

## Bibliography Section

---

- ABATE, L., SIRACUSA, G. (Univ. Catania, Ist. Dept. Chim. e Chim. Ind., I-95125 Catania, Italy): Enthalpimetric measurements in solid-solid reactions. The formation of intermolecular charge-transfer complexes. *Thermochim. Acta* 29 (1979) 157
- ABBASI, S. A. (Bhopal Univ., Sch. Biol. Sci., Bhopal, 462016 India): Heterocyclic hydroxamic acids: effect of temperature on the protonation equilibria. *Thermochim. Acta* 29 (1979) 184
- ABBASOV, A. A., SADYKHOV G. G. (Acad. Sci. AzSSR, Inst. Cybernet., Baku, AzSSR): One optimal control problem of the heat conductivity theory. *Izv. Akad. Nauk Azerb. SSR* (1978) 98 (In Russian)
- ABRIKOSOV, A. A. (L. D. Landau Theoret. Phys. Inst., Moscow, USSR): A possible mechanism of high temperature superconductivity. *J. Less-Common Metals* 62 (1978) 451
- ACKERMANN, R. J., RAUH, E. G. (Argonne Natl. Lab., Div. Chem., Argonne, Ill., 60439 USA): Comparison of the thermodynamic properties and high temperature chemical behavior of lanthanide and actinide oxides. *Rev. Int. Hautes Temp. Refract.* 15 (1978) 259
- ADEOSUN, S. O. (Univ. Ife, Dept. Chem., Ile Ife, Nigeria): Electrical conductance and thermal behaviour of some manganese(II) carboxylates. *Can. J. Chem.* 57 (1979) 151
- ADEOSUN, S. O., ELLIS, H. A. (Univ. Ife, Dept. Chem., Ile Ife, Nigeria): Binary phase diagrams of some bivalent metal carboxylate systems. *Thermochim. Acta* 28 (1979) 313
- ADIGA, K. C., JAIN, S. R., PATIL, K. C., PAI VERNEKER, V. R. (Indian Inst. Sci., Dept. Aeronaut., Propellant Chem. Lab., Bangalore, 560012 India): Thermal reactivity of ammonium perchlorate recrystallized from liquid ammonia. *Comb. Flame* 34 (1979) 209
- AGASHKIN, O. V., LIUTS, A. E., ZAMKOVA, V. V., TSOI, L. A. KRASNOMOLOVA, L. P., CHOLPANKULOVA, S. T. (Acad. Sci. KaSSR, Inst. Chem. Sci., Alma Ata, 480021 KaSSR): Mass spectra of thiazoline quaternary salts and the rearrangement in thermal decomposition. *Dokl. Akad. Nauk SSSR* 245 (1979) 114 (In Russian)
- ÅKESSON, L. (Sandvik AB, Coromant Res. Ctr., Stockholm, Sweden): Thermodynamic and sintering studies in the Co-W-C system. *Thermochim. Acta* 29 (1979) 327
- AKIYAMA, S., MIASE, K. (Tokyo Univ. Agr. and Technol., Fac. Gen. Educ., Chem. Lab., Fuchu, Tokyo, 183 Japan): The heat of mixing of both poly(vinyl nitrate) with poly(vinyl acetate) and poly(vinyl nitrate) with poly(ethylene-co-vinyl acetate) mixtures. *Polym. J.* 11 (1979) 157
- ALEKSEEVSKII, N. E., DOBROVOLSKII, N. M., WOLF, G., HOHLFELD, C., BOHMHAMMEL, K. (Acad. Sci. USSR, Inst. Phys. Technol., Moscow, V-71 USSR): Heat capacity and magnetic properties of  $\text{Mo}_6\text{S}_8$  and  $\text{Mo}_6\text{Se}_8$  at low temperatures. *J. Less-Common Metals* 62 (1978) 329
- ALESHKO-OZHEVSKII, Y. P. (N. S. Kurnakov Gen. and Inorgan. Chem. Inst., Moscow, USSR): Relation of heat capacity to the structure of aqueous electrolyte solutions and neighboring ion hydration. *Zh. Fiz. Khim.* 53 (1979) 545 (In Russian)
- ALGRA, H. A., DE JONGH, L. J., REEDIJK, J. (Philips Res. Labs., Eindhoven, Netherlands): Specific heat near the critical concentration for the dilute simple-cubic mag-

- net  $\text{Co}_x\text{Zn}_{1-x}(\text{C}_5\text{H}_5\text{NO})_6(\text{ClO}_4)_2$ . *Phys. Rev. Lett.* 42 (1979) 606
- AL-KAZRAJI, S. S., REES, G. J. (Polytech. Wales, Dept. Chem. Engn., Pontypridd, Wales): The fast pyrotechnic reaction of silicon and red lead: heats of reaction and rates of burning. *Fuel* 58 (1979) 139
- ALPER, G. A., AFANASEV, V. N., KRESTOV, G. A. (Ivanovo Chem. Technol. Inst., Ivanovo, USSR): Influence of degassing of methyl alcohol and acetone on thermal effects of  $\text{NaI}$  and  $\text{NaClO}_4$  dissolution. *Zh. Fiz. Khim.* 53 (1979) 499 (In Russian)
- ANAKCHIAN, E. K., DUBININ, M. M., ISIRIKIAN, A. A. (Acad. Sci. USSR, Inst. Phys. Chem., Moscow, V-71 USSR): Thermostability of aquocomplexes with alkaline and alkaline-earth cations of clinoptilolite. *Dokl. Akad. Nauk SSSR* 243 (1978) 1467 (In Russian)
