimethylsulfoxide. *J. Thermal Anal.* **25** (1982) 441
- DEBORD, J., LABADIE, M., BOLLINGER, J. C., YVERNAULT, T. (Fac. Med. Limoges, Biochim. Med. Lab., F-87032 Limoges, France): Etude microcalorimétrique de l'inhibition de cholinestérase par quelques phosphoramides aliphatiques. *Thermochim. Acta* **66** (1983) 323
- DE LOOS-VOLLEBREGT, M. T. C., DE GALAN, L., VAN UFIENEN, J. W. M., SLAVIN, W., MANNING, D. C. (TH Delft, Analyt. Scheikunde Lab., POB 5029 2600 GA Delft, Netherland): Heating characteristics of glassy carbon tubes used in electrothermal

- atomization—atomic absorption spectrometry. *Spectrochim. Acta B* 38 (1983) 799
- DESHPANDE, D. A., GHORMARE, K. R., DESHPANDE, N. D., TANKHIWALE, A. V. (Dr. Ambedkar Coll., Dept. Phys., Nagpur, 440010 India): Dehydranon of crystalline  $K_2CO_3 \cdot 15 H_2O$ . *Thermochim. Acta* 66 (1983) 255
- DESHPANDE, D. A., GHORMARE, K. R., DESHPANDE, N. D., TANKHIWALE, A. V. (Dr. Ambedkar Coll., Dept. Phys., Nagpur, 440010 India): D. c. electrical conductivity and dielectric constant measurements on crystalline  $K_2CO_3 \cdot 15 H_2O$ . *Thermochim. Acta* 66 (1983) 267
- DE WIT, H. G. M., DE KRUIF, G. G., VAN MILTENBURG, J. C. (State Univ. Utrecht, Chem. Thermodynam. Grp., Struct. Chem. Grp. Gen. Chem. Lab., 3584 CH Utrecht, Netherlands): Thermodynamic properties of molecular organic crystals containing nitrogen, oxygen and sulphur. II. Molar heat capacities of eight compounds by adiabatic calorimetry. *J. Chem. Thermodyn.* 15 (1983) 891
- DIETZ, G., HÜLLER, K., JUNG, K. (Univ. Cologne, Inst. Phys., 2 D-5000 Cologne, 41 GFR): Isothermal changes of volume and Young's modulus of amorphous Co—P. *J. Non-Cryst. Solids* 57 (1983) 265
- DOBRESCU, V. E., RADOVICI, C. (Icechim., Chem. Res. Inst., 202 Splaiul, Independentel, Bucharest, Romania): Temperature dependence of melt viscosity of polymers. *Polym. Bull.* 10 (1983) 134
- DOERING, D. L., SEMANCIK, S. (NBS, Div. Surface Sci., Washington, D. C., 20234 USA): Low-temperature ordering sodium overlayers on Ru(001). *Surface Sci.* 129 (1983) 177
- DONDUR, V., VUČELIĆ, D. (Univ. Belgrade, Fac. Sci. and Math., Inst. Gen. and Phys. Chem., Inst. Phys. Chem., Belgrade, Yugoslavia): An approach to the kinetics of water desorption from A-zeolites. I. Isothermal and non-isothermal desorption. *Thermochim. Acta* 68 (1983) 91
- DONDUR, V., VUČELIĆ, D. (Univ. Belgrade, Fac. Sci. and Math., Inst. Gen. and Phys. Chem., Inst. Phys. Chem., Belgrade, Yugoslavia): An approach to the kinetics of water desorption from A-zeolites. II. Resolution of the complex dehydration process to elementary reactions. *Thermochim. Acta* 68 (1983) 101
- DONDUR, V., VUČELIĆ, D. (Univ. Belgrade, Fac. Sci. and Math., Inst. Gen. and Phys. Chem., Inst. Phys. Chem., Belgrade, Yugoslavia): An approach to the kinetics of water desorption from A-zeolites. III. Thermodesorption of complexes with non-uniform activation energies. *Thermochim. Acta* 68 (1983) 113
- DRABIK, M., ZURKOVA, L., GOLJER, I. (Slovak Acad. Sci., Inst. Inorgan. Chem., CS-84236 Bratislava, Czechoslovakia): Thermal reactivity and H-1 NMR spectroscopy of  $Sr_{1-x}H_{2x}V_6O_{16}aq$ . *J. Thermal Anal.* 26 (1983) 73
- DUBEY, S. N., BEWEJA, R. K., PURI, D. M. (Kurukshetra Univ., Dept. Chem. Kurukshetra, 132119 Haryana, India): Thermodynamic study of the complex formation of manganese(II) and cobalt(II) ions with thiodiacetic acid, thiopropionic acid and diglycolic acid and of cobalt(II) with iminodiacetic. *Indian J. Chem. A* 22 (1983) 450
- DUBININ, M. M., ANDREEVA, G. A., VARTEPETYAN, R. S., VNUKOV, S. P., NIKOLAEV, K. M., POLYAKOV, N. S., SEREGINA, N. I., FEDOSEEV, D. V. (D. I. Mendeleev Chem. Technol. Inst., Moscow, USSR): Adsorption of water and the micropore structures of carbon adsorbents. 5. Pure structure parameters of thermally treated carbon adsorbents and the adsorption of water vapor on these materials. *Bull. Acad. Sci. USSR Div. Chem. Sci. transl. Izv. Akad. Nauk SSSR Khim.* 31 (1982) 2133
- DUDINA, L. A., ANISKINA, T. A., YEFREMOVA, A. I., ZOLOTUKHIN, S. P., IRRZHAK, V. I., IVANOVA, L. L., PONOMAREVA, T. I., SHTEINBERG, V. G., ROZENBERG, B. A. (c/o T. A. Aniskina, Acad. Sci. USSR, Inst. Chem. Phys., Chernogolovka, USSR): On heat-resistance of polymeric compositional materials with fibered fillers. *Vysokomol. Soedin. B* 25 (1983) 594 (in Russian)
- DUTKA, V. S., TSVETKOV, N. S., MARKOVSKAYA, R. F. (I. Franko State Univ., Lvov, UkSSR): Effect of the reaction medium on the rate of thermolysis of diacyl diperoxides. *Kinet. Catal. transl. Kinet. Katal.* 23 (1982) 909

- DYAGILEVA, L. M., ISYGANOVA, E. I., RABINOVICH, V. G., POPOV, V. P., ALEKSANDROV, Y. A. (N. I. Lobachevskii State Univ., Chem. Res. Inst., Gorki, USSR): Pyrolysis of bisarechromiums in an open system. *J. Appl. Chem. USSR transl. Zh. Prikl. Khim.* **56** (1983) 15
- DYER, L. D., ALEMAN, H., LIELMEZS, J. (Amoco, Drayton Valley, Alberta, Canada): Thermodynamic functions for acrylamide. *Thermochim. Acta* **66** (1983) 147
- DYUNIN, A. G., LAZAREV, V. M., MAIER, A. I., VOROBEV, A. F. (D. I. Mendeleev Chem. Technol. Inst., Moscow, USSR): High-temperature differential heat-conducting calorimeter for the determination of enthalpies of processes in melts. *Zh. Fiz. Khim.* **57** (1983) 2095 (in Russian)
- DZIERZA, W. (Nicholas Copernicus Univ., Inst. Chem., PL-871000 Torun, Poland): Thermoelectric behaviour of segmented polyurethane elastomers. *Makromol. Chem.-Macro. Chem. Phys.* **184** (1983) 1519
- EBEID, E. Z. M., HARIB, A. F. M., ISSA, R. M., AZIM, S. A., BRIDGE, N. J. (Univ. Kent, Chem. Lab., Canterbury CT2 7NH Kent, England): Photoreactivity of 9-cyanoanthracene thermally generated inside-9-cyanoanthracene photodimer single crystals. *J. Chem. Soc. Faraday Trans. 1.* **79** (1983) 2133
- EL-FEKEY, S. A., ROFAIL, N. H., KHILLA, M. A. (Nucl. Res. Ctr., Dept. Nucl. Chem., Cairo, Egypt): The thermal decomposition of ammonium uranates precipitated from sulphate and nitrate media by urea. *Thermochim. Acta* **67** (1983) 137
- ELLIOT, A. J., SOPCHSHYN, F. C. (Atom Energy Canada Ltd., Chalk River Nucl. Labs., Phys. Chem. Branch, Chalk River, Ontario, K0J 1J0 Canada): The radiolysis at room temperature and 118 °C of aqueous solutions containing sodium nitrate and either sodium formate or 2-propanol. *Can. J. Chem.* **6** (1983) 1578
- ELSEMONGY, M. M., ABDEL-KHALEK, A. A., HUSSEIN, M. A. (Kuwait Univ., Fac. Sci., Dept. Chem., Kuwait City, Kuwait): Thermodynamic behaviour of hydrochloric acid in propylene glykol and its aqueous mixtures from electromotive force measurements. *Thermochim. Acta* **66** (1983) 303
- EL-SHOBAKY, G. A., GHONEIM, N. M., MORSI, I. M. (Natl. Res. Ctr., Cairo, Egypt): Thermal stability of cobalt oxides doped with MgO and Al<sub>2</sub>O<sub>3</sub>. *Thermochim. Acta* **67** (1983) 293
- ENGELHARDT, G., LOHSE, U., PATZELOVA, V., MÄGI, M., LIPPMAA, E. (Acad. Sci. GDR, Centr. Inst. Phys. Chem., DDR-1199 Berlin): High resolution <sup>29</sup>Si n. mir. of dealuminated Y-zeolites. 1. The dependence of the extent of dealumination on the degree of ammonium exchange and the temperature and water vapour pressure of the thermochemical treatment. *Zeolites* **3** (1983) 233
- ENNS, J. B., GILLHAM, J. K. (Bell Tel. Labs. Inc., Whippany, N. J., 07981 USA): The time-temperature transformation (TTT) cure diagram: modelling the cure behavior of thermosets. *J. Appl. Sci.* **28** (1983) 2567
- ESTOVEZ, J. L. G., SANAHUJA, A., CASTAN, T. (Univ. Barcelona, Fac. Fis. Dept. Termol., Barcelona, 29 Spain): Heats of solution of NaCl, KCl, KBr, RbBr, KJ and RbI at 293.15 K. Treatment through Pizer's equations. *Afinidad* **40** (1983) 269
- EVANS, W. J., MARINI, M. A., MARTIN, C. J. (Univ. Calif. Irvine, Dept. Chem., Irvine, Calif., 92717 USA): Heats precipitation of zinc phytate. *Thermochim. Acta* **67** (1983) 287
- FANELLI, E., POETI, G., BRAGHETTI, M. (Univ. Camerino, Dipartimento Sci. Chim., I-62032 Camerino, Italy): Calorimetric study of the 4-propionyl-4'n-alkanoyloxy azobenzene series. *Mol. Cryst. Liquid Cryst.* **92** (1982) 127
- FARBER, M., SRIVASTAVA, R. D., MOYER, J. W. (Space Sci. Inc., Monrovia, Calif., 91016 USA): Effusion-mass spectrometric determination of thermodynamic properties of gaseous potassium sulfide species. *High Temp. Sci.* **16** (1983) 153
- FĂTU, D., SEGAL, E. (Polytech. Inst. Bucharest, Fac. Chem. Engrn., Chair Phys. Chem. and Electrochem. Technol., Bucharest, Romania): Discrimination of conversion functions using TG and DTG curves. *Thermochim. Acta* **67** (1983) 59
- FAUCHAIS, P. (CNRS, Ceram. Nouvelles Lab., 320 Equipe Thermodynam. and Plasma, 123 Ave. Albert Thomas, F-87060 Limoges,

- France): Thermal plasmas modelling. *Ann. Chim.* **81** (1983) 363
- FERINO, I., MARONGIU, B., SOLINAS, V., TORRAZZA, S., KEHIAIAN, H. V. (c/o B. Marongiu, Ist. Chim. Fis. and Ind., Via Osped, I-09100 Cagliari, Italy): Thermodynamic properties of binary mixtures containing aldehydes. I. Excess enthalpies of some n-alkanal +  $\alpha$ -alkane mixtures: measurement and analysis in terms of a quasi-chemical group-contribution model and estimation of excess Gibbs energies. *Fluid Phase Equilibria* **12** (1983) 125
- FEWELL, L. L. BASI, R. J., PARKER, J. A. (NASA, Ames. Res. Ctr. Moffett Field, Calif., 94035 USA): Synthesis and thermal stability of carborane-containing phosphazenes. *J. Appl. Polym. Sci.* **28** (1983) 2659
- FINCH, A., GARDNER, P. J., WU, D. (Univ. London Royal Holloway Coll., Bourne Lab., Egham TW20 0FX Surrey, England): Studies on nitrophenols. IV. The standard enthalpies of combustion and formations of 1,2-dihydroxybenzene, 12- and 1,4-nitrophenol. *Thermochim. Acta* **66** (1983) 333
- FINCH, A., SMITH, A. E. (Univ. London Royal Holloway Coll., Bourne Lab., Egham TW20 0EX Surrey, England): The standard enthalpy of formation of methylurea. *Thermochim. Acta* **66** (1983) 387
- FLOWERS, M. C., HONEYMAN, M. R. (Univ. Southampton, Dept. Chem., Southampton SO9 5NH, Hants, England): Kinetics of the gas-phase thermal decomposition of 2,3-dimethyl-2,2-epoxypentane. *J. Chem. Soc. Faraday Trans. 1.* **79** (1983) 2185
- FORD, C. L., WINZOR, D. J., NICHOL, L. W., SCULLEY, M. J. (c/o D. J. Winzor, Univ. Queensland, Dept. Biochem. St. Lucia, QLD, 4067 Australia): Effects of thermodynamic nonideality in ligand binding studies. *Biophys. Chem.* **18** (1983) 1
- FORET, F., LANGFELDEROVA, H., GAZO, J. (Slovak Tech. Univ., Dept. Inorgan. Chem., CS-81237 Bratislava, Czechoslovakia): The relationship between the structures of Cu(II) complexes and their chemical transformations. 4. The thermochromism of M(2MII) (S-O-O4)2 compounds (MI = K, Rb, G or TL, MII = Ni or Cu). *J. Thermal Anal.* **25** (1982) 487
- FRENKEL, M. L., GUSEV, E. A., KABO, G. Y. (V. I. Lenin State Univ., Minsk, BeSSR): Thermodynamic properties of urea and methylurea. *J. Appl. Chem. USSR transl. Zh. Prikl. Khim.*, **56** (1983) 204
- FROLOVA, G. I., KOZEEVA, L. P., NAUKOV, I. E. (Acad. Sci. USSR, Inst. Inorgan. Chem., Novosibirsk, UKSSR): Thermal capacity, entropy and difference at KY(MoON)<sub>2</sub> enthalpies in the 8-312 K range. *Zh. Fiz. Khim.* **57** (1983) 1802 (in Russian)
- FUJIHARA, I., SAKUTA, T., KAGEMOTO, A. (Osaka Ind. Univ., Fac. Gen. Educ., Daito City, Osaka, 574 Japan): Enthalpy of dilution of polystyrene/diethyl ketone. *Makromol. Chem.-Macro. Chem. Phys.* **184** (1983) 1231
- FURKA, A. (Eötvös Loránd Univ., Dept. Organ. Chem., H-1088 Budapest, Hungary): Comparison of the heats of formation of hydrocarbons. *Croat. Chem. Acta* **56** (1983) 199
- FYFE, C. A., MCKINNON, M. S., RUDIN, A., TCHIR, W. J. (Univ. Guelph, Guelph Waterloo, Ctr. Grad Work Chem., Dept. Chem., Guelph, Ontario, N1G 2W1 Canada): Investigation of the mechanism of the thermal decomposition of cured phenolic resins by high-resolution <sup>13</sup>C CP/MAS solid-state NMR spectroscopy. *Makromolekules* **16** (1983) 1216
- GALWEY, A. K., PÖPPL, L., RAJAM, S. (Queens Univ. Belfast, Dept. Chem., Belfast, BT9 5AG Antrim, North Ireland): A melt mechanism for the thermal decomposition of ammonium dichromate. *J. Chem. Soc. Faraday Trans. 1.* **79** (1983) 2143
- GHONEIM, N. A., ABBAS, A. F. (Natl. Res. Ctr., Glass Res. Lab., Cairo, Egypt): Thermal expansion of high lead borate glasses and boric oxide anomaly. *Thermochim. Acta* **66** (1983) 91
- GIAMELLO, E., FUBIN, B. (c/o B. Fubin, Univ. Turin, Fac. Farm., Ist. Chim. Gen. and Inorgan., I-10125 Turin, Italy): Heat of adsorption of carbon monoxide on zinc oxide pretreated by various methods. *J. Chem. Soc. Faraday Trans. 1.* **79** (1983) 1995
- GICQUEL, A., TORCK, B. (Inst. Français Petr., 1-4 Ave Boris Preauf, F-92506 Ruel Malmaison, France): Synthesis of methyl tertiary butyl ether catalyzed by ion-exchange resin. Influence of methanol concentration and temperature. *J. Catal.* **83** (1983) 9

- GILCHRIST, J., GODFRIN, H. (CNRS, Ctr. Rech., Tries Basses Temp., 25 Ave Martyrs, BO 166X F-38042 Granoble, France): Secondary amines: a low-temperature dielectric relaxation study. *Chem. Phys.* **79** (1983) 307
- GIRGIS, M. M. (Univ. Assiut, Fac. Sci., Dept. Chem., Assiut, Egypt): Non-isothermal kinetic study of catalytic ammonia oxidation. *Thermochim. Acta* **66** (1983) 357
- GODOWSKY, Y. K., BESSENOVA, N. P. (L. Y. Karpov Physicochem. Res. Inst., Moscow, USSR): Thermoelasticity of segments polyurethanes. *Colloid Polym. Sci.* **261** (1983) 645
- GOLUBEV, V. M. (All Union Synthet. Resin Res. Inst., Vladimir, USSR): Thermodynamic theory of the surface tension of liquids in homogeneous series of linear-chain molecules. *Colloid J. USSR* transl. *Kolloidn. Zh.* **44** (1982) 1020
- GORALCZYK, D. (Jagiellonian Univ. Inst. Chem., Dept. Phys. Chem. and Electrochem., PL-30060 Krakow, Poland): Thermodynamic characteristics and composition of anionic-cationic adsorption films (octylpyridium) chloride and sodium alkylsulfonates. *Polish J. Chem.* **55** (1981) 2097
- GORBACHEV, V. M. (Acad. Sci. USSR, Inst. Inorgan. Chem., Novosibirsk, USSR): On the expedience for practice to search for a more accurate analytical solution of the integral in the Arrhenius equation in non-isothermal kinetics. *J. Thermal Anal.* **25** (1982) 603
- GORBACHEV, V. M., KOLOSOVSKAYA, E. A., CHUDINOV, B. S. (Acad. Sci. USSR, Inst. Inorgan. Chem., Novosibirsk, USSR): Proper determination of order of reactions by thermal analysis. *J. Thermal Anal.* **26** (1983) 151
- GORBATYI, Y. E., DEMYANETS, Y. N. (Acad. Sci. USSR, Exptl., Mineral Chemo-golovka, USSR): X-ray diffraction investigation of the structure of liquid and supercritical water at high temperatures and pressures. 1. Molecular functions of structurally sensitive scattering components at a pressure of 1000 bars and temperatures from 298°K to 773°K. *J. Struct. Chem.* transl. *Zh. Strukt. Khim.* **23** (1982) 882
- GORDON, H. J., MARTIN, J. C., McNAB, H. (c/o H. McNab, Univ. Edinburgh, Dept. Chem., Edinburgh, EH9 3JJ, Midlothian, Scotland): Thermal functionalisation of nitrogen substituents: formation of dihydropyrrol-3-ones, quinolin-4-ones, and enamino-enaminones by gas-phase hydrogen transfer reactions. *J. Chem. Soc.* (1983) 957
- GORELOV, Y. P., BOGUSLAVSKAYA, L. S., BULOVIATOVA, A. B., TSAREVA, L. A.: Thermal degradation of poly- $\alpha$ -fluoroacrylates. *Vysokomol. Soedin. B* **25** (1983) 514 (in Russian)
- GORINA, I. I., SIZOVA, N. L., CHISTYAKOV, I. G. (Acad. Sci. USSR, Inst. Crystallog., Moscow, 117333 USSR): Marangoni convection in cholesteric liquid crystals of low thermal sensitivity. *Mol. Cryst. Liquid Cryst.* **95** (1983) 271
- GRAUER, Z., YARIV, S., HELLERKALLAI, L., AVNIR, D. (Hebrew Univ. Jerusalem, Dept. Organ. Chem., IL-91904 Jerusalem, Israel): Effect of temperature on the conformation of dibenzotropone adsorbed on montmorillonites. *J. Thermal Anal.* **26** (1983) 49
- GREGORY, N. W. (Univ. Washington, Dept. Chem., Seattle, Wash., 98195 USA): Thermodynamic properties of iron(III) oxychloride. *Inorg. Chem.* **22** (1983) 2677
- GRENET, J., LARMAGNAC, J. P., MICHON, P. (Fac. Sci. and Tech. Rouen, Etud Couches Minges Amorphes and Polycrystallines Lab., F-76130 Mt. St. Aignan, France): Non-isothermal crystallization in amorphous selenium films. *J. Thermal Anal.* **25** (1982) 539
- GRØNVOLD, F., MEISINSET, K. K. (Univ. Oslo, Dept. Chem., Oslo, Norway): Thermodynamic properties and phase transitions of salt hydrates between 270 and 400 K. II.  $\text{Na}_2\text{CO}_3 \cdot \text{H}_2\text{O}$  and  $\text{Na}_2\text{CO}_3 \cdot 10 \text{H}_2\text{O}$ . *J. Chem. Thermodyn.* **15** (1983) 881
- GRÜNDLER, W. (Gesell. Strahlen und Umweltforsch. MBH D-8042 Neuherberg, GFR): Comment on the paper by T. P. Zivkovic: "Heats of atomization of conjugated hydrocarbons by new semiempirical method". *Theor. Chim. Acta* **63** (1983) 439
- GUGEL, H., ZELLER, K. P., WENTRUP, C. (c/o K. P. Zeller, Univ. Tübingen, Inst. Organ. Chem., D-7400 Tübingen, 1 GFR): Thermal azulene rearrangements. Synthesis and thermolysis of 6-<sup>13</sup>C/azulene. *Chem. Ber.* **116** (1983) 2775

- GUION, J., SAUZADE, J. D., LAUGT, M. (Univ. Nice, Inst. Math. and Sci. Phys. Chim. Phys. Lab., F-06034 Nice, France): Critical examination and experimental determination of melting enthalpies and entropies of salt hydrates. *Thermochim. Acta* 67 (1983) 167
- GULBRANDSEN, T., KOLSAKER, P. (Nyegaard and Co. AS Nycoveien 2, Oslo, Norway): The reaction between diazoalkanes and allylic halides carrying electronegative  $\gamma$ -substituents. 2. Formation and decomposition of dimethyl 4-(1-bromo-1-methylethyl)-5-aryl-4,5-dihydro-3H-3,3 pyrazoledicarboxylates. *Acta Chem. Scand.* 37 (1983) 197
- GUPTA, A. K., SINGHAL, R. P., AGARWAL, V. K. (Indian Inst. Technol, Ctr. Mat. Sci. and Technol., New Delhi, 110016 India): Effect of heat treatment on the dielectric relaxation of polyacrylonitrile. III. Role of duration of heat treatment. *J. Appl. Polym. Sci.* 28 (1983) 2745
- GUSHIKEM, Y., GIESE, R., VOLPE, P. L. O. (Univ. Estadual Campinas, Inst. Quim., BR-13100 Campinas, SP Brazil): Calorimetric study of the interaction of tri- and tetraphosphate with some trivalent cations. *Thermochim. Acta* 68 (1983) 83
- HABASH, T. F., HOUSER, J. J., GARN, P. D. (Univ. Akron, Akron, Ohio, 44325 USA): Dynamic purity determinations. 2. Some additional systems. *J. Thermal Anal.* 25 (1982) 271
- HÁJEK, B., KAREN, P., BROŽEK, V. (Prague Inst. Chem. Technol., Dept. Inorgan. Chem., CS-16628 Prague, 6 Czechoslovakia): Thermal decomposition of magnesium sesquicarbides. *Collect.* 48 (1983) 1963
- HÁJEK, B., KAREN, P., BROŽEK, V. (Prague Inst. Chem. Technol., Dept. Inorgan. Chem., CS-16628 Prague, 6 Czechoslovakia): Synthesis and thermal decomposition of magnesium dicarbide. *Collect.* 48 (1983) 1969
- HARA, K., AKAMA, M., SHINOHARA, I., TAKAMATSU, T. (Waseda Univ., Shinjuku ku, Tokyo, 160 Japan): Thermally stimulated depolarization current and thermally stimulated polarization current in styrene-propylene oxide multi-type block copolymers. *Kobunshi Konbunshu, Jap. Polym. Sci. Techn.* 40 (1983) 317
- HARAN, E. N., MAITLAND, G. C., MUSTAFA, M., WAKEHAM, W. A. (Minist. Def., Armament Dev. Author, Haifa, Israel): The thermal conductivity of argon, nitrogen and carbon monoxide in the temperature range 300–400 K at pressures up to 10 MPa. *Ber. Bunsen Ges. Phys. Chem.* 87 (1983) 657
- HARRISON, I. R., VARNELL, W. D. (Penn. State Univ., Dept. Mat. Sci. and Engr., Polymer Sci. Sect., University, Pk, Pa., 16802 USA): The effect of sample geometry on the melting point of polyethylene. *J. Thermal Anal.* 25 (1982) 391
- HASHIMOTO, T., OGITA, K., UMEMOTO, S., SAKAI, T. (Tokyo Inst. Technol., Dept. Text. and Polymer Mat., Meguro ku, Tokyo, 152 Japan): Thermoluminescence from extended-chain crystals of polyethylene. *J. Polym. Sci. Polym. Phys. Ed.* 21 (1983) 1347
- HASSAM, S., GAUNE-ESCARD, M., BROS, J. P. (c/o M. Gaune-Escard, Univ. Provence, Ctr. St. Jerome, CNRS, Dynam. and Thermophys. Fluides Lab., F-13397 Marseille, 13 France): Enthalpies of formation of Au–Ge and Au–Ge liquid alloys at 1373 K. *High Temp. Sci.* 16 (1983) 131
- HAYAMI, Y., ARATONO, M., URYU, S., MOTOMURA, K., MATUURA, R. (c/o R. Matuure, Kyushu Univ. 33 Fac. Sci. Dept. Chem. Fukuoka, 812 Japan): Thermodynamic study on penetration of pentadecanoic acid monolayer by dodecylammonium chloride. *Bull. Chem. Soc. Jap.* 56 (1983) 1950
- HAYS, D., PATRICK, J. W., WALKER, A. (British Carbonizat. Res. Assoc., Chesterfield, SH2 6JS, Derby, England): SEM study of binder coke in electrode carbon. *Fuel* 62 (1983) 948
- HERBER, R. F. M. (Univ. Amsterdam, Coronek Lab. Occupat and Environm. HLTH, 1054 BW Amsterdam, Netherlands): Some instrumental improvements in electrothermal atomization-atomic absorption spectrometry. Application in biomedical research. *Spectrochim. Acta B* 38 (1983) 783
- HILBERATH, W., VOWINKEL, B. (Univ. Cologne, Inst. Phys. 1, D-5000 Cologne, 41 GFR): An automatic low temperature heat switch. *Cryogenics* 23 (1983) 467
- HINTON, J. F., SHUNGU, D. (Univ. Arkansas, Dept. Chem., Fayetteville, Ark., 72701 USA): Sulfur-33 spin-lattice relaxation time in the