- ANDREJS, B., SCHULZ, J. P., WAPPLER, E. (WC Heraeus GmbH, Hanau, GFR): DSC —, TG —, TMA — Untersuchungen an Lacken. *Thermochim. Acta* 29 (1979) 309
- ARAI, H., SENRUI, S., NAKASE, Y., KURIYAMA, I. (Japan Atomic Energy Res. Inst., Takasaki Radiat. Chem. Res. Estab., 1233 Watanuki, Takasaki 370-12, Japan): Thermal analysis of ozone-oxidized polyethylene prepared by  $\gamma$ -ray polymerization in bulk at room temperature. *Jap. Polym. Sci. Techn.* 36 (1979) 55
- ARBIB, H. A., GOLDMAN, Y., TIMNAT, Y. M. (Technion Israel Inst. Technol., Dept. Aeronaut. Engn., Haifa, Israel): The influence of pressure on combustion intensity. *Acta Astronaut.* 5 (1978) 1221
- ARENOSA, R. L., MENDUIÑA, C., TARDAJOS, G., DIAZ PEÑA, M. (Univ. Complutense Madrid, Fac. Quim., Dept. Quim. Fis., Madrid, Spain): Excess enthalpies at 298.15 K of binary mixtures of cyclohexane with n-alkanes. *J. Chem. Thermodyn.* 11 (1979) 159
- ARUNACHALAM, M., RAJAPPA, N. R. (Indian Inst. Technol., Dept. Aeronaut. Engn., Madras, 600036 India): Forced convection in liquid metals with variable thermal conductivity and capacity. *Acta Mech.* 31 (1978) 25
- ASENBAUM, A. (Vienna Univ., Inst. Exptl. Phys., A-1090 Wien, Austria): Die spezifische Wärme der zweiten Relaxationsstufe der Essigsäure. *Z. Naturforsch. A* 34 (1979) 207
- ASTAKHOVA, N. A., BONDARENKO, V. S., GABUDA, S. P., MAL'CHIKOV, G. D., SHESTAKOVA, N. A. (Acad. Sci. USSR, Inst. Inorgan. Chem., Novosibirsk, 90 USSR): Thermal isomerization of the complex *cis*-[PtCl<sub>2</sub>(gIH)<sub>2</sub>] in the solid phase. *J. Struct. Chem. transl. Zh. Strukt. Khim.* 19 (1978) 372
- ATOVMYAN, L. O., BROUDE, V. L., DOLGANOV, V. K., KOLESNIKOV, A. I., KRYLOVA, S. P., PONOMAREV, V. I., SHEKA, E. F. (Acad. Sci. USSR, Inst. Solid State Phys., Chernogolovka, UUSR): Phase transitions in azoxy-compounds. *Fiz. Tverd. Tela* 21 (1979) 427 (In Russian)
- ATTRUSHKEVICH, A. A., TOLCHINSKY, Y. I., KHOMUTOV, V. A., TSEITLIN, G. M., KORSHAK, V. V. (D. J. Mendeleev Chem. Technol. Inst., Moscow, USSR): The study of the thermochemical transformations of polymers and low-molecular compounds in different media by the ampullar method with gas chromatography. *Vysokomol. Soedin. A* 21 (1979) 229 (In Russian)
- BADIE, J. M. (CNRS, Ultra Refract. Lab., F-66120 Font Romeu, France): Phases et transitions de phases à haute température dans les systèmes  $\text{Sc}_2\text{O}_3 - \text{Ln}_2\text{O}_3$  ( $\text{Ln}$  = lanthanide et yttrium). *Rev. Int. Hautes Temp. Refract.* 15 (1978) 183
- BAGHAL-VAYJOEE, M. H., COLUSSI, A. J., BENSON, S. W. (Univ. So. Calif., Inst. Hydrocarbon Chem., Dept. Chem., Los Angeles, Calif., 90007 USA): The very-low-pressure study of the kinetics and equilibrium:  $\text{Cl} + \text{CH}_4 \rightleftharpoons \text{CH}_3 + \text{HCl}$  at 298 K. The heat of formation of the  $\text{CH}_3$  radical. *Int. J. Chem. Kinet.* 11 (1979) 147
- BAHUGUNA, G. P., KRISHNA, B. (Univ. Allahabad, Dept. Chem., Allahabad, 211002 Uttar Pradesh, India): Ground states of conjugated systems containing nitrogen and oxygen heteroatoms Pi-bond energies and heats of formation of pyridine, pyrrole and furan type molecules. *Indian J. Chem. A* 16 (1978) 933
- BAILEY, D. J., STEVENSON, R. (G. E., Div. Nucl. Energy, San Jose, Calif., 95125 USA): High strength low carbon sheet steel by thermomechanical treatment. 1. Strength-

- ening mechanisms. *Met. Trans. A* 10 (1979) 47
- BALDUCCI, G., GIGLI, G., GUIDO, M. (Univ. Studi Roma, Ist. Chim. Fis., I-00185 Roma, Italy): Thermochemical properties of gaseous EuPO<sub>2</sub> and EuPO<sub>3</sub> molecules. *J. Chem. Phys.* 70 (1979) 3146
- BANSAL, O. P., MORRISON, J. A., RICHARDS, E. L. (Apt. 207, 1447 Dollard Ave., Losallo, H8N 1T3, Quebec, Canada): Low temperature specific heats of very dilute alloys of Ce in Al. *Z. Phys. B* 32 (1979) 379
- BARANOVA, N. M., YAKUSHEVA, A. D., KOMAROV, P. N. (L. Y. Karpov Phys. Chem. Inst., Obninsk, USSR): Dimeric peroxide of isosafrole and its thermal decomposition. *Zh. Org. Khim.* 14 (1978) 2399 (In Russian)
- BARDEL, R., SOUSTELLE, M. (c/o M. Soustelle, Ecole Natl. Super. Mines St. Etienne, Ctr. Chim. Phys., Chim. Phys. Solide Lab., 158 Cours Fauriel, F-42023 St. Etienne, France): Cinetiques de decomposition thermique des solides. Decomposition de l'oxalate d'argent. *Ann. Chim.* 3 (1978) 379
- BARMA, M., SHARMA, K. C. (Tata Inst. Fundamental Res., Homi Bhabha Rd., Bombay, 400005 India): Specific heat of the random Ising chain. *Solid State Commun.* 30 (1979) 11
- BARR, J. J., STORR, R. C. (c/o R. C. Storr, Univ. Liverpool, Robert Robinson Labs., P.O.B. 147, Liverpool L69 3BX, Lancashire, England): Formation and thermal transformations of extended dipolar imidoylazimines. *J. Chem. Soc. Perkin. Trans. I* (1979) 185
- BARTON, J. M. (Royal Aircraft Estab., Dept. Mat., Farnborough, Hampshire, England): Calibration of a thermomechanical analyser. *Thermochim. Acta* 29 (1979) 188
- BATALIN, G. I., STUKALO, V. A., NEŠCHIMENKO, N. Y., GLADKIKH, V. A., LYUBORETS, O. I.: Enthalpy of formation of liquid yttrium-nickel alloys. *Russ. Metal. transl. Izv. Akad. Nauk SSSR Metal.* (1977) 35
- BECHER, G., SKATTEBØL, L. (Univ. Oslo, Dept. Chem., Oslo 3, Norway): Thermal reactions of meso- and racemic deca- 2, 3, 7, 8-tetraene. *Tetrahedron Lett.* (1979) 1261
- BELAN-GAIKO, L. V., BOGDANOV, V. I., FUKS, D. L. (Volgograd Polytech. Inst., Volgograd, USSR): Calculation of elastic and thermal properties of alkali metals by pseudopotential method. *Izv. Vyssh. Uch. Zav. Fiz.* (1979) 25 (In Russian)
- BELOUS, V. M., TOLSTOBROV, V. I., CHIBISOV, K. V. (I. I. Mechnikov State Univ., Phys. Res. Inst., Odessa, UkrSSR): Thermal decomposition of silversulphide centres and the formation of photographic sensitivity of silverhalide emulsions. *Dokl. Akad. Nauk SSSR* 224 (1979) 905 (In Russian)
- BENNDORF, C., EGERT, B., SEIDEL, H., THIEME, F. (Univ. Hamburg, Inst. Phys. Chem., Laufgraben 24, D-2000 Hamburg, 13 GFR): AES, work function and gravimetric measurements of the oxygen interaction with Al and Cu film surfaces. *Thermochim. Acta* 29 (1979) 333
- BERG, R. L., VANDERZEE, C. E. (c/o C. E. Vanderzee, Univ. Nebraska, Dept. Chem., Lincoln, Nebr., 68588 USA): Thermodynamics of carbon dioxide and carbonic acid: (a) the standard enthalpies of solution of Na<sub>2</sub>CO<sub>3</sub>(s), NaHCO<sub>3</sub>(s) and CO<sub>2</sub>(g) in water at 298.15 K; (b) the standard enthalpies of formation, standard Gibbs energies of formation, and standard entropies of CO<sub>2</sub>(aq), HCO<sub>3</sub><sup>-</sup>(aq), CO<sub>3</sub><sup>2-</sup>(aq), NaHCO<sub>3</sub>(s), Na<sub>2</sub>CO<sub>3</sub>(s), Na<sub>2</sub>CO<sub>3</sub> · H<sub>2</sub>O(s) and Na<sub>2</sub>CO<sub>3</sub> · 10H<sub>2</sub>O(s). *J. Chem. Thermodyn.* 10 (1978) 1113
- BHALLA, A. S., CROSS, L. E., PAYNE, D. A. (Penn. State Univ., Mat. Res. Lab., University Pk., Pa., 16802 USA): Thermal, optical, and elastic properties of ferroelastic isopropyl ammonium chloroplatinate (IPACP) and chlorostannate (IPACS). *Phys. Status Solidi A* 50 (1978) 661
- BILJAKOVIĆ-FRANULOVIĆ, K., TOMIC, S., PRESTER, M., DJUREK, D. (Univ. Zagreb, Inst. Phys., YU-41001 Zagreb, Yugoslavia): Calorimetric study of the phase transitions in HMTTF-TCNQ. *J. Phys. Lett.* 40 (1979) L151
- BLAZSÓ, M., GARZÓ, G., ANDRIANOV, K. A., MAKAROVA, N. N., CHERNAVSKI, A. I., PETROV, I. M. (Hungarian Acad. Sci., Inorgan. Chem. Res. Lab., H-1112 Budapest, Hungary): Thermal decomposition of cyclo-linear methylsiloxane polymers. *J. Organometall. Chem.* 165 (1979) 273
- BLOUNT, E. I., PHILLIPS, J. C. (Bell Tel. Lab. Inc., Murray Hill, N. J., 07974 USA): High temperature superconductivity in CuCl?!. *J. Less-Common Metals* 62 (1978) 457

- BONDO, A., VAZZANA, I., SPARATORE, F. (Univ. Genova, Ist. Chim. Farmaceut. e Tossicolog., I-16132 Genova, Italy): Benzimidazole derivatives with anti-inflammatory activity. *Chim. Ind.* 61 (1979) 67 (In Italian)