- sulfate anion: concentration and temperature effects. *J. Magn. Resonance* **54** (1983) 309
- HOFFMANN, S. K. (Polish Acad. Sci., Inst. Molec. Phys., PL-60179 Poznan, Poland): Temperature dependence of a superexchange interaction determined from merging effect of copper(II) EPR lines. *Chem. Phys. Lett.* **98** (1983) 329
- HOLCIK, J., KOENIG, J. L., SHELTON, J. R. (Res. Inst. Organ. Technol., CHZJO CS-81001 Czechoslovakia): The antioxidant activity of phosphorus compounds. I. Decomposition of hydroperoxid by pentaerythritol diphosphites. *Polym. Degrad. Stabil.* **5** (1983) 373
- HOLMES, H. F., MESMER, R. E. (Oak Ridge Natl. Lab., Div. Chem., Oak Ridge, Tenn., 37830 USA): Isopiestic studies of aqueous solutions at elevated temperatures. VII.  $MgSO_4$  and  $NiSO_4$ . *J. Chem. Thermodynam.* **15** (1983) 709
- HOUSE, J. E., ENGEL, D. A. (Illinois State Univ., Dept. Chem., Normal, Ill., 61761 USA): Decomposition of ammonium bifluoride and the proton affinity of the bifluoride ion. *Thermochim. Acta* **66** (1983) 343
- HOUSE, J. E., REIF, L. A., HOUSE, J. D. (Illinois State Univ., Dept. Chem., Normal, Ill., 61761 USA): A relationship between hydration enthalpies and ionization energies of metal ions. *Thermochim. Acta* **66** (1983) 365
- HOWALD, R. A., MOE, A. A., ROY, B. N. (Montana State Univ., Dept. Chem., Bozeman, Mont., 59717 USA): The high pressure disproportionation of spinel,  $MgAl_2O_4$ . *High Temp. Sci.* **16** (1983) 111
- HUYS, C. T., HERMAN, G. G., GOEMINNE, A. M., EECKHAUT, Z. (c/o A. M. Goeminne, State Univ. Ghent, Gen. and Inorgan. Chem. Lab., B-9000 Ghent, Belgium): A thermochemical and spectrophotometrical study of complex formation between copper(II) ion and  $\alpha,\omega$ -thiadiamines. *J. Coord. Chem.* **13** (1983) 71
- ICHIKAWA, K., MATSUMOTO, T. (Hokkaido Univ., Fac. Sci., Dept. Chem., Sapporo, Hokkaido, 060 Japan): The heat capacities of lithium, sodium, potassium, rubidium and cesium nitrates in the solid and liquid states. *Bull. Chem. Soc. Jap.* **56** (1983) 2093
- IHARA, Y., KAMISHIMA, T., TSUCHIYA, R. (Kanazawa Univ., Fac. Educ., Chem. Lab., Kanazawa, Ishikawa, 920 Japan): Thermal square planar-zo-octahedral transformation of nickel(II) complexes containing butanediamines in a solid phase. *Thermochim. Acta* **67** (1983) 23
- ISHIKAWA, M., SUGISAWA, B., KUMADA, M., KAWAKAMI, H., YAMABE, T. (Kyoto Univ., Fac. Engr., Dept. Synthet. Chem., Kyoto, 606 Japan): Photolysis of organopolysilanes. Thermal behavior of 1-silylcyclopropenes. *Organometallics* **2** (1983) 974
- ISMAILOV, E. G., KASUMOV, F. B. (Acad. Sci. AzSSR, Inst. Petrochem. Proc., Baku, AzSSR): ESR study of the peculiarities of formation of low temperature nonequilibrium phases with anomalous cation distribution in Mo-Tl oxide catalysts. *React. Kinet Catal. Lett.* **22** (1983) 95
- IWAFUCHI, K., WATANABE, C., OTSUKA, R. (Waseda Univ., Sch. Sci. and Engr., Dept. Mineral Engr., Physiol. and Med. Biophys., Tokyo 160 Japan): Thermal decomposition of ferromanganous dolomite. *Thermochim. Acta* **66** (1983) 105
- IWASA, K., TAKAO, N. (Kobe Womens Coll. Pharm., Higashinada ku, Kobe, 658 Japan): The pyrolysis and photolysis of the protopine type alkaloid N-oxides. The synthesis of the secoberlines and benzo [c] phenanthridines. *Heterocycles* **20** (1983) 1535
- JACOB, K. T., IWASE, M. (Indian Inst. Sci., Dept. Met., Bangalore 560012 Karnataka, India): Effects of pressure on the emf of solid state cells. *High Temp. Sci.* **16** (1983) 123
- JACUCCI, G., OMERTI, E. (Univ. Trento, Dipartimento Fis., I-38050 Povo, Italy): Monte Carlo calculation of the radial distribution function of quantum hard spheres at finite temperatures using path integrals with boundary conditions. *J. Chem. Phys.* **79** (1983) 3051
- JAIN, M. L., SONI, R. P. (Indian Drugs and Pharmaceut Ltd., Colony, 10-2 Showbhagya Nagar, Balanagar Town Ship, Hyderabad, 500037 India): Thermal decomposition of quinone-synthesis of anthrimidazodiones. *J. Prakt. Chem.* **325** (1983) 353
- JAKAB, E., BLAZSÓ, M. (Hungarian Acad. Inorgan. Chem. Res. Lab., H-1112 Buda-

- pest, Hungary): Thermal degradation of polyquinones used as coal models. *J. Anal. Appl. Pyrol.* **5** (1983) 139
- JANSEN, M., WOLF, B. (Univ. Hanover, Inst. Anorgan. Chem., D-3000 Hanover, 1 GFR): On low-temperature  $K_3NO_3$ . *Z. Anorg. Allg. Chem.* **502** (1983) 153
- JAYA, S., RAO, T. P., RAMAKRISHNA, T. V. (Cent. Electrochem. Res. Inst., Div. Electro-analyt., Karaikundi, 623006 Tamil Nadu, India): Spectrophotometric determination of rhodium(III) in thermocouple wires using thiocyanate and rhodamine 6G. *Analyst* **108** (1983) 1151
- JEE, J. G., LEE, Y. H., WOO, E. H., LEE, K. H. (Kyungpook Natl. Univ., Coll. Teachers, Dept. Chem., Daegu, 635 South Korea): Thermodynamics of 2,N-dimethyl pyridinium iodide in ethanol-water mixture under high pressure. *Bull. Kor. Chem. Soc.* **4** (1983) 115
- JENKINS, H. D. B., PRITCHETT, M. S. F. (Univ. Warwick, Dept. Chem. and Molec. Sci., Coventry CV4 7A1 W Midlands, England): Thermodynamic and viscosity  $\beta$ -coefficient data for single ions derived from a new analytical approach. *J. Chem. Soc.* (1983) 1041
- JEYARAJ, G. L., HOUSE, J. E. (Illinois State Univ., Dept. Chem. Normal, Ill., 61761 USA): Thermal studies on dithionate compounds. 1. Dithionates of calcium, strontium and barium. *Thermochim. Acta* **66** (1983) 289
- JEZEQUEL, J. Y., BARONNET, F., NICLAUSE, M. (Ecole Natl. Super Ind. Chim. Inst. Natl. Politech. Lorraine Dept. Chim. Phys. React. CNRS, Lab., 328 F-5402 Nancy, France): The pyrolysis of propane at small extents of reaction. 1. Experimental study and reaction mechanism. *J. Chim. Phys.* **80** (1983) 455
- JIN, J. I., CHUNG, Y. S., LENZ, R. W., OBER, C. (Korea Univ., Dept. Chem., Seoul, 132 South Korea): Synthesis and properties of thermotropic compounds with two terminal mesogenic units and a central spacer(II). Homologous series of  $\alpha$ - $\omega$ -bis(4-p-substituted phenoxy-carbonyl) phenoxyalkanes. *Bull. Kor. Chem. Soc.* **4** (1983) 143
- JORGENSEN, F. R. H., MOYLE, F. J. (CSIRO, Div. Mineral. Chem., POB 124 Port Melbourne, Vic, 3207 Australia): Phases formed during the thermal analysis of pyrite in air. *J. Thermal Anal.* **25** (1982) 473
- JUGIE, G., DURAND, M., MURGICH, J. (c/o J. Murgich, Inst. Venezolano Invest. Cient., Ctr. Quim., Apartado 1827 Caracas, 1010 A Venezuela): Temperature dependence of the 36/NQR spectra of the trichloroacetic acid triethylene diamine (TED) (2:1) complex. *J. Mol. Struct.* **101** (1983) 183
- JUHASZ, Z. (Tech. Univ. Budapest, Dept. Bldg Mat., H-1521 Budapest, Hungary): Adaption of thermal analysis for the study of water vapour adsorption isotherms. *J. Thermal Anal.* **25** (1982) 409
- KADUSHIN, A. A., MATYSHAK, V. A., KUTYREVA, N. A., SKLYAROV, A. V., VLASENKO, A. G. (Acad. Sci. USSR, Inst. Chem. Phys., Moscow, V-71 USSR): Thermal activation of the  $Mo(CO)_6$  gamma- $A_{12}O_3$  catalyst for propylene metathesis. *Kinet. Catal.* transl. *Kinet. Catal.* **23** (1982) 993
- KAHWA, I. A. (Univ. Dar es Salaam, Dept. Chem., Dar es Salaam, Tanzania): Fusion temperatures of rare earth metal trihalides. *J. Thermal Anal.* **25** (1982) 525
- KAMBAYASHI, S., KATO, E. C. (Waseda Univ., Dept. Met. Engn., Tokyo, 160 Japan): A thermodynamic study of (magnesium oxid + silicon dioxide) by mass spectrometry. *J. Chem. Thermodyn.* **15** (1983) 701
- KARAKHANOV, R. A., VARTANYAN, M. M. (N. D. Zelinskii Organ. Chem. Inst., Moscow, USSR): Transformation of 2-(1-acetoxy-2-butyl) tetrahydrofuran to 2-methyl-3-acetyl-1,6-dioxaspirol [4,4] non-2-ene. A new thermal isomerization. *Bull. Acad. Sci. USSR Div. Chem. Sci.* transl. *Izv. Akad. Nauk SSSR Khim.* **31** (1982) 2333
- KARVO, M. (Univ. Oulu, Dept. Chem., SF-90570 Oulu 57 Finland): Excess enthalpies of sulfolane + benzene + p-xylene, and + mesitylene as functions of temperature. *J. Chem. Thermodyn.* **15** (1983) 821
- KATIME, I., QUINTANA, J. R., VEGUILLAS, J. (Univ. Pais Vasco, Fac. Ciencias, Dept. Quim. Fis., Grupo Propiedades Termodinamicas Macromolec. and Disoluc, Bilbao, Spain): Thermal behaviour of poly(methyl methacrylate) stereocomplex by DTA. *Thermochim. Acta* **67** (1983) 81
- KATZ, J. L., RUGGIERO, J. G., PARTCH, R., WARREN, D., EBETION, F. H. (Johns Hopkins Univ., Dept. Chem. Engn., Baltimore,

- M. d., 21218 USA): Thermally induced nucleation. I. A new way to obtain activation energies for unimolecular reactions. *J. Chem. Phys.* **79** (1983) 2763
- KAWALEC, B., HOUSER, J. J., GARN, P. D. (Univ. Akron, Akron, Ohio, 44325 USA): Dynamic purity determination. 1. Location of the solidus by nuclear magnetic resonance. *J. Thermal Anal.* **25** (1982) 259
- KAWAMOTO, Y., SAKAGUCHI, F. (Kobe Univ., Fac. Sci., Dept. Chem., Nada ku, Kobe, 657 Japan): Thermal properties and Raman spectra of crystalline and vitreous  $\text{BaZrF}_6$ ,  $\text{PbZrF}_6$  and  $\text{SrZrF}_6$ . *Bull. Chem. Soc. Jap.* **56** (1983) 2138
- KAWASHIMA, T., TOMITA, T., INAMOTO, N. (Univ. Tokyo, Fac. Sci., Dept. Chem., Bunkyo ku, Tokyo, 113 Japan): Synthesis and thermolysis of meso-1,2-diphenyl-1,2-divinyl-diphosphane and DI-1,2-diphenyl-1,2-divinyl-diphosphane disulfides. *Phosphor. Sulfur Relat. Elem.* **16** (1983) 9
- KHAN, M. M. T., SATYANARAYANA, S., JYOTI, M. S., LINCOLN, C. A. (Cent. Salt and Marne Chem. Res. Inst., Bhavnagar, 364002 Gujarat, India): Thermodynamic quantities associated with interaction of thymine, uracil, cytosine, adenine and hypoxanthine, with metal ions. *Indian J. Chem.* **A 22** (1983) 357
- KHAN, M. M. T., SATYANARAYANA, S., JYOTI, M. S., REDDY, A. P. (Cent. Salt and Marine Chem. Res. Inst., Bhavnagar, 364002 Gujarat, India): Thermodynamic quantities associated with mixed ligand metal(III) chelate formation. Thymine, uracil, cytosine, adenine or hypoxanthine as a primary ligand and 2,2-bipyridyl, 1-10-phenanthroline or 5'-sulphoralicyclic acid as a secondary ligand. *Indian J. Chem. A* **22** (1983) 364
- KHANNA, Y. P., PEARCE, E. M. (Allied Chem./Corp., Corp. Res. and Dev., Morristown, N. J., 07960 USA): Aromatic polyamides. 8. Kinetic analysis of the thermal and thermo-oxidative degradation. *J. Thermal Anal.* **26** (1983) 107
- KHARITONOV, Y. Y., BEKHIT, M. M., BELEVSKII, S. F. (D. I. Mendeleev Chem. Technol. Inst., Moscow, USSR): Thermal decomposition processes of zirconium(IV) and hafnium(IV) complexes with dimethylformamide. *Zh. Neorg. Khim.* **28** (1983) 1956 (in Russian)
- KHALTAB, F. I., AMER, M. M., HASSAN, N. Y. M. (Univ. Cairo, Fac. Pharm., Dept. Analyt. Chem., Cairo, Egypt): Thermal analysis of pharmaceutical compounds. 4. Evaluation of sulphonamides by thermal analysis. *J. Thermal Anal.* **25** (1982) 367
- KHOBDABERGENOVA, G. R., DERGACHEVA, M. B. KOZIN, L. F. (Acad. Sci. KaSSR, Inst. Organ. Catalysis and Electrochem., Alma Ata, 480021 KaSSR): Thermodynamic properties of rubidium-thallium-mercury alloys. *Zh. Fiz. Khim.* **57** (1983) 2059 (in Russian)
- KINGCADE, E., COCKE, D. L., GINGERICH, K. A. (c/o K. A. Gingerich, Texas A and M Univ., Dept. Chem., College Stn., Tex., 77843 USA): Thermodynamic stabilities of the gaseous cerium carbides  $\text{CeC}$ ,  $\text{CeC}_2$ ,  $\text{CeC}_3$ ,  $\text{CeC}_4$ ,  $\text{CeC}_5$  and  $\text{CeC}_6$ . *High Temp. Sci.* **16** (1983) 89
- KIOKA, T., MIKI, H., KAWASAKI, K. (Sci. Univ. Tokyo, Fac. Sci., Dept. Phys., Noda, Chiba, 278 Japan): Thermal desorption of  $\text{N}_2$  from  $(\text{N}_2 + \text{O}_2)$  coadsorbed on polycrystalline rhenium surfaces. *Surface Sci.* **130** (1983) L294
- KIRKBRIGHT, G. F., SHAW, A. E. S. (Univ. Manchester, Inst. Sci. and Technol. Dept., Instrumentat and Analyt. Sci., Manchester M60 1QD Lancs, England): The heavy atom effect in the room temperature luminescence of some pesticides and ecologically related compounds. *Can. J. Spectrosc.* **28** (1983) 100
- KIRPICHEV, E. P., RUBTSOV, Y. I., TITOVA, K. V., ROSOLOVSKI, V. Y.: Standard formation enthalpy of  $\text{Na}_2\text{CO}_3 \cdot 5 \text{H}_2\text{O}_2$  sodium carbonate peroxohydrate. *Zh. Neorg. Khim.* **28** (1983) 1858 (in Russian)
- KISTER, J., DAVIN, E., GUILIANO, M., MILLE, G., CHOUTEAU, J. (Univ. Drot Econ. and Sci. Aix Marseille, Ctr. Sci. St. Jerome, Ctr. Spect. Molec., F-13397 Marseille, 4 France): Thermal stability of araheterocyclic spiroopyrans and merocyanins. *La Analisis* **11** (1983) 284
- KISHORE, K., NAGARAJAN, R. (Indian Inst. Sci. High Energy Solids Lab., Bangalore, 560012 Karnataka, India): Kinetic and mechanistic studies on the decomposition of nickel salicylate. *Thermochim. Acta* **67** (1983) 351

- KISHORE, K., NAGARAJAN, R. (Indian Inst. Sci., Dept. Inorgan. and Phys. Chem., Bangalore, 560012 Karnataka, India): Thermochemical and kinetic studies on the effects of cobalt salicylate on the oxidative degradation of polystyrene. *J. Thermal Anal.* **25** (1982) 585
- KISHORE, K., SANTHANALAKSHMI, K. N. (Indian Inst. Sci., Dept. Inorgan. and Phys. Chem., Bangalore, 560012 Karnataka, India): A thermochemical study on the reactions of aniline with formaldehyde in the presence of acid medium. *Thermochim. Acta* **68** (1983) 59
- KISHORE, K., VERNEKER, V. R. P., DHARUMURAJ, G. B. (Indian Inst. Sci., Dept. Inorgan. and Phys. Chem., Bangalore, 560012 Karnataka, India): The effect of bithioacetacetonato nickel(II) compounds on thermal oxidation of polyethylene. *J. Polym. Sci. Polym. Lett. Ed.* **21** (1983) 627
- KITAZAWA, Y., KUNIMOTO, Y., WAKIHARA, M., TANIGUCHI, M. (Tokyo Inst. Technol., Dept. Chem. Engrn., Meguro ku, Tokyo, 152 Japan): Phase equilibria and oxidation mechanism in the La-S-O system. *J. Thermal Anal.* **25** (1982) 279
- KITTEL, P. (NASA, Ames. Res. Ctr. Space Technol. Branch, Moffett Field, Calif., 94035 USA): Ultimate temperature stability of a magnetic refrigerator. *Cryogenics* **23** (1983) 477
- KLYUS, I. P., BREZGIN, B. N., NOVIKOV, A. V., GRINEV, G. V.: Heat capacity of ammonium nitrate containing additives in the region of the IV  $\rightarrow$  III polymorphic transition. *J. Appl. Chem. USSR transl. Zh. Prikl. Khim.* **55** (1982) 2415
- KOHLI, R. (Battelle Mem. Inst., Nucl. Technol. Sect., Columbus, Ohio, 43201 USA): Heat capacity and thermodynamic properties of alkali metal compounds. III. Estimation of the thermodynamic properties of cesium and rubidium chalcogenides. *Thermochim. Acta* **66** (1983) 361
- KOKSHAROV, S. A., POBEDINSKI, V. S., MORYGANOV, A. P., MELNIKOV, B. N. (Ivanovo Chem. Technol. Inst., Dept. Fiber Mat. Chem. Technol., Ivanovo, USSR): Thermal stability of urea melts and its effects on the results of high-speed fixation of dyes on textile materials. *Izv. Vyssh. Uch. Zav.* **26** (1983) 855 (in Russian)
- KOLÁŘ, V., ČERVENKA, J. (Czechoslovak Acad. Sci., Inst. Chem. Proc. Fundamentals, CS-16502 Prague, 6 Czechoslovakia): Heat and mass transfer in rectification of binary mixtures at turbulent vapour flow. *Collect.* **48** (1983) 1820
- KOMATSU, T., TAKEUCHI, M., MATUSITA, K., YOKOTA, R. (Technol. Univ. Nagaoka, Dept. Mat. Sci. and Technol., Nagaoka, 94954 Japan): Study of structural relaxation of Ni<sub>78</sub>Si<sub>8</sub>B<sub>14</sub> metallic glass by electrical resistivity and thermal expansion measurements. *J. Non-Cryst. Solids* **57** (1983) 129
- KOLSAKER, P., STORESUND, H. J., GULBRANDSEN, T., WØIEN, G. (Univ. Oslo, Dept. Chem., Oslo, Norway): The reaction between diazoalkanes and allylic halides carrying electronegative  $\gamma$ -substituents. 1. Solvent effects in the decomposition of 4-(1-bromo-1-methylethyl)-4,5-dihydro-3H-3,3-pyrazoledicarbonitrile. *Acta Chem. Scand. B* **37** (1983) 187
- KOOS, M., REPAS, M., KOSIK, M., REISER, V. (Slovak Acad. Sci., Ctr. Chem. Res., Inst. Chem., CS-84238 Bratislava, Czechoslovakia): Thermal degradation of corncobs and straw. *Chem. Zvesti* **37** (1983) 399
- KOSNIK, K. G., BENSON, S. W. (c/o S. W. Benson, Univ. So Calif., Hydrocarbon Res. Inst., Dept. Chem. Los Angeles, Calif., 90089 USA): Deuterium-hydrogen exchange and scrambling reactions in the pyrolysis at labeled cyclopentene. A radical mechanism. *J. Phys. Chem.* **87** (1983) 2790
- KOTOYORI, T., MARUTA, M. (Res. Inst. Ind. Safety, Minatoku, Tokyo, 108 Japan): An adiabatic self-ignition testing apparatus. *Thermochim. Acta* **67** (1983) 35
- KRETSCHMAR, R. (Tech. Univ. Dresden, Wissensch. Bereich Lebensmittelchen und Tech. Biochem., Sect. Chem., DDR-8027 Dresden, GDR): Thermodynamic observations on macromolecules in solution, which tend towards micelle formation. *Z. Phys. Chem.* **264** (1983) 729
- KRIGBAUM, W. R., WATANABE, J., ISHIKAWA, T. (Duke Univ. Gross Chem. Lab., Durham, N. C., 27706 USA): Thermotropic polyesters. 2. Investigation of the mesophase properties of polymers based on 4,4'-dihydroxybiphenyl. *Macromolecules* **16** (1983) 1271

- KTENAS, T. B., TAYLOR, M. D. (Care Of Evangelopoulos A, Natl. Hellen Res. FDN 48 Vassileos Constantinou Ave, GR-5011 Athens, Greece): Modes of decomposition of silver, lead and mercuric toluenedithiolates — a synthetic and analytical study. *J. Thermal Anal.* **25** (1982) 563
- KUBASOV, A. A., GORELIK, L. B., TOPCHIEVA, K. V. (M. V. Lomonosov State Univ., Dept. Chem., Moscow, 117234 USSR): Thermal modification as a method for obtaining a specific effect on the catalytic properties of catalysts. *Kinet. Catal.* transl. *Kinet. Catal.* **23** (1982) 947
- KUMAR, D., FOHLEN, G. M., PARKER, J. A. (c/o J. A. Parker, NASA, Ames Res. Ctr., Off Chem. Res. Projects, Moffett Field, Calif., 94035 USA): Fire and heat-resistant laminating resins based on maleimido-substituted aromatic cyclotriphosphazenes. *Macromolecules* **16** (1983) 1250
- KUMAR, A., NATH, R. (Univ. Roorkee, Dept. Phys., Roorkee 247667 Uttar Pradesh, India): Isothermal transient current studies in cellulose acetate films. *J. Appl. Polym. Sci.* **28** (1983) 2483
- KUNDYS, E. (Sch. Med. Wroclaw, Inst. Chem. and Phys., Dept. Inorgan. Chem., PL-50139 Wroclaw, Poland): Thermodynamic properties of molten salt solutions. The AgBr—CdBr<sub>2</sub> system. *Polish J. Chem.* **55** (1981) 2485
- LANGFELDEROVA, H., KARLA, V., LINKESOVA, M., GAZO, J. (Slovak Tech. Univ., Dept. Inorgan. Chem., CS-81237 Bratislava, Czechoslovakia): On the relationship between the structures of Cu(II) complexes and their chemical transformations. 5. Kinetics of thermal decomposition of Cu(II). Aquacomplexes with heterogeneous coordination sphere. *J. Thermal Anal.* **26** (1983) 95
- LALAUZE, R., LETHIESSE, J. C., PIJOLAT, C., SOUSTELLE, M. (c/o J. C. Lethiesse, Ecole Mines, F-42023 St. Etienne, France): Temperature-programmed desorption and microcalorimetric studies of the SO<sub>2</sub>—O<sub>2</sub>—NiO system. *J. Phys. Chem.* **87** (1983) 3405
- LAPUJOLADE, J., PERREAU, J., KARA, A. (CENS, Serv. Phys. Atomes and Surfaces, F-91191 Gif sur Yvette, France): The thermal attenuation of elastic scattering of helium from copper single crystal surfaces. *Surface Sci.* **129** (1983) 59
- LEBODA, R. (Marie Curie Sklodowska Univ., Dept. Phys. Chem., PL-20033 Lublin, Poland): Thermal modification of silica gels with temperature programming. *J. Thermal Anal.* **25** (1982) 449
- LEE, L. L., CHUNG, T. H., STARLING, K. E. (Univ. Oklahoma, Sch. Chem. Engr. and Mat. Sci., Norman, Okla., 73019 USA): A molecular theory for the thermodynamic behavior of polar mixtures. I. The statistical mechanical local-composition model. *Fluid Phase Equilibria* **12** (1983) 105
- LELIK, L., SAJÓ, G., VASS-BALTHAZÁR, K., KAPOSÍ, O. (c/o O. Kaposi, Eötvös Loránd Univ., Dept. Phys. Chem. and Radiol., H-1088 Budapest, Hungary): High temperature mass-spectroscopic investigation of the formation of homo- and heterocomplexes in the equilibrium vapour over sodium iodide and cesium iodide, I. *Acta Chim. Hung.* **113** (1983) 61
- LELIK, L., SAJÓ, G., VASS-BALTHAZÁR, K., KAPOSÍ, O. (c/o O. Kaposi, Eötvös Loránd Univ., Dept. Phys. Chem. and Radiol., H-1088 Budapest, Hungary): High temperature mass-spectrometric investigation of the formation of homo- and heterocomplexes in the equilibrium vapour over sodium iodide and cesium iodide, II. *Acta Chim. Hung.* **113** (1983) 75
- LEVANOVA, S. V., RODOVA, R. M., TERESHKINA, T. P., ZABRODINA, T. J. (V. V. Kubyshv. Polytech. Inst., Kubyshv, USSR): Thermocatalytic conversions of chlorobromopropanes. *Zh. Fiz. Khim.* **57** (1983) 1876 (in Russian)
- LEVY, J. H., STUART, W. I., WHITTEM, R. N. (Australian Atom Energy, Res. Estab., Sutherland NSW 2232 Australia): Thermal analysis of an epoxide resin system. *J. Thermal Anal.* **25** (1982) 359
- LI, M., MESSING, G. L.: Chloride salt effects on the decomposition of dolomite. *Thermochem. Acta* **68** (1983) 1
- LINKO, I. V., IVANOVEMIN, B. N., MOLODKIN, A. K., ZAITSEV, B. E., NANOVA, T. M., VENSKOVSKII, N. V., DOLGANEV, V. P. (P. Lumumba Univ., Moscow, USSR): Study of the thermal decomposition of tetraamminedioxoosmium(VI)

- chloride, bromide and iodide. *Zh. Neorg. Khim.* **28** (1983) 2051 (in Russian)
- LIPTAY, G. (Tech. Univ. Budapest, Dept. Inorgan. Chem., H-1521 Budapest, Hungary): Thermal analysis from a numerical aspect. *J. Thermal Anal.* **25** (1982) 235
- LYOYD, D. R., NETZER, F. P. (Univ. Dublin Trinity Coll., Dept. Chem., Dublin, Ireland): The electronic structure of the high temperature phase of ethylene adsorbed on Pd(III). *Surface Sci.* **129** (1983) L249
- LOBBIA, G. G., LORENZOTTI, A. (Univ. Camerino, Dipartimento Sci., Chim., I-62032 Camerino, Italy): Cryoscopic behaviour of mixtures. Ethylenetetra-carbon-tetraethyl ester + alkane. *Thermochim. Acta* **67** (1983) 111
- LODGE, T. P., HAN, C. C., AKCASU, A. Z. (c/o C. C. Han, NBS Ctr., Mat. Sci., Div. Polymer. Sci. and Standards, Washington, D. C., 20234 USA): Temperature dependence of dynamic light scattering in the intermediate momentum transfer region. *Macromolecules* **16** (1983) 1180
- LÓPEZ, R., RAMOS, I., VILLALBA, V., GARCIA, J. J. (Ctr. Invest. Quim., Washington, 169 Cerro, La Habana, Cuba): Decomposition and high temperature adsorption of pyridine on hydrorefining catalysts. *Collect.* **48** (1983) 2263
- LÜDERWALD, I., PERNAK, G. (Fachsch. Fresenius Wiesbaden, Dambachtal 20 D-6200 Wiesbaden, GFR): Catalytic thermal degradation of nylon. 6. *J. Anal. Appl. Pyrol.* **5** (1983) 133
- L'VOV, B. V., SAVIN, A. S. (M. I. Kalinin Polytech. Inst., Leningrad, 195251 USSR). Atomization of elements in electrothermal atomic absorption spectrometry by solid-phase reduction of oxides by carbon. *J. Anal. Chem. USSR* transl. *Zh. Anal. Khim.* **37** (1982) 1631
- LYLE, S. J., WESTALL, W. A. (Univ. Kent, Chem. Labs., Canterbury, CT2 7NH Kent, England): A study of the thermal decomposition of hydrated europium(III) chloride and europium(III) bromide. *Thermochim. Acta.* **68** (1983) 51
- MA, C. Y., HAN, C. D. (Polytech. Inst. New York, Dept. Chem. Engn., Brooklyn, N. Y., 11201 USA): Foam extrusion characteristics of thermoplastic resin with fluorocarbon blowing agent. II. Polystyrene foam extrusion. *J. Appl. Polym. Sci.* **28** (1983) 2983
- MACQUERON, J. L., ORTIN, J., THOMAS, G., TORRA, V. (Inst. Natl., Sci. Appl. Lyon Ultrasons Lab., F-9621 Villeurbanne, France): Thermogenesis: comparative efficiency of deconvolution based on optimal control and inverse filters. *Thermochim. Acta* **67** (1983) 213
- MADEREK, E., SCHULZ, G. V., WOLF, B. A. (c/o B. A. Wolf, Univ. Mainz, Inst. Phys. Chem., D-6500 Mainz, GFR): High temperature demixing of poly(decyl methacrylate) solutions in isooctane and its pressure dependence. *Makromol. Chem.-Macro. Chem. Phys.* **184** (1983) 1303
- MAHARAJH, D. M. (Univ. W. Indies, Dept. Chem. St. Augustine, Trinidad and Tobago): Thermodynamic studies of binary mixtures containing a self-associated compound: excess volumes of 1,1,3,3-tetramethylurea amid mixtures. *Thermochim. Acta* **68** (1983) 43
- MAHARAJH, D. M. (Univ. W Indies, Dept. Chem. St. Augustine, Trinidad and Tobago): Excess volumes of binary liquid mixtures of 1,1,3,3-tetramethylurea with alcohols. *Thermochim. Acta* **67** (1983) 67
- MAHER, W. A. (Univ. Adelaide, Dept. Phys. and Inorgan. Chem., Adelaide, SA 5001 Australia): A decomposition procedure for the determination of arsenic in marine samples. *Talanta* **30** (1983) 534
- MAHL, B. S., BHARDWAJ, S. S., DHANDA, S., KAUR, S. (Punjab Agr. Univ., Dept. Chem. Ludhiana, 141004 Punjab, India): Thermodynamic properties of some binary liquid mixtures containing o-chlorotoluene. Excess volumes and excess enthalpies of o-chlorotoluene + some aromatic hydrocarbons. *Thermochim. Acta* **68** (1983) 9
- MAMYLOV, S. G., LOMOVSKY, O. I. (Acad. Sci. USSR, Inst. Solid State Chem. and Raw Mineral, Proc. Novosibirsk, USSR): Stages of lead thiosulfate thermal decomposition. *Izv. Sibirsk. Otdel. Akad. Nauk A* (1983) 21 (in Russian)
- MANZANARES, C., CARRAZZA, J. (Univ. Simon Bolivar, Dept. Quim. Caracas, 1080 A, Venezuela): Temperature dependence of near-resonant vibrational energy transfer between CO<sub>2</sub> and deuterated methanes. *J. Chem. Phys.* **79** (1983) 2212