- BOLSHAKOVA, S. I., KUZMINSKII, A. S. (Moscow Rubber Ind. Res. Inst., Moscow, USSR): Investigation of the kinetics of rubber oxidation by the method of calorimetry. *Dokl. Akad. Nauk SSSR* 244 (1979) 1366 (In Russian)
- BORDAS, S., CASAS-VAZQUEZ, J., CLAVAGUERA, N., CLAVAGUERA-MORA M. T. (Univ. Autonoma Barcelona, Fac. Ciencias, Dept. Termol., Barcelona, 16 Spain): Glass-forming ability in the Ge-Sb-Te-Se quaternary system. *Thermochim. Acta* 28 (1979) 387
- BORIACK, M. L., OVERHAUSER, A. W. (Purdue Univ., Dept. Phys., W. Lafayette, Ind., 47907 USA): Ultra-low-temperature anomalies in heat capacities of metals caused by charge-density waves. *Phys. Rev. B* 18 (1978) 6454
- BORUKHOVICH, A. S., MARUNYA, M. S. (Acad. Sci. USSR, Ural Sci. Ctr., Inst. Chem., Sverdlovsk, USSR): Effect of lightly doping with gadolinium on critical specific heat of EuO. *Fiz. Tverd. Tela* 21 (1979) 244 (In Russian)
- BOY, S., BÖHME, K. (VEB Mansfeld Kombinat W. Pieck, Forschungsinstitut NE-Metalle, Freiberg, GDR): Gegenüberstellung verschiedener Lösungsverfahren zur Ermittlung kinetischer Parameter anhand von Experimentalwerten. *Thermochim. Acta* 28 (1979) 249
- BOYER, L. L. (USN, Res. Lab., Washington, D. C., 20375 USA): Calculation of thermal expansion, compressibility, and melting in alkali halides: NaCl and KCl. *Phys. Rev. Lett.* 12 (1979) 584
- BRAUN, D. (Deutsches Kunststoff Inst., Darmstadt, GFR): General discussion on thermal and photodegradation and stabilization. *J. Macromol. Sci.* 1712 (1978) 379
- BRENDEL, C., HOLSTE, G. (Univ. Münster, Inst. Anorgan. Chem., D-4400 Münster, GFR): Thermisches Verhalten und Hydratbildung von  $\text{CoX}_2 \cdot 2\text{C}_5\text{H}_5\text{N}$  ( $\text{X}:\text{Cl}^-$ ,  $\text{Br}^-$ ,  $\text{I}^-$ ). *Z. Anorg. Allg. Chem.* 447 (1978) 161
- BRINDLE, I. D., GIBSON, M. S. (c/o M. S. Gibson, Brock Univ., Dept. Chem., St. Catharines, Ontario, L2S 3A1 Canada): Thermal rearrangement of allylic amine-imides and related topics. *J. Chem. Soc. Perkin Trans. I* (1979) 517
- BROS, J. P., GAUNE-ESCARD, M. (Univ. Provence, CNRS, Dynam. et Thermophys. Fluides Lab., Ctr. St. Jérôme, F-13397 Marseille, 4 France): Estimation de l'enthalpie de fusion de mélanges eutectiques de sels fondus utilisables pour le stockage thermique de l'énergie. *Rev. Phys. Appl.* 14 (1979) 107
- BROWN, M. E. (Rhodes Univ., Dept. Chem., Grahamstown, 6140 South Africa): The distinguishability of selected kinetic models for isothermal solid-state reactions. *Thermochim. Acta* 29 (1979) 129
- BUDOO, B., PHILIPPE, R. (Univ. Lyon 1, Chim. Analyt. Lab., 43 Blvd. 11 Novembre 1918, F-69621 Villeurbanne, France): Excess Gibbs free energies and excess enthalpies for triethylamine + n-hexane, triethylamine + n-octane, and tributylamine + n-hexane at 298.15 K. *J. Chem. Thermodyn.* 10 (1978) 1147
- BULATOV, A. S., DOLZHENKO, V. F. (Acad. Sci. UkrSSR, Inst. Engr. Phys., Kharkov, 108 UkrSSR): Low-temperature phase transition in samarium. *Zh. Eksp. Teor. Fiz.* 75 (1978) 2241 (In Russian)
- BUTLER, W. H., WILLIAMS, R. K. (Sandia Lab., Albuquerque, N. M., 87185 USA): Electron-phonon interaction and lattice thermal conductivity. *Phys. Rev. B* 18 (1978) 6483
- BUTTLER, F. G., MORGAN, S. R. (Teesside Polytech., Middlesborough, TS1 3BA Cleveland, England): A study of the decomposition of salts of propan-2-one-1,3-disulphonic acid. *Thermochim. Acta* 29 (1979) 301
- BYRNE, L. F., HOURSTON, D. J. (Univ. Lancaster, Dept. Chem., Lancaster LA1 4YA, Lancashire, England): Aspects of the thermal and dynamic mechanical behavior of EPDM rubbers. *J. Appl. Polym. Sci.* 23 (1979) 1607
- CABANI, S., LOBO, S. T., MATTEOLI, E. (Univ. Pisa, Ist. Chim. Fis., Via Risorgimento 35, I-56100 Pisa, Italy): Apparent molal heat capacities of organic solutes in water. V. Aminoalcohols, aminoethers, diamines, and polyethers. *J. Solut. Chem.* 8 (1979) 5
- CAILLEAU, H., DWORAKIN, A. (Univ. Rennes, CNRS, Dept. Phys. Crystalline et Chim.