- MARDILOVICH, I. P., TROKHIMETS, A. I. (Acad. Sci. BeSSR, Inst. Phys. and Organ. Chem., Minsk, BeSSR): Effect on the zero order surface reaction mechanism effect on the parameters of programmed thermal desorption and its product. *Zh. Fiz. Khim.* 57 (1983) 2018 (in Russian)
- MARKOVNIK, V. S., SHVARO, O. V., SACHEK, A. I., PESHCHENKO, A. O. (V. I. Lenin State Univ., Petr. Chem. Proc. Thermodynam. Res. Lab., Minsk, BeSSR): Temperature dependence of the vapour pressure of some oxygen containing compounds. *Izv. Vyssh. Uchebn. Zav. Khim.* 26 (1983) 698 (in Russian)
- MARTA, L., ZAHARESCU, M., MACAROVICI, C. G. (Polytech. Inst., Baritzu Str. 25, R-3400 Cluj Napoca, Romania): Thermal and structural investigation of some oxalato-niobium complexes. 3. Strontium tris(oxalato)oxoniobate. *J. Thermal Anal.* 26 (1983) 387
- MASUDA, Y. (Niigota Univ., Dept. Gen. Educ., Div. Chem., Niigata 95021 Japan): Thermal decomposition of formates. IX. Thermal decomposition of rare earth formate anhydrides. *Thermochim. Acta* 67 (1983) 271
- MATHEW, N. M., DE, S. K. (Indian Inst. Technol. Ctr. Rubber Technol., Kharagpur, 721302 W Bengal, India): Thermo-oxidative ageing and its effect on the network structure and fracture mode of natural rubber vulcanizates. *Polymer* 24 (1983) 1042
- MATULEWICZ, E. R. A., SCHEFFER, B., MOL, J. C. (Univ. Amsterdam, Inst. Chem. Technol., 1018 TV Amsterdam, Netherlands): Determination of kinetic parameters of the desorption of propene from a  $\text{Re}_2\text{O}_7/\text{Al}_2\text{O}_3$  catalyst using temperature-programmed desorption. *Thermochim. Acta* 67 (1983) 361
- McGHIE, A. R., CHIU, J., FAIR, P. G., BLAINE, R. L. (Univ. Penn., Struct. Matter Res. Lab., Philadelphia, Pa., 19104 USA): Thermogravimetric apparatus temperature calibration using melting point standards. *Thermochim. Acta* 67 (1983) 241
- MELNIKOVA, V. M., EFIMOV, M. E., VASIN, S. K., MEDVEDEV, V. A. (Acad. Sci. USSR, Inst. Rare Element and Raw Mineral Chem., Technol., Apatity, USSR): Standard formation enthalpies of hafnium sulfate and its tetrahydrate. *Zh. Fiz. Khim.* 57 (1983) 1632 (in Russian)
- MENSHENINA, N. F., EVDOKIMOV, A. A., KHOMCHENKO, G. P. (Moscow Radioengn. Electr. and Autom. Inst., Moscow, USSR): Isothermal cross section of the  $\text{BaO}-\text{Nd}_{203}\text{Nb}_{205}$  system. *Zh. Neorg. Khim.* 28 (1983) 1887 (in Russian)
- MESUBI, M. A., OLATUNJI, G. A. (Univ. Ilorin., Dept. Chem., Ilorin, Nigeria): A study of thermal decomposition of some triphenyl carboxylate. *Thermochim. Acta* 67 (1983) 307
- METZGER, R. M., KUO, C. S., ARAFAT, E. S. (Univ. Mississippi, Dept. Chem., University, Miss., 38677 USA): A semi-micro rotating-bomb combustion calorimeter. *J. Chem. Thermodyn.* 15 (1983) 841
- MEUZELAAR, H. L. C.: Analytical pyrolysis. A comprehensive guide. *J. Anal. Appl. Pyrol.* 5 (1983) 167
- MIKALOUSKAS, T. V., SHCHEMELEVA, G. G.: Temperature effects during extraction of molybdenum(VI) with tributyl phosphate. *J. Appl. Chem. USSR transl. Zh. Prikl. Khim.* 55 (1982) 2523
- MIKHAILOV, V. K., SHLYAPOCHNIKOV, V. A. (Acad. Sci. USSR, Inst. Organ. Chem., Moscow, V-71 USSR): Calculation of thermodynamic functions based on the mechanical model of a molecule. *Zh. Fiz. Khim.* 57 (1983) 1867 (in Russian)
- MIKITAIEV, A. K., BERIKETOV, A. S., KORSHAK, V. V., TAOVA, A. Z. (Kabardino Balkar State Univ., Inst. Macromolec. Cpd., Nalchik, USSR): Influence of defects of chemical structure of polyimides on their thermal resistance. *Vysokomol. Soedin. A* 25 (1983) 1691 (in Russian)
- MILLET, C., NGUYEN, Q. L., ZAFFRAN, C., KOULBANIS, C. (Labs. Rech. Loreal, F-94150 Chevilly, Larve France): Optimization of external oil phase systems by differential thermal analysis. *Thermochim. Acta* 67 (1983) 157
- MILLER, B. (Bell Tel. Labs., N. C. Murray Hill, N. J., 07974 USA): Thermal modulation voltammetry. *J. Electrochem. Soc.* 130 (1983) 1639
- MILNE, T. A., SOLTYS, M. N. (Solar Energy Res. Inst., Div. Solar Fuels and Chem. Res., 1617 Cole Blvd. Golden, Colo., 80401 USA): Direct mass-spectrometric studies of the pyrolysis of carbonaceous fuels.

- I. A flame-pyrolysis molecular-beam sampling technique. *J. Anal. Appl. Pyrol.* **5** (1983) 93
- MILNE, T. A., SOLTYS, M. N. (Solar Energy Res. Inst., Div. Solar Fuels and Chem. Res., 1617 Cole Blvd. Golden, Colo., 80401 USA): Direct mass-spectrometric studies of the pyrolysis of carbonaceous fuels. II. Qualitative observations of primary and secondary processes in biomass. *J. Anal. Appl. Pyrol.* **5** (1983) 111
- MINEYEV, A. P., SHARONOV, Y. A., SHARONOVA, N. A., LYSOV, Y. P., FIGLOVSKY, V. A. (Acad. Sci. USSR, Inst. Molec. Biol., Moscow, 117334 USSR):  $\pi$ -d-interaction and the temperature dependent magnetic circular dichroism spectra of cow spin Fe(II)-heme compounds. *Theor. Chim. Acta* **63** (1983) 421
- MINTON, A. P. (Niadoko, Biochem. Pharmacol. Lab., Bldg, 4 Room 81-27 Bethesda, Md., 20205 USA): Thermodynamic non-ideality and the dependence of partition coefficient upon solute concentration in exclusion chromatography. II. An improved theory of equilibrium partitioning of concentrated protein solution. Application to hemoglobin. *Biophys. Chem.* **18** (1983) 139
- MITANI, Y., TSUTSUMI, K., TAKAHASHI, H. (c/o K. Tsutsumi, Toyohashi Univ. Technol., Toyohashi, Aichi, 440 Japan): Direct measurement of the interaction energy between solids and gases. X. Acidic properties of hydroxyl sites of H-Y zeolite determined by high-temperature calorimetry. *Bull. Chem. Soc. Jap.* **56** (1983) 1917
- MITANI, Y., TSUTSUMI, K., TAKAHASHI, H. (c/o K. Tsutsumi, Toyohashi Univ. Technol., Toyohashi, Aichi, 440 Japan): Direct measurement of the interaction energy between solids and gases. Calorimetric measurement of acidities of aluminium deficient H-Y zeolites. *Bull. Chem. Soc. Jap.* **56** (1983) 1921
- MITRA, S., DE, G., CHAUDHURI, N. R. (c/o N. R. Chaudhuri, Indian Assoc. Cultivat. Sci., Dept. Inorgan. Chem., Calcutta, 700032 W Bengal, India): Thermal investigation of diamine complexes of nickel(II) in the solid phase. *Thermochim. Acta* **66** (1983) 187
- MODESTOV, A. D., ASTAKHOV, I. I. (Acad. Sci. USSR, Inst. Electrochem., Moscow, V-71 USSR): Determination of thermodynamic and diffusion properties of alloys by kinetic electrochemical techniques. *Sov. Electrochem.* **19** (1983) 205
- MONTMITONNET, P., MONASSE, B., HAUDIN, J. M., DELAMARE, F. (Ecole Natl. Super Mines Paris, Ctr. Mise Forme Mat., CNRS, ERA 837 F-6565 Valbonne, France): Study of phase transitions of lithium stearate-influence of the thermal history. *J. Thermal Anal.* **26** (1983) 117
- MOURAD, M. Y., WASSEL, M. A., METWALLY, M. S. (Al Azhar Univ., Fac. Sci., Dept. Chem., Cairo, Egypt): Thermodynamic study of alkali-hydrogen exchange in aqueous glycerol on m-cresol-formaldehyde resin. *Thermochim. Acta* **67** (1983) 181
- MURTHY, C. S. R., RAO, G. N. (Indian Inst. Technol., Dept. Chem. New Delhi, 110016 India): Thermal decomposition of mixed ligand complexes of manganese(II), nickel(II), copper(II), zinc(II) and cadmium(II) containing triethandamine and oxalate. *Thermochim. Acta* **68** (1983) 75
- NAGATA, I., TAMURA, K. (Kanazawa Univ., Dept. Chem. Engr., Kanazawa Ishikawa, 920, Japan): Excess enthalpies of acetonitrile + trichloromethane + ethyl acetate and + methyl acetate and of (acetonitrile + trichloromethane) + ethyl acetate and + methyl acetate at 308.15 K. *J. Chem. Thermodyn.* **15** (1983) 721
- NALWA, H. S., VASUDEVAN, P. (Indian Inst. Technol., Dept. Chem., New Delhi, 110016 India): Thermally stimulated depolarization effect in thiourea-formaldehyde condensate. *Polymer* **24** (1983) 1197
- NARAIN, G., SHAKYA, A. K., SHUKLA, P. R. (Saugar Univ., Dept. Chem., Sagar, 470033 Madhya Pradesh, India): Kinetic parameters of the thermogravimetric dissociation of primary aliphatic amine complexes derived from tetraquocopper(II) nitrosopentacyanoferrate(II). *Thermochim. Acta* **67** (1983) 377
- NARAYANAN, S. S., RAO, V. R. S. (Indian Inst. Technol., Dept. Chem. Madras, 600036 Tamil Nadu, India): Chlorine isotropic exchange reaction between chloramine-T and chloride ion. *Radio Chim. Acta* **32** (1983) 197
- NARUCHI, K., TANAKA, S., YAMAMOTO, M., YAMADA, K. (Chiba, 260 Japan): Thermal dimerization of sodium crotonate in

- a solid state. *Nippon Kagaku Kaishi, J. Chem. Soc. Jap. Chem. Ind. Chem.* (1983) 1291
- NEDEL'KO, V. V., KORSUNKII, B. L., VERKHOVSKAYA, M. Y., NAZAROV, A. S. (Acad. Sci. USSR, Inst. Chem. Phys. Chernogolovka, USSR): Thermal decomposition of nitroform inclusion product in graphite oxide matrix. *Bull. Acad. Sci. USSR Div. Chem. Sci. transl. Izv. Akad. Nauk SSSR Khim.* 31 (1982) 2296
- NIRSHA, B. M., CHUBINIDZE, A. D., VELIKODNYI, Y. A., ZHADANOV, B. V., OLIKOVA, V. A. (All Union Chem. Reagent and Highly Pure Chem. Subst. Res. Inst., Moscow, USSR): Thermal decomposition of potassium hydroacetate. *Zh. Obshch. Khim.* 53 (1983) 1466 (in Russian)
- NIRSHA, B. M., CHUBINIDZE, A. D., VELIKODNYI, Y. A., ZHADANOV, B. V., OLIKOVA, V. A. (All Union Chem. Reagent and Highly Pure Chem. Subst. Res. Inst., Moscow, USSR): Thermal decomposition of strontium and barium hydroacetates. *Zh. Obshch. Khim.* 53 (1983) 1631 (in Russian)
- OHRBACH, K. H., RADHOFF, H. G., KETTRUP, A. (c/o A. Kettrup, Univ. Gesamtsch. Paderborn, Dept. Appl. Chem., D-4790 Paderborn, GFR): Thermal degradation of metal acetylacetonates with divalent metals by a combined TG-DTA-MS technique. *Thermochim. Acta* 67 (1983) 189
- OHRBACH, K. H., RADHOFF, G., KETTRUP, A. (c/o A. Kettrup, Univ. Gesamtsch. Paderborn, Dept. Appl. Chem., D-4790 Paderborn, GFR): TG-DTA-MS investigations of copper chelates with various  $\beta$ -diketones as ligands. *Thermochim. Acta* 67 (1983) 197
- ORLOVA, G. M., CHALABYAN, G. A., POPOVA, T. V.: Thermal expansion and velocity of propagation of ultrasound in glasses of the P-Se-Ge system. *J. Appl. Chem. USSR transl. Zh. Prikl. Khim.* 56 (1983) 192
- OSKOMOVA, L. A., GLADYSHEV, V. P., NAURYZHAEV, M. K. (S. M. Kirov State Univ., Dept. Analyt. Chem., Alma Ata, KaSSR): Temperature effect on the inhibiting action of diantipyrilmethane and its derivatives. *Izv. Vyssh. Uchebn. Zav. Khim.* 26 (1983) 707 (in Russian)
- PANDO, C., RENUNCIO, J. A. R., SCHOFIELD, R. S., IZATT, R. M., CHRISTENSEN, J. J. (Univ. Complutense Madrid, Departamento Quim. Fis., Madrid, Spain): The excess enthalpies of (carbon dioxide + toluene) at 308.15, 385.15 and 413.15 K from 7.60 to 12.67 MPa. *J. Chem. Thermodyn.* 15 (1983) 747
- PANEK, Z., FITZNER, K. (Polish Acad. Sci., Inst. Met. Res., PL-30059 Krakow, Poland): Thermodynamic properties and cation distribution of  $CdFe_2O_4 + Fe_3O_4$  solid solutions at 1073 K. *Thermochim. Acta* 66 (1983) 127
- PANT, N., CHATURVEDI, C. V., CHATURVEDI, G. D. (Univ. Allahabad, Dept. Chem., Allahabad 211002 Uttar Pradesh, India): Thermal pressure coefficient, internal pressure and solubility parameter of hard sphere fluids. *Z. Phys. Chem.* 264 (1983) 513
- PARIDA, K. M., KANUNGO, S. B. (c/o S. B. Kanungo, Reg. Res. Lab., Bhubaneswar, 751013 Orissa, India): Thermal decomposition characteristics in air and their relationship with electrochemical activity of different polymorphic forms of  $MnO_2$ . *Thermochim. Acta* 66 (1983) 275
- PATNAIK, P., RAO, D. Y., GANGULI, P., MURTHY, R. S. (Hindustan Lever, Res. Ctr., Bombay, 400099, India): Decomposition mechanism of copper ammonium chromate: a basic material for copper chromite catalyst. *Thermochim. Acta* 68 (1983) 17
- PATRYKIEJEW, A., JARONIEC, M., MARCZEWSKI, A. W. (Marie Curie Skłodowska Univ., Inst. Chem., PL-20031 Lublin, Poland): Studies of the temperature dependence of gas adsorption data on graphite and boron nitride in terms of the partially mobile adsorption model. *Chem. Scr.* 22 (1983) 136
- PAULIK, F., PAULIK, J., ARNOLD, M. (Tech. Univ. Budapest, Inst. Gen. and Analyt. Chem., H-1521 Budapest, Hungary): Kinetics and mechanism of pyrite under conventional and quasi-isothermal quasi-isobaric thermoanalytical conditions. *J. Thermal Anal.* 25 (1982) 313
- PAULIK, J., PAULIK, F., ARNOLD, M. (Tech. Univ. Budapest, Inst. Gen. and Analyt. Chem., H-1521 Budapest, Hungary): Simultaneous TG, DTG, DTA and EGA technique for the

- determination of carbonate, sulphate, pyrite and organic material in minerals, soils and rocks. 1. Principles of the method. *J. Thermal Anal.* **25** (1982) 327
- PEDDADA, S. V., MAGILL, J. A. (c/o J. H. Magill, Univ. Pittsburgh, Dept. Met. and Mat. Engn. Pittsburgh, Pa., 15261 USA): Mechanism of thermal degradation of some polyphosphazenes. *Macromolecules* **16** (1983) 1258
- PEÑA, D. M., LAINEZ, A., COMPOSTIZO, A., CRESPO, A. (Univ. Complutense Madrid, Fac. Ciencias Quím., Dept. Quím. Fis., Madrid, Spain): Excess functions of (1-bromobutane + toluene) at various temperatures. *J. Chem. Thermodyn.* **15** (1983) 807
- PERKINS, P. G. (Univ. Strathclyde, Dept. Pure and Appl. Chem., Glasgow G1 1XL Scotland): The heats of formation and structures of some phosphorus sulphides. *Inorg. Chim. Acta* **73** (1983) 45
- PETRANOVIČ, N., ŠUŠIĆ, M. (Fac. Sci. Beograd, Inst. Phys. Chem., Beograd, Yugoslavia): High temperature treated Ag-A zeolite. Electric and electrochemical properties. *Zeolites* **3** (1983) 271
- PIÑA, C., MUÑOZ, E., BOLDU, J. L. (Univ. Nacl. Autónoma México, Inst. Fis., 01000 México City, OF México): Temperature dependence of the spin hamiltonian parameters in KCl: Eu<sup>2+</sup> crystals. *J. Chem. Phys.* **79** (1983) 2172
- PLEKHOTKIN, V. F.: Standard thermodynamic functions of nitric oxide dimer. *J. Appl. Chem. USSR transl. Zh. Prikl. Khim.* **55** (1982) 2336
- PONNUSAMY, E., BALAKRISMAN, T., KOTHANDARAMAN, H. (Univ. Madras, Ac Coll. Campos, Dept. Phys. Chem., Madras, 800025 Tamil Nadu, India): Synthesis, characterization and kinetics of thermal degradation of copolymers. *Makromol. Chem. Macro. Chem. Phys.* **184** (1983) 1279
- POMPE, R., ABERG, U. (Chalmers Univ. Technol., Dept. Inorgan. Chem., S-41296 Gothenburg. Sweden): On the thermal stability and properties of olivine-based mineral fibres. *Thermochim. Acta* **67** (1983) 251
- POPESCU, M., MATEI, V., SIMION, A., DANET, A. (Inst. Construct. Bucharest, Romania): Thermodiffusive characteristics of some adhesive, film-forming materials and the component solvents. *J. Thermal Anal.* **26** (1983) 65
- POSPISIL, M., KUSNIERIK, O. (Czech. Tech. Univ., Fac. Nucl. and Phys. Engn., CS-11519 Prague, 1 Czechoslovakia): Influence of composition and ionising radiation on kinetics of reduction of mixed CdO-ZnO oxides with hydrogen. *J. Thermal Anal.* **25** (1982) 499
- QUAST, H., SEIDENPINNER, H. M. STAWITZ, J. (Univ. Würzburg, Inst. Organ. Chem., D-8700 Würzburg, GFR): Thermal rearrangement and nucleophilic ring cleavage of cis-2,3-dihydro-2,3-diphenyl-14, -1,4-disrepines. *Liebigs Ann. Chem.* (1983) 1230
- RAJESHWAR, K., ROSENVOLD, R. J., DuBOW, J. B. (Colorado State Univ., Dept. Elect. Engn., H Collins, Colo., 80523 USA): Thermogravimetric assay of oil shale. *Thermochim. Acta* **66** (1983) 373
- RAPER, E. S. (Newcastle Upon Tyne Polytech., Sch. Chem. and Life Sci., Newcastle Tyne NE1 8ST, Tyna and Wear, England): Thermal analysis of heterocyclic thione donor complexes. 1. Cobalt(II) complexes of 1-methylimidazoline-2(34)-thione. *J. Thermal Anal.* **25** (1982) 463
- RASMUSSEN, J. K., SMITH, H. K. (Three M Co, CENT Res. Labs., Sci. Res. Lab., 3M Ctr., St. Paul, Mont 55144 USA): Polyamide-polyether copolymers: a new family of impact-resistant. *J. Appl. Polym. Sci.* **28** (1983) 2473
- RASTOGI, R. P., SHABD, R. (Univ. Gorakhpur, Dept. Chem. Gorakhpur, 273001 Uttar Pradesh, India): Thermodynamics of stability of non-equilibrium steady states. *J. Chem. Educ.* **60** (1983) 540
- REDDY, G. O., CHALTERJEE, A. K. (Iol. Chem. Ltd., Inbri Div., POB 397 Sankey RD Bangalore, 560003 India): A thermal study of the salts of azotetrazole. *Thermochim. Acta* **66** (1983) 231
- REICH, L., STIVALA, S. S. (Stevens Inst. Technol., Dept. Chem. and Chem. Engn., Hoboken, N. J., 07030 USA): Computer-determined kinetic parameters from DTA traces. *Thermochim. Acta* **66** (1983) 383
- REZUKHINA, T. N., GORSHKINA, T. I., TSVETKOV, A. A. (M. V. Lomonosov State Univ., Fac. Chem., Moscow, 117234 USSR):

- Thermodynamic properties of solid titanium trifluoride. *Zh. Fiz. Khim.* 57 (1983) 1651 (in Russian)
- REZUKHINA, T. N., GORSHKOVA, T. I., TSVETKOV, A. A. (M. V. Lomonosov State Univ., Fac. Chem., Moscow, 117234 USSR): Thermodynamic properties of  $\text{CrF}_2$  and  $\text{CaCrF}_4$ . *Zh. Fiz. Khim.* 57 (1983) 1887 (in Russian)
- RIEKKÜLA, M. L., SIREN, H. (Univ. Helsinki, Dept. Chem., Div. Analyt. Chem., SF-00100 Helsinki, IO Finland): The rate of decomposition of sodium disobutylidithiocarbamate in aqueous solution and extractibility of the corresponding acid with methylene chloride. *Finn. Chem. Lett.* (1983) 68
- RIGOTTI, G., LAVAT, A. E., ESCOBAR, M. E., BARAN, E. J. (Univ. Nacl. La Plata, Fac. Ciencias Exactas, RA-1900 La Plata, Argentina): Crystal data, IR spectrum and thermal behaviour of aluminium decavanedate. *Z. Anorg. Allg. Chem.* 501 (1983) 184
- ROBESON, L. M., CRISAFULLI, S. T. (Union Carbide Corp., Res. and Dev., Bound Brook, N. J., 08805 USA): Microcavity formation in engineering polymers exposed to hot water. *J. Appl. Polym. Sci.* 28 (1983) 2925
- RODANTE, F., BONICELLI, M. G. (Univ. Rome, Fac. Ingn., Ist. Chim., I-00100 Rome, Italy): The effect of medium on the dissociation of the p-hydroxyaniline ion. *Thermochim. Acta* 66 (1983) 225
- RODANTE, F., BONICELLI, M. G. (Univ. Rome, Fac. Ingn., Ist. Chim., I-00100 Rome, Italy): The effect of medium on the dissociation of the ortho-hydroxyanilinium ion. Primary steric effect as a factor in the ionization process. *Thermochim. Acta* 67 (1983) 257
- RODANTE, F., CECCARONI, G., FANTAUZZI, F. (Univ. Rome, Fac. Ingn., Ist. Chim., I-00100 Rome, Italy): Complete thermodynamic analysis of the ionization of orthomethoxybenzoic acid. Influence of the medium on the ortho effects. *Thermochim. Acta* 67 (1983) 45
- ROGACHEVA, S. S., SIROTKINA, Y. Y. (S. M. Kirov Polytech. Inst., Tomsk, USSR): Influence of thermal treatment on electrophotographic properties of oligomers of 9-vinyl carbazol. *Vysokomol. Soedin. B* 25 (1983) 548 (in Russian)
- ROLDAN, A. M. R., AUFFREDIC, J. P., LOVER, D. (Univ. Complutense Madrid, Fac. Ciencias, Inst. Quim. Inorgan. Elhuyar, Madrid, Spain): Influence of crystalline structure on thermal decomposition of the hydroxynitrates of bivalent metals. Example of cadmium hydroxynitrate. *J. Thermal Anal.* 26 (1983) 131
- ROLIN, A., RICHARD, C., MASSON, D., DEGLISE, X. (Univ. Nancy 1 Photochim. Appl. Lab., F-54506 Vancoœuvre, France): Catalytic conversion of biomass by fast pyrolysis. *J. Anal. Appl. Pyrol.* 5 (1983) 151
- ROSA, C. J. (Univ. Cincinnati, Dept. Mat. Sci. and Met. Engn., Cincinnati, Ohio, 45221 USA): High temperature ductility of iron and some steels. *High Temp. Sci.* 16 (1983) 69
- ROTH, W. R., KLÄRNER, F. G., GRIMME, W., KÖSER, H. G., BUSCH, R., MUSKULUS, B., BREUCKMANN, R., SCHOLZ, B., LENNARTZ, H. W. (Univ. Bochum, Chem. ABT.-D4630 Bochum, 1 GFR): Stereochemistry of the bicyclo [2.1.0] pentane ring-opening; thermolysis of tricyclo [3,2,0.044] heptone derivatives. *Chem. Ber.* 116 (1983) 2717
- ROZWADOWSKI, M., SIEDLEWSKI, J., WISNIEWSKI, E. (Nicholas Copernicus Univ., Inst. Chem., PL-87100 Turun, Poland): Effect of temperature and adsorbate kind on curves of adsorption energy distribution. *Polish J. Chem.* 55 (1981) 1849
- RÓZYLO, J. K., MALINOWSKA, I. (Marie Curie Skłodowska Univ., Inst. Chem., Dept. Phys. Chem., PL-20031 Lublin, Poland): Parameters of thermodynamic optimization theory of thin layer chromatographic separation of mixtures in inactive mobile phases. *Chem. Anal.* 27 (1982) 469
- RYCHLY, J., MATISOVARYCHIA, L., VAVREKOVA, M. (Slovak Acad. Sci., Inst. Polymer, CS-80934 Bratislava, Czechoslovakia): Difference method of evaluation of dynamic integral thermogravimetric curves in decomposition of polypropylene. *J. Thermal Anal.* 25 (1982) 423
- RYSAVA, N., TRNKA, J., NOVAK, J., SCHULTZE, D. (Czechoslovak Acad. Sci., Inst. Phys., CS-11142 Prague, 1 Czechoslovakia): DTA study on lead chloride. *J. Thermal Anal.* 26 (1983) 101