- Struct., Equipe Rech., F-35031 Rennes, France): Calorimetric study of the phase transition of para-terphenyl. *Mol. Cryst. Liquid Cryst.* 50 (1979) 217
- CARFAGNA, C., VACATELLO, M., CORRADINI, P. (Univ. Naples, Ist. Chim., I-80134 Naples, Italy): Melting behaviour of a series of diamides. *Thermochim. Acta* 28 (1979) 265
- CARLING, R. W., WESTRUM, E. F. (c/o E. F. Westrum, Univ. Michigan, Dept. Chem., Ann Arbor, Mich., 48109 USA): Thermophysics of alkali and related azides. II. Heat capacities of potassium, rubidium, cesium and thallium azides from 5 to 350 K. *J. Chem. Thermodyn.* 10 (1978) 1181
- CARRAHER, C. E., GIRON, D. J., WOELK, W. K., SCHROEDER, J. A., FEDDERSON, M. F. (Wright State Univ., Dept. Chem., Dayton, Ohio, 45435 USA): Characterization of polyethylenimine modified with organotin halides. Thermal, solubility and fungal properties. *J. Appl. Polym. Sci.* 23 (1979) 1501
- CARRÉ, J., GERMAIN, P., KOLLMANNSSBERGER, M., PERACHON, G., THOUREY, J. (CNRS, Phys. Chim. Minérale Lab. 116, 20, Ave. Albert Einstein, F-69621 Villeurbanne, France): Détermination de l'enthalpie de formation standard de l'oxydifluorure de sélénium SeOF<sub>2</sub> et du tetrafluorure de sélénium SeF<sub>4</sub> par hydrolyse alcaline. *J. Fluorine Chem.* 13 (1979) 365
- CARTWRIGHT, M., WOOLF, A. A. (Univ. Bath, Sch. Chem., Bath BA2 7AY, Somersetshire, England): A redetermination of the heat of formation of perchloryl fluoride. *J. Fluorine Chem.* 13 (1979) 353
- CARUNCHIO, V., CRISTALLI, A., GRASSINI-STRAZZA, G. (Univ. Rome, Ist. Chim., I-00100 Rome, Italy): Chromatographic study of thermal reactions of *cis*- and *trans*- [Co(en)<sub>2</sub>Cl<sub>2</sub>] Y complexes and ammonium salts in the solid phase. *Ann. Chim.* 68 (1978) 279
- CASTANET, R., BERGMAN, C. (CNRS, Ctr. Rech. Microcalorimétrie et Thermochim., Thermodynam. Alliages et Mélanges Moléc. Sect., 26 Rue du 141ème R. I. A., F-13003 Marseille, France): Calorimetric investigation of the liquid alloys of Ag+Te and of the Ag<sub>2</sub>Te solid compound at high temperature. *J. Chem. Thermodyn.* 11 (1979) 83
- CESARI, E., TORRA, V., NAVARRO, J., UTZI, E., ZIELENKIEWICZ, W. (Fac. Fis. Barcelona, Dept. Termol., Barcelona, 14 Spain): Détermination d'une thermogénése par analyse harmonique et par la méthode d'optimisation. *Bull. Acad. Pol. Sci.* 25 (1978) 731
- CHALLIS, L. J., GHAZI, A. A., MAXWELL, K. J. (Univ. Nottingham, Dept. Phys., Nottingham, NG7 2RD England): An investigation of the ground state of Mn<sup>3+</sup> in MgO based on thermal conductivity measurements. *J. Phys. C* 12 (1979) 303
- CHANDA, M., KUMAR, W. S. J., RAGHAVENDRACHAR, P. (Indian Inst. Sci., Dept. Chem. Engn., Bangalore, 560012 India): A kinetic investigation of thermal degradation of poly(vinyl formals). *J. Appl. Polym. Sci.* 23 (1979) 755
- CHANDE, M. S., TANKSALE, S. W. (Inst. Sci., Nagpur, 440001 India): Pyrolysis of thiuram disulphides. *J. Indian Chem. Soc.* 55 (1978) 1062
- CHARSLEY, E. L., JENKINS, J. M., LAYE, P. G. (Stanton Redcroft, Consultancy Serv., Copper Mill Lane, London, SW17 OBN England): Thermal studies of pyrotechnic systems. *Thermochim. Acta* 29 (1979) 349
- CHAUFFOEUX, J. C., DEHENNAU, C., VAN RIJCKEVORSEL, J. (Lab. Cent. Solvay, Brüssels, Belgium): Flow and thermal stability of rigid PVC. *J. Rheol.* 23 (1979) 1
- CHAURASIA, P. B. L., CHAUDHARY, D. R., BHANDARI, R. C. (Univ. Rajasthan, Dept. Phys., Jaipur, 4 India): Effective thermal conductivity of 2-phase system. *Indian J. Pure Appl. Phys.* 16 (1978) 963
- CHERNEN'KAYA, E. I., BRATASH, E. G. (Moscow Fundamental Chem. Res. Inst., Moscow, USSR): Heat-capacity characteristics of sodium bisulfate solutions. *J. Appl. Chem. USSR* transl. *Zh. Prikl. Khim.* 51 (1978) 1432