- SABLIOVSCHI, M., GRIGORIU, G. (Petru Poni Inst. Macromolec. Chem., Aleea Gr. Ghica Voda 4JA Jassy, Romania): Compatibility of binary systems of poly(methyl methacrylate) poly(vinyl chloride) and poly(vinyl acetate). 1. Thermogravimetric, infrared spectroscopic and microscopic studies. *J. Thermal Anal.* 26 (1983) 23
- SABLIOVSCHI, M., GINJU, F., SIMIONESCU, C. I. (Petru Poni Inst. Macromolec. Chem. Aleea Gr. Ghica Voda 41A, Jassy, Romania): Compatibility of binary systems of poly(methyl methacrylate), poly(vinyl chloride) and poly(vinyl acetate). 2. Time and temperature dependences. *J. Thermal Anal.* 26 (1983) 31
- SAEED, A. A. H., WATSON, M. H., SULTAN, A. W. A. (Basrah Univ., Coll. Sci., Dept. Chem., Basrah, Iraq): The effect of temperature and the kinetics of the hydrolysis of some  $\beta$ -diketone. Schiff bases. *Thermochim. Acta* 67 (1983) 17
- SAGI, S. R., PRASADA RAO, M. S., RAMANA, K. N. (Andhra Univ., Inorgan. Chem. Labs., Waltair 530003 Andhra Pradesh, India): Some studies on thallium oxalates. XII. Electrical properties of thallium(I) oxalate. *Thermochim. Acta* 67 (1983) 121
- SALYER, O. I., DAVIDSON, J. A. (Univ. Dayton, Res. Inst., Dayton, Ohio, 45469 USA): Thermal-energy storage in crosslinked pellets of high-density polyethylene for home heating and cooling via off-peak electric power utilization. *J. Appl. Polym. Sci.* 28 (1983) 2903
- SAMPATH, S., CHACKRABURTTY, D. M. (Bhabha Atom Res. Ctr., Div. Radiochem., Bombay, 400085 India): Studies on the oxidation of uranium-plutonium oxides by non-isothermal kinetics. *Thermochim. Acta* 66 (1983) 153
- SAMUILOV, Y. D., NURULLINA, R. L., KONOVALOV, A. I. (V. I. Lenin State Univ., Kazan, USSR): Thermochemical and kinetic study of Diels-Alder reactions with ethylene and acetylene dienophiles. *Zh. Org. Khim.* 19 (1983) 1431 (in Russian)
- SAMYGIN, V. D. (Moscow Steel and Alloys Inst., Moscow, USSR): Thermodynamics of the adhesion of bubbles and drops in presence of a film. *Colloid J. USSR transl. Kolloidn. Zh.* 44 (1982) 1054
- SANTANDREA, R., GMELIN, E., SANTANDREA, C., VON SCHNERING, H. G. (Max Planck, Inst. Festkörperforsch., D-7000 Stuttgart, 80 GFR): Chemistry and structural chemistry of phosphides and polyphosphides. 32. Heat capacity measurements of  $\text{LiP}_{15}$  and  $\text{KP}_{15}$ . *Thermochim. Acta* 67 (1983) 263
- SARAWADEKAR, R. G., KULKARNI, S. B. (Explos. Res. and Dev. Lab., Pune, 411021 India): Structural and thermal properties of alkaline earth metal phosphate. *Thermochim. Acta* 67 (1983) 333
- SARAWADEKAR, R. G., KULKARNI, S. B. (Explos. Res. and Dev. Lab., Pune, 411021 India): Physico-chemical properties of metal phosphates. *Thermochim. Acta* 67 (1983) 341
- SAWHNEY, S. S., BAINS, S. S., BISHT, D. S. (Dav Postgrad Coll., Dept. Chem., Dehra Dun, 248001 India): Investigations on  $\text{UO}_2$ -2-methyl-5-hydroxy 1,4-naphthalenedione complex. *Thermochim. Acta* 67 (1983) 107
- SAWHNEY, S. S., BANSAL, A. K. (Dav Postgrad Coll., Dept. Chem., Dehra Dun, 248001 India): Kinetics of the non-isothermal decomposition of some metal derivatives of 8-quinolinol and its dihalo derivatives from DTG/DTA curves. *Thermochim. Acta* 66 (1983) 347
- SAWHNEY, S. S., SATI, R. M. (Dav PG Coll. Dept. Chem., Dehra Dun, 248001 India): pH-metric studies on Cd(II), Pb(II), Al(III), Cr(III) and Fe(III) p-nitrobenzaldehyde thiosemicarbazone systems. *Thermochim. Acta* 66 (1983) 351
- SAWHNEY, S. S., DANGWAL, D. N. (Dav. PG. Coll., Dept. Chem., Dehra Dun, 248001 India): Solution study on lanthanum(III), praseodymium(III), europium(III) and gadolinium(III)-phenylmethyl penicillin systems. *Thermochim. Acta* 67 (1983) 383
- SCHMITZ, F. P., MROSZEWSKI, K. D., ROSSBACH, V. (c/o V. Rossbach, Univ. Hamburg, Inst. Tech. Chem. and Makromolek. Chem., D-2000 Hamburg 13 GFR): On the thermal mobility of the amino end groups of polyamides 6 and 6,6. *Makromol. Chem. Macro. Chem. Phys.* 184 (1983) 1255
- SERGEEV, V. A., NEDELKIN, V. I., ARUSRAMYAN, S. S., YORZH, B. V.,

- YUNNIKOV, V. V., BATENINA, N. V. (A. N. Nesmeyanov Organoelement Cpds. Inst., Moscow, USSR): Synthesis and thermal properties of reactive polychloro (diphenylen sulfides). *Vysokomol. Soedin. A* 25 (1983) 1758 (in Russian)
- SEU, G. (Univ. Cagliari, Ist. Chim. Organ., I-09100 Cagliari, Italy): Effect of heat-setting on dyeing behaviour of nylon 6,6 fibres. *Ann. Chim.* 73 (1983) 333
- SEVERINI, F., GALLO, R., MARULLO, R. (Univ. Messina, Inst. Chim., I-98100 Messina, Italy): Differential scanning calorimetry study of reactions of epoxides with polyamines. *J. Thermal Anal.* 25 (1982) 515
- SHAKIRZANOV, R. G., TELYAKOV, E. S., SERAFIMOV, L. P. (All Union Hydrocarbon Raw Mat. Res. Inst., Moscow, USSR): Thermodynamic-topological analysis of isolation of sulfur compounds from the pentane fraction by rectification. *J. Appl. Chem. USSR* transl. *Zh. Prikl. Khim.* 56 (1983) 123
- SHAPOSHNIKOVA, S. G., VASINA, N. A., VASIL'CHENKO, L. M.: Thermophysical properties of alkali and alkaline-earth. *J. Appl. Chem. USSR* transl. *Zh. Prikl. Khim.* 55 (1982) 2330
- SHARMA, U. (Dav. PG Coll. Dehra Dun, 248001 India): Physico-chemical studies on the composition and stability constants of Zn(II), Cd(II) and Hg(II). L-lysine monohydrochloride complexes. *Thermochim. Acta* 66 (1983) 369
- SHILEY, R. H., KONOPKA, K. L., CAHILL, R. A., HINCLEY, C. C., SMITH, G. V., TWARDOWSKA, H., SAPOROSCHENKO, M. (Illinois Dept. Energy and Nat. Resources Illinois State Geol. Survey, Champagn, Ill., 61820 USA): Methods for detecting the nobility of trace elements during medium-temperature pyrolysis. *Fuel* 62 (1983) 905
- SHIRALKAR, V. P., KULKARNI, S. B. (Natl. Chem. Lab., Pune, 8 India): Thermal and structural properties of rare earth exchanged zeolites. *J. Thermal Anal.* 25 (1982) 399
- SHIROKOV, N. A., DAUENGAUER, S. A., SAZANOV, Y. N. (Acad. Sci. USSR, Inst. Macromolec. Cpds., Leningrad, USSR): Some features of DTA in platinum crucibles. *J. Thermal Anal.* 25 (1982) 597
- SHUKLA, J. P., RAVI, P. M., SUBRAMANIAN, M. S. (Bhabha Atom Res. Ctr., Div. Radiochem., Bombay, 400085 India): Thermodynamics of proton-ligand dissociation equilibria in mixed solvents. Acid dissociation of 2-isopropyltropolone in mixtures of water and dioxane. *Thermochim. Acta* 66 (1983) 75
- SIBOTA, N. N., POLUTCHANKINA, L. P., ORLOVA, N. S.: Temperature dependence of the X-ray diffuse scattering intensity in  $V_3Si$  in the temperature range from 5 to 300 K. *Cryst. Res. Tech.* 18 (1983) 1029
- SILING, S. A., GRIBKOVA, P. N., PONOMAREV, I. I., BALKOVA, T. N., VLCSOVA, I. V., PAVLOVA, S. S. A., KORSCHAK, V. V., VINOGRADOVA, S. V. (A. N. Nesmeyanov Organoelement Cpds. Inst., Moscow, USSR): Thermal conversions of polymers with macroheterocycles in the chain. *J. Polym. Sci. Polym. Chem. Ed.* 21 (1983) 2675
- SIMONOTGRANGE, M. H. (Fac. Sci. Mirande, Rech. Reactivite Solides Lab., Bp 138, F-21004 Duon, France): Kinetic contribution to the knowledge of affinity thermal machines. 1. Kinetic of the evolution of zeolite-vapor-liquid system during the sorption-evaporation process or cooling production step. *J. Chim. Phys.* 80 (1983) 481
- SINGH, N. B., PANDEY, S. P. (Gorakhpur Univ., Dept. Chem., Gorakhpur, 273001 Uttar Pradesh, India): Thermal decomposition of  $MCl_2$ . M. CO(II), Ni(II), Cu(II) in sodium nitrate-potassium nitrate eutectic melt. *Thermochim. Acta* 67 (1983) 147
- SINGH, P. K., MATHUR, A. B., MATHUR, G. N. (Harcourt Butler Technol. Inst. Dept. PF Plast. Technol., Kanpur 208002 Uttar Pradesh, India): Study on the thermal behaviours of homopolymers and copolymers of styrene, MA and AN by thermogravimetry. *J. Thermal Anal.* 25 (1982) 387
- SINGH, P. P. (Maharshi Dayanand Univ., Dept. Chem., Rohtak, 124001 India): Topological aspects of the effect of temperature and pressure on the thermodynamics of binary mixtures of non-electrolytes. *Thermochim. Acta* 66 (1983) 37
- SIVARAMAN, A., MARTIN, R. J., KOBAYASHI, R. (Rice Univ., George R. Brown Sch. Engr., Dept. Chem. Engr., Houston, Tex., 77251 USA): A versatile apparatus to study the vapor pressures and heats of vaporization of carbazole,

- 9-fluorenone and 9-hydroxyfluorene at elevated temperatures. *Fluid Phase Equilibria* 12 (1983) 175
- SKOWRONSKI, T. A., RABEK, J. F., RANBY, B. (Polytech. Inst. Wroclaw, Inst. Organ. and Polymer Technol., PL-50370 Wroclaw, Poland): Effect of thermal stabilizers on the photo-oxidative degradation of solid poly(vinyl chloride). *Polymer* 24 (1983) 1189
- SMIESZEK, Z., KOLENDA, Z. S., NORWISZ, J., HAJDUK, N. (Inst. Nonferrous Met., PL-44100 Gliwice, Poland): Remarks on the determination of kinetic constants from thermogravimetric data. *J. Thermal Anal.* 25 (1982) 377
- SMITH, D. (Penn State Univ., Dept. Chem., Hazleton, Pa., 18201 USA): Negative thermal expansion due to the hindered rotation of the ammonium ion or the methyl group in solids with low barriers to rotation and the anisotropic thermal expansion in solids having polyatomic groups. *J. Chem. Phys.* 79 (1983) 2995
- SRIVASTAVA, A. K., AGARWAL, R. K. (c/o R. K. Agarwal, Lajpat Rai Coll., Dept. Chem., Sahabad, 201005 India): Thermal behaviour of the thiouramsulphide complex of thorium(IV) nitrate. *Thermochim. Acta* 68 (1983) 121
- SRIVASTAVA, S. P., GUPTA, V. K., JAIN, M. C., ANSARI, M. N., KAUSHIK, R. D. (Univ. Roorkee, Dept. Chem., Roorkee 247667 Uttar Pradesh, India): Thermodynamic and LFER studies for the oxidation of anilines by the periodate ion. *Thermochim. Acta* 68 (1983) 27
- STRAKOVSKAYA, S. E., KORABLEV, V. Y., STANCHITS, S. A.: Temperature dependencies of GaAs(III)B optical constants. *Opt. Spectrosk.* 55 (1983) 90 (in Russian)
- STRANSKY, P. D., YATES, W. R., JOHNSON, J. F. (Rogers Corp., Rogers Conn., 062363 USA). Accelerated heat age testing of phenolics: applicable temperature range. *J. Appl. Polym. Sci.* 28 (1983) 2593
- STOMPTEL, Z. J., BARTIE, K. D. (Inst. Chem. Proc. Coal, Zamkowa, 1 PL-41803 Zabrze, Poland): Structural analysis of tars from fluidized bed pyrolysis of coal. 2. <sup>1</sup>Hn.m.r. and i.r. spectroscopy. *Fuel* 62 (1983) 900
- SWAMY, M. S. R., PRASAD, T. P. (Elect. Res. and Dev. Assoc., 834 Gide, Baroda, 10, India): Thermal decomposition of iron(II) sulphate heptahydrate in the presence of alkali metal carbonates. *J. Thermal Anal.* 25 (1982) 347
- SWAMY, M. S. R., PRASAD, T. P. (Elect. Res. and Dev. Assoc., 834 Gide, Baroda, 10, India): Thermal decomposition of iron(II) sulphate heptahydrate in air in the presence of (basic) beryllium carbonate. *J. Thermal Anal.* 25 (1982) 355
- SWATHIRAJAN, S., BRUCKENSTEIN, S. (Suny Buffalo, Dept. Chem., Buffalo, N. Y., 14214 USA): Thermodynamics and kinetics of underpotential deposition of metal monolayers on polycrystalline substrates. *Electrochim. Acta* 28 (1983) 865
- SZCZEPANICKI, W., PLAZIAK, A. S. (Adam Mickiewicz Univ., Inst. Chem., PL-60780 Poznan, Poland): Mass spectrometry of dialkyldithiophosphates. II. Fragmentation of cobalt(II), zinc(II) and cadmium(II) di-n-alkyldithiophosphate complexes upon electron impact. Thermal decomposition occurring in mass spectrometer while recording EIM5 data of divalent metal complexes. *Polish J. Chem.* 55 (1981) 2289
- SZEKELY, A., HANSON, R. K., BOWMAN, C. T. (Stanford Univ., Dept. Mech. Engr., High Temp. Gasdynam. Lab., Stanford, Calif., 94305 USA): High-temperature determination of the rate coefficient for the reaction  $H_2 + CN \rightarrow H + HCN$ . *Int. J. Chem. Kinet.* 15 (1983) 915
- TAGAWA, T., YAMASHITA, S., FURUSAWA, K. (Mitsubishi Chem. Ind. Ltd., 1000 Kamoshida Cho, Midoriku, Yokohama, Kanagawa, 227 Japan): Absorption treatment of polymer at lower critical solution temperature (LCST) and its effect on the stability of polystyrene lattices. *Kobunshi Ronbunshu, Jap. Polym. Sci. Techn.* 40 (1983) 273
- TAI, K., ARAI, Y., TAGAWA, T. (Unitika Ltd., Ctr. Res. and Dev., 23 Kozakura, Lui, Kyoto, 611 Japan): The simulation of hydrolytic polymerization of  $\epsilon$ -caprolactam in various reactors: a simulation model for the tubular reactor with heat exchanger and its numerical solution. *J. Appl. Polym. Sci.* 28 (1983) 2527
- TAKENAKA, S., KUSABAYASHI, S., SETO, S.: Synthesis and thermal properties of new liquid crystalline materials involving