- CHERNENKO, V. A., POLANDOV, I. N., STRUKOV, B. A., NOVIK, V. K. (M. V. Lomonosov State Univ., Moscow, 117234 USSR): Calorimetric study of triglycine-selenate crystals under pressure near the tricritical point. *Fiz. Tverd. Tela* 21 (1979) 258 (In Russian)
- CHISTOV, S. F., SHURALEVA, Z. V., SKOROKHODOV, I. I.: The effect of mass-molecular distribution on a temperature and thermal melting of polydimethyl siloxanes. *Vysokomol. Soedin. B* 21 (1979) 178 (In Russian)

- CHOW, S., STEINER, P. R. (Canadian Forestry Serv., Western Forest Prod. Lab., Vancouver, B. C., V6T 1X2, Canada): Comparisons of the cure of phenol-formaldehyde novolac and resol systems by differential scanning calorimetry. *J. Appl. Polym. Sci.* 23 (1979) 1973
- CHOWDARI, B. V. R., RAVI SEKHAR, Y. (Indian Inst. Technol., Dept. Phys., Madras, 600036 India): Thermal depolarization in dichromate doped KDP and ADP single crystals. *Solid State Commun.* 29 (1979) 687
- CHOY, C. L., LEUNG, W. Y., CHEN, F. C. (Chinese Univ. Hong Kong, Dept. Phys., Shatin, Hong Kong): Heat capacity of poly(vinylidene fluoride) and polytetrafluoroethylene between 5 and 200°K. *J. Polym. Sci. Polym. Phys. Ed.* 17 (1979) 87
- CHRISTENSEN, J. J., IZATT, R. M., STITT, B. D., HANKS, R. W. (Brigham Young Univ., Dept. Chem. Engn., Provo, Utah, 84602 USA): The excess enthalpies of seven n-decane + alcohol mixtures at 298.15 K. *J. Chem. Thermodyn.* 11 (1979) 261
- CHUKIN, G. D., SMIRNOV, B. V. (All Union Petr. Refinery Inst., Moscow, USSR): Structure of zeolites with polyvalent cations and the reasons for their thermal stability. II. *J. Struct. Chem. transl. Zh. Strukt. Khim.* 15 (1978) 416
- CHUPAKHIN, A. P., LYAKHOV, N. Z. (Acad. Sci. USSR, Inst. Physicochem. Bases Mineral Proc., Novosibirsk 630091, Derzhavina, USSR): Dependence of the rate of water evaporation on the pressure of its vapour. *Thermochim. Acta* 29 (1979) 192
- CLARKE, P. H., FRANCIS, P. G., GEORGE, M., PHUTELA, R. C., ROBERTS, G. K. ST. C. (c/o P. G. Francis, Univ. Hull, Dept. Chem., Hull HU6 7RX, N. Humberside, England): Flow calorimeters for the measurement of the isothermal Joule-Thomson coefficient of benzene and of cyclohexane vapour. *J. Chem. Thermodyn.* 11 (1979) 125
- CLEMENTS, J., CAPACCIO, G., WARD, I. M. (Univ. Leeds, Dept. Phys., Leeds LS2 9JT, W. Yorkshire, England): Melting behavior of ultrahigh modulus linear polyethylene. *J. Polym. Sci. Polym. Phys. Ed.* 17 (1979) 693
- COFFY, G., OLOFSSON, G. (Univ. Lund, Ctr. Chem. Thermochem. Lab., S-22007 Lund, 7 Sweden): The standard enthalpy of formation of aqueous magnesium ion at 298.15 K. *J. Chem. Thermodyn.* 11 (1979) 141
- CONE, J., SMITH, L. E. S., VAN HOOK, W. A. (Univ. Tennessee, Dept. Chem., Knoxville, Tenn., 37916 USA): Enthalpies of solution of gases in liquids. The calorimeter and measurements on lower hydrocarbons and CO<sub>2</sub> in C<sub>6</sub>H<sub>6</sub>, CCl<sub>4</sub> and THF. *J. Chem. Thermodyn.* 11 (1979) 277
- COOPE, J. A. R., SNIDER, R. F. (Univ. British Columbia, Dept. Chem., Vancouver, B. C., V6T 1W5 Canada): On the contribution of angular momentum polarization to gas phase thermal conductivity. *J. Chem. Phys.* 70 (1979) 1075
- CORCORAN, M. D., CORMELL, L., DRIS, M., ERWIN, A. R., GOLLON, P. J., KANOFSKY, A., KONONENKO, W., ROBINSON, B., SELOVE, W., THOMPSON, M., YOST, B. (Univ. Wisconsin, Madison, Wis., 53706 USA): A two-jet calorimeter experiment at Fermilab. *Phys. Scr.* 19 (1979) 95
- CORSAN, J. M., MITCHEM, N. I. (Natl. Phys. Lab., Div. Quantum Metrol., Teddington, TW11 0IW Middlesex, England): The specific heat of fifteen stainless steels in the temperature range 4K-30K. *Cryogenics* 19 (1979) 11
- CRACKNELL, A. P., TOOKE, A. O. (Univ. Dundee, Carnegie Lab. Phys., Dundee, DD1 4HN Scotland): The specific heats of magnetically-ordered materials. *Contemp. Phys.* 20 (1979) 55
- CRAUS, M. L., REZLESCU, N. (Ctr. Tech. Phys., Iassy, Romania): The influence of the composition and thermal treatment on the cation redistribution in the Mg<sub>x</sub>Fe<sub>3-x</sub>O<sub>4</sub> system. *Phys. Status Solidi A* 50 (1978) K225
- CRESCENTE, O., HELLER, H. G., OLIVER, S. (c/o H. G. Heller, Univ. Wales, Univ. Coll. Edward Davies Chem. Labs., Aberystwyth SY23 1NE, Dyfed, Wales): Overcrowded molecules. 16. Thermal and photochemical reactions of (E,E)-bis(benzylidene) succinic anhydride. *J. Chem. Soc. Perkin Trans. I* (1979) 150
- CRIAZO, J. M. (Univ. Sevilla, Fac. Ciencias, Dept. Quim. Inorgan., Sevilla, Spain): On the kinetic analysis of thermoanalytical diagrams obtained with the "quasi-isothermal" heating technique. *Thermochim. Acta* 28 (1979) 307
- CRIGHTON, J. S., DAS, A. (Univ. Bradford, Sch. Textiles, Bradford BD7 1DP, W. Yorkshire, England): Vacuum thermogravi-

- metry of textiles: procedures and use with cellulosic fibres. *Thermochim. Acta* 29 (1979) 319
- CROCHET, M. J., NAGHDI, P. M. (Catholic Univ. Louvain, B-1348 Louvain LaNeuve, Belgium): On thermomechanics of polymers in the transition and rubber regions. *J. Rheol.* 22 (1978) 73
- CURTIN, D. Y., PAUL, I. C., DUESLER, E. N., LEWIS, T. W., MANN, B. J., WEN-I SHIAU (Univ. Illinois, Dept. Chem., Urbana, Ill., 61801 USA): Studies of thermal reactions in the solid state. *Mol. Cryst. Liquid Cryst.* 50 (1979) 25
- CYGAŃSKI, A. (Tech. Univ. Łódź, Inst. Gen. Chem., PL-90924 Łódź, Poland): Studies on thermal decomposition of thiocyanato-bismuthates (III). IV. Double salts of alkali metals. *Polish J. Chem.* 52 (1978) 2321
- CYGAŃSKI, A., MAJEWSKI, T. (Tech. Univ. Łódź, Inst. Gen. Chem., PL-90924 Łódź, Poland): Determination of thiocyanates by thermal decomposition of silver thiocyanate. *Analyst* 104 (1979) 167
- CYGAŃSKI, A., ZALEWICZ, M., GRODZICKI, A. (Tech. Univ. Łódź, Inst. Gen. Chem., PL-90924 Łódź, Poland): Thermal decomposition reactions and kinetic parameters of nitritobismuthates(III). *Thermochim. Acta* 26 (1979) 323
- DAS, A., KAKU, M. (CUNY, City Coll., Dept. Phys., New-York, N. Y., 10031 USA): Supersymmetry at high temperatures. *Phys. Rev. D* 18 (1978) 4540
- DEFREES, D. J., HEHRE, W. J., McIVER, R. T., McDANIEL, D. H. (c/o R. T. McIver, Univ. Calif. Irvine, Dept. Chem., Irvine, Calif., 92664 USA): Heat of formation and adiabatic electron affinity of NH<sub>2</sub>. *J. Phys. Chem.* 83 (1979) 232
- DE KRUIF, C. G., OONK, H. A. I. (State Univ. Utrecht, Chem. Thermodynam. Grp., Gen. Chem. Lab., Utrecht, Netherlands): Enthalpies of vaporization and vapour pressures of seven aliphatic carboxylic acids. *J. Chem. Thermodyn.* 11 (1979) 287
- DELBOVE, F. (CNRS, Ctr. Synth. et Chim. Minéraux, la Rue de la Férollerie, F-45045 Orléans, France): Experimental partitioning of K, Rb, Cs, Sr, Ba, between crystalline and molten albite and hydrothermal saline solution. *Bull. Mineral.* 101 (1978) 317 (In French)
- DE SOUZA, E. P., RAPP, R. E., LERNER, E. (Univ. Fed. Rio de Janeiro, Inst. Fis., Rio de Janeiro, Brazil): A cryostat for measuring specific heats of absorbed gases at low temperatures. *Cryogenics* 18 (1978) 646
- DHILLON, M. S. (Guru Nanak Dev. Univ., Dept. Chem., Amritsar, 143005 India): Second virial coefficients of a polymer of 2-butene-2,3-dibromo-1,4-diol with adipic acid from light scattering measurements in benzene. *Thermochim. Acta* 28 (1979) 359
- DICK, W., WESTERBERG, C. (Telefonaktiebolaget L. M. Ericsson Telekabeldiv., Älvsjö, Sweden): Studying stabilization of PVC by differential thermal analysis. *J. Macromol. Sci. A* 12 (1978) 455
- DICKENS, B. (NBS, Ctr. Mat. Res., Washington, D. C., 20234 USA): Automation of factor-jump thermogravimetry for active computer control. *Thermochim. Acta* 29 (1979) 41