- tropolone. *Mol. Cryst. Liquid. Cryst.* **95** (1983) 287
- TAMURA, K., OHOMURO, K., MURAKAMI, S. (Osaka City Univ., Fac. Sci. Dept. Chem., Osaka, 558 Japan): Speeds of sound, isentropic and isothermal compressibilities, and isochoric heat capacities at  $\{x\text{CC}_6\text{H}_{12} + (1-x)\text{C}_6\text{H}_6\}$ ,  $\{x\text{CCl}_4 + (1-x)\text{C}_6\text{H}_6\}$ ,  $\{x\text{C}_7\text{H}_{16} + (1-x)\text{C}_6\text{H}_6\}$  at 298.15 K. *J. Chem. Thermodyn.* **15** (1983) 859
- TAYLOR, R. (Univ. Sussex, Sch. Chem. and Molec. Sci., Brighton, BN1 9QS E Sussex, England): The mechanism of thermal elimination. 17. Rate data for pyrolysis of vinyl acetate and 1,2-diacetoxyethane. *J. Chem. Soc. Perkin Trans. II* (1983) 1157
- TISSOT, P., WAEFLER, J. P. (Univ. Geneva, Dept. Inorgan. Analyt. and Appl. Chem., CH-1211 Geneva, 4 Switzerland): Thermal decomposition of the alkaline salts of difluorochloro and difluorobromoacetic acids. *Thermochim. Acta* **66** (1983) 315
- TITOVA, K. V., KOLMAKOVA, E. I., ROSOLOVSKII, V. Y. (Acad. Sci. USSR, Inst. New Chem. Problem, Moscow, V-71 USSR): Thermal decomposition of sodium carbonate peroxyhydrate  $\text{Na}_2\text{CO}_3 \cdot 1.5 \text{H}_2\text{O}_2$ . *Zh. Neorg. Khim.* **28** (1983) 1922 (in Russian)
- TSUNASHIMA, Y., NEMOTO, N., KURATA, H. (c/o M. Kurata, Kyoto Univ., Inst. Chem. Res., Uji, Kyoto, 611 Japan): Dynamic light scattering studies of polymer solutions. 2. Translational diffusion and intramolecular motions of polystyrene in dilute solutions at the Q temperature. *Macromolecules* **16** (1983) 1184
- UCHYTILOVÁ, V., MAJER, V., SVOBODA, V., HYNEK, V. (c/o V. Majer, Inst. Chem. Technol., Dept. Phys. Chem., CS-16628 Prague, Czechoslovakia): Enthalpies of vaporization and cohesive energies for seven aliphatic ketones. *J. Chem. Thermodyn.* **15** (1983) 853
- UCHYTILOVÁ, V., SVOBODA, V. (Prague Inst. Chem. Technol., Dept. Phys. Chem., CS-16628 Prague, 6 Czechoslovakia): Verification of the calculation of the constant-volume heat capacity difference of substances in the liquid and gas phases from the temperature dependence of heat of vaporization. *Collect.* **48** (1983) 2141
- UDAROV, B. G., KULIKOV, V. I. (Acad. Sci. BeSSR, Inst. Phys. Organ. Chem., Minsk, BeSSR): Chromatographic identification of monoterpenes and related compounds from their thermodynamic dissolution characteristics and relative retention times on squabane and tricresylphosphate. *J. Anal. Chem. USSR transl. Zh. Anal. Khim.* **38** (1983) 260
- URUSOVA, M. A., VALYASHKO, V. M. (N. S. Kurnakov Gen. and Inorgan. Chem. Inst., Moscow, USSR): Solubility, vapor pressure and thermodynamic properties of solutions in the  $\text{MgCl}_2 \cdot \text{H}_2\text{O}$  system at 300 °C to 350 °C. *Zh. Neorg. Khim.* **28** (1983) 1845 (in Russian)
- VAN DEIJCK, W., ROELOFSEN, A. M., PIETERS, H. J., HERBER, R. F. M. (Univ. Amsterdam, Coronel Lab. Occupat. and Environm. HLTH, 1054 BW Amsterdam, Netherlands): Temperature-controlled electrothermal atomization—atomic absorption spectrometry using a pyrometric feedback system in conjunction with a background monitoring device. *Spectrochim. Acta B* **38** (1983) 791
- VANDERZEE, C. E., SPRENGEL, M. E. (Univ. Nebraska, Dept. Chem., Lincoln, Nebr., 68588 USA): The standard motor enthalpies of formation of  $\text{I}^-$  (aq) and 41 (g) at 298.15 K. *J. Chem. Thermodyn.* **15** (1983) 869
- VAN DOOREN, A. A., MÜLLER, B. W. (Duphar BV, Dept. Pharmaceut. Dev., Weesp, Netherlands): Effects of experimental variables purity determinations with differential scanning calorimetry. *Thermochim. Acta* **66** (1983) 161
- VANKAN, J. M. J., WEEMAN, W. S., HALTIWANGER, R. C., BEURSKENS, P. T. (Catholic Univ. Nijmegen, Dept. Phys. Chem., 6525 Ea Nijmegen, Netherlands): Low-temperature delayed fluorescence in 1,4-dibromonaphthalene. *Chem. Phys. Lett.* **99** (1983) 53
- VARDAPETJAN, R. R., LETNANSKY, K., VARDEVANJAN, P. O., PANOSJAN, G. H. (Vienna Univ. Inst. Canc. Res., A-1010 Vienna, Austria): The evaluation of an average nucleotide composition from melting curves. *Biophys. Chem.* **18** (1983) 11
- VASÁK, F., KOLÁČ, B., BROŽ, Z.: Heat transfer flow at very low prandtl numbers. *Collect.* **48** (1983) 1695

- VASILEVA, I. A., SEREGIN, A. N. (M. V. Lomonosov State Univ., Moscow, 117234 USSR): Thermodynamic functions of oxides formation in the V-VO system. *Zh. Fiz. Khim.* **57** (1983) 1624 (in Russian)
- VAZ, N. A. P., DOANE, J. W. (Kent State Univ., Dept. Phys., Kent, Ohio, 44242 USA): Temperature dependence of the Maier-Saupe order matrix from ZH-NMR of fluorene-d<sub>10</sub> in the nematic, ametic A, B and C phases. *J. Chem. Phys.* **79** (1983) 2470
- VEERESHAM, P., RAO, U. V. S., BABU, V. H. (Osmania Univ., Dept. Phys., Hyderabad, 500007 Andhra Pradesh, India): Thermoluminescence studies in KBr XII-X mixed crystals. *Cryst. Res. Tech.* **18** (1983) 939
- VESALA, A., KÄPPI, R., LAHIKONEN, P. (Univ. Turku, Dept. Chem. and Biochem., SF-20500 Turku, 50 Finland): Thermodynamics of complex formation of sodium, calcium and lanthanum ions with methyl glycofuranosides in methanol. *Finn. Chem. Lett.* (1983) 45
- VIGGIANO, A. A., PAULSON, J. F. (USAF, Geophys. Lab., Bedford, Mass., 01731 USA): Temperature dependence of associative-detachment reactions. *J. Chem. Phys.* **79** (1983) 2241
- VINK, H. (Univ. Uppsala, Inst. Phys. Chem., S-75121 Uppsala, Sweden): Thermodynamics of swelling and partition equilibria in gels. *Acta Chem. Scand.* **37** (1983) 187
- VOIGT, B., LUDWIG, W. (Univ. Jena, Sekt. Chem., DDR-6900 Jena, GDR): Study of the crystallization of undercooled GeX<sub>2</sub> melts (X = O, S, Se) from DTA. *J. Thermal Anal.* **25** (1982) 341
- VOIGT, B., LUDWIG, W. (Univ. Jena, Sekt. Chem., DDR-6900 Jena, GDR): A new method for the estimation of the glassforming tendency of melts from DTA using the example of Pb-Se-Ge. *J. Thermal Anal.* **25** (1982) 579
- WALSH, R. (Univ. Reading, Dept. Chem., Reading RG6 2AD Berks, England): Thermochemistry of silicon-containing compounds. 1. Silicon-halogen compounds, an evaluation. *J. Chem. Soc. Faraday Trans. 1.* **79** (1983) 2233
- WANG, B., LIN, Y. J., CHUNG, C. S. (Natl. Tsing Hua Univ., Dept. Chem., Hsinchu, 300 Taiwan): Thermodynamic studies on the complexation reactions of copper(II) complex of O<sub>2</sub>N<sub>2</sub> donor-macrocycle with halide and pseudohalide ions. *J. Chin. Chem. Soc.* **30** (1983) 207
- WARD, J. R. (Chem. Syst. Lab., Div. Res., Aberdeen Proving Ground, Md., 21010 USA): On the temperature dependence of the formation constant of Cr(H<sub>2</sub>O)<sub>5</sub>-NCS<sup>2+</sup> in acidic solution. *Thermochim. Acta* **67** (1983) 327
- WASICKI, J., RADOMSKA, M., RADOMSKI, R. (Adam Mickiewicz Univ., Inst. Phys., PL-60780 Poznan, Poland): Heat capacities of diphenyl, para-terphenyl and para-quaterphenyl from 180 K to their melting points. *J. Thermal Anal.* **25** (1982) 509
- WEISS, R. A., LEFELAR, J., TORIUMI, H. (Univ. Connecticut, Inst. Mat. Sci., Storrs, Conn., 06268 USA): The influence of thermal history on the microstructure of sulfonated polystyrene ionomers. *J. Polym. Sci. Polym. Lett. Ed.* **21** (1983) 661
- WEN, J. X., TAKAMATSU, T. (Inst. Phys. and Chem. Res., 2-1 Hirosawa, Wako, Saitama, 351 Japan): Thermally stimulated depolarization current and pyroelectricity in a copoly(vinylidene fluoride and tetrafluoroethylene). *Kobunshi Ronbunshu, Jap. Polym. Sci. and Techn.* **40** (1983) 135
- WILBERFORCE, J. K. (CSI Corp., 594 Kingston RD Raynes Pk, London, SW20 England): Comparison of methods of determination of adiabatic times to maximum rate of exothermic reactions. *J. Thermal Anal.* **25** (1982) 593
- WORMALD, C. J., COLLING, C. N. (Univ. Bristol, Sch. Chem., Bristol, BS8 1TS Avon, England): Excess enthalpies for (water + nitrogen) (g) up to 698.2 K and 12.6 MPa. *J. Chem. Thermodyn.* **15** (1983) 725
- YANG, K. Z., FENG, X. S. (Shandong Univ., Dept. Chem., Yinan, Peoples R China): Studies on heats of adsorption on (1-mordenite and catalytic activity for toluene disproportionation. *Acta Chim. Sin.* **41** (1983) 551
- YEVSTROPOV, A. A., LEBEDEV, B. V., KIPARISOVA, Y. G. (N. I. Lobachevskii State Univ., Chem. Res. Inst., Gorki, USSR): Thermodynamics of pentadecanolactone, of the process of its polymerization and of formed poly(pentadecanolactone) in the

- 0–400 K region. *Vysokomol. Soedin. A* 25 (1983) 1679 (in Russian)
- YU, Z. X., LU, P. Y., ALFANO, R. R. (CUNY City Coll. Inst. Ultrafast. Spectroscopy and Lasers, Dept. Phys., New York, N. Y., 10031 USA): Temperature dependence of J-band aggregate of the dye 1,1'-diethyl-2,2'-cyanine bromide studied by steady-state and time-resolved picosecond fluorescence spectroscopy. *Chem. Phys.* 79 (1983) 289
- YUKHNO, F. A., BIKKULOV, A. Z., YUKHNO, G. F. (Ufa Petr. Inst., Ufa, USSR): Kinetics and thermodynamics of the synthesis of N-alkyl-N'-toluene-P-sulfonylurea. *J. Appl. Chem. USSR* transl. *Zh. Prikl. Khim.* 55 (1982) 2467
- ZAMKANEI, M., KAISER, J., BIRKHOFFER, H., BECKHAUS, H. D., RÜCHARDT, C. (c/o C. Rüchardt, Univ. Freiburg, Chem. Lab., D-7800 Freiburg, GFR): Substituent effects on the CC-bond strength. 5. Kinetics and thermochemistry of the homolytic dissociation of meso- and D, L-2,3-dimethoxy-2,3-diphenylsuccinonitrile. *Chem. Ber.* 116 (1983) 3216
- ZAYED, M. A., KHATER, M. M., RISK, M. S., ABD EL-FATTAH, H. M., KHALIL, A. M. (Univ. Cairo, Fac. Sci., Dept. Chem., Cairo, Egypt): Related thermogravimetric and spectrophotometric studies on lanthanide(III) complexes with the 3-acetylpyridine N-oxide ligand. *Thermochim. Acta* 67 (1983) 125
- ZHDANOV, A. A., ZAVIN, B. G., BLOKHINA, O. G. (A. N. Nesmeyanov Organoelement Cpd. Inst., Moscow, USSR): Temperature dependence of reactivity of vinylcyclosiloxanes in radical copolymerization with styrene. *Vysokomol. Soedin. B* 25 (1983) 582 (in Russian)
- ZHECHEVA, E., ANGELOV, S., MEHANDJIEV, D. (Bulgarian Acad. Sci. Inst. Gen. and Inorgan. Chem., BU-1040 Sofia, Bulgaria): Study of copper-cobaltite spinel formation during simultaneous decomposition of copper and cobaltous nitrates. *Thermochim. Acta* 67 (1983) 91
- ZIMINA, N. K., MOLCHANOVA, N. F. (Moscow Railroad Transport Engr. Inst., Moscow, USSR): Role of thermal accommodation in the study of dependence of nitrogen thermal conductivity on pressure. *Zh. Fiz. Khim.* 57 (1983) 1834 (in Russian)
- ŽIVKOVIC, T. P. (Rudjer Boskovic Inst., YU-41001 Zagreb, Yugoslavia): Comment on the comment of Pr. W. Gründber on the paper "Heats of atomization of conjugated hydrocarbons by a new semiempirical method". *Theor. Chim. Acta* 63 (1983) 443
- ZOLOTOVSKII, B. P., KRIVORUCHKO, O. P., BUYANOV, R. A., KRIGER, T. A., KRJUKOVA, G. N. (Acad. Sci. USSR, Inst. Catalysis, Novosibirsk, USSR): Study of the effect of the size of hydrargillite crystals on the peculiarities of its thermal decomposition and formation of the phase composition of Al(III) oxides. *React. Kinet. Catal. Lett.* 22 (1983) 153