- DICKENS, B. (NBS, Ctr. Mat. Res., Washington, D. C., 20234 USA): Computer program to implement automated factor-jump thermogravimetry. *Thermochim. Acta* 29 (1979) 57
- DICKENS, B. (NBS, Ctr. Mat. Res., Washington, D. C., 20234 USA): Experiences in developing an automated factor-jump method of thermogravimetry. *Thermochim. Acta* 29 (1979) 87
- DIDENKO, E. A., PIRKES, S. B. (N. G. Chernyshevskii State Univ., Saratov, USSR): Thermal stability of protonated orthosulfobenzoates of rare earth elements. *Zh. Neorg. Khim.* 24 (1979) 335 (In Russian)
- DILLI, S., ROBARDS, K. (Univ. New S. Wales, Sch. Chem., P.O.B. 1, Kensington, 2033 New S. Wales, Australia): Volatility studies of metal chelates. IV. Thermal behaviour of copper(II) chelates of aryl β-diketones. *Aust. J. Chem.* 32 (1979) 277
- DINGTÜRK, S., JACKSON, R. A., TOWNSON, M. (c/o R. A. Jackson, Univ. Sussex, Brighton BN1 9QJ, E. Sussex, England): An improved σ scale. The thermal decomposition of substituted dibenzylmercury compounds in alkane solutions. *J. Chem. Soc. Commun.* (1979) 172
- DONOSO, E., VARCHAVSKY, A. (Univ. Chile, Inst. Res. and Testing Mat., Santiago, Chile): Microcalorimetry of plastic zones in a deformed disperse-ordered Cu-9 wt%

- Al alloy during fatigue crack propagation. *Mater. Sci. Eng.* 37 (1979) 151
- DOUPOVEC, J., THURZO, I., VLASÁK, G. (Slovak Acad. Sci., Inst. Phys., Dubravská cesta, CS-89930 Bratislava, Czechoslovakia): Thermal, structural, and dielectric properties of Cu-doped Ge-S glasses. *J. Amer. Ceram. Soc.* 62 (1979) 16
- DUBLER, E.: Thermoanalysis of gallstone components. *Chimia* 33 (1979) 91
- DUDKIN, L. D., EVDOKIMOV, A. I., MELIKHOVA, A. N., OB'EDKOV, A. G., ROGACHEVA, E. I. (V. I. Lenin Polytech. Inst., Kharkov, UkrSSR): Influence of MnTe on the temperature characteristics of the phase transition of GeTe. *Inorg. Mater. transl. Izv. Akad. Nauk SSSR Neorg. Mater.* 14 (1978) 1205
- DUSSEAU, C. H. V., STEINBERG, H., deBOER, T. J. (c/o T. J. De Boer, Univ. Amsterdam, Organ. Chem. Lab., Nieuwe Achtergracht 129, 1018 WS, Amsterdam, Netherlands): An NMR study of the thermal decomposition of dimethoxycarbenium bromides. *Rec. Trav. Chim. J. Roy. Neth. Chem. Soc.* 98 (1979) 22
- DYER, A., NOWELL, T. R. (Univ. Salford, Dept. Chem. and Appl. Chem., Salford, M5 4WT Lancashire, England): A modified DTA cell to study small-scale reactions. *Thermochim. Acta* 29 (1979) 171
- DZIEMBAJ, R., PODOLSKI, J. (Jagiellonian Univ., Inst. Chem., PL-30060 Kraków, Poland): Redox processes in the course of thermal decomposition of  $\text{NH}_4\text{VO}_3$ . *Bull. Acad. Pol. Sci.* 26 (1978) 715
- EHSES, K. H., SCHMITT, H. (Univ. Saarland, D-6600 Saarbrücken, GFR): The temperature dependence of the spontaneous polarization of TGS near the phase transition. *Ferroelectrics* 21 (1979) 543
- EISENREICH, N., PFEIL, A. (Fraunhofer Gesell., Inst. Chem. Treib- und Explos. Stoffe, D-7507 Pfanztal 1, GFR): A thermoanalytical study of the catalytic oxidation of carbonaceous residues of nitrocellulose decomposition. *Thermochim. Acta* 29 (1979) 305
- EMA, K., HAMANO, K. (Tokyo Inst. Technol., Dept. Phys., Meguro-ku, Tokyo 152, Japan): Measurement of specific heat at constant electric flux density  $C^D$  of ferroelectrics by AC method. *Ferroelectrics* 20 (1978) 193
- EMA, K., HAMANO, K., IKEDA, Y. (Tokyo Inst. Technol., Fac. Sci., Dept. Phys., Meguro-ku, Tokyo 152, Japan): Critical region in the specific heat of ferroelectric TGS. *J. Phys. Soc. Jap.* 46 (1979) 345
- EPIOTIS, N. D. (Univ. Washington, Dept. Chem., Seattle, Wash., 98195 USA): Thermal chemistry as an exercise in photochemistry. *Pure Appl. Chem.* 51 (1979) 203
- EVANS, H. T. (US Geol. Survey, Natl. Ctr. 959, Reston, Va., 22092 USA): The thermal expansion of anhydrite to 1000°C. *Phys. Chem. Miner.* 4 (1979) 77
- FARAGHER, R., GILCHRIST, T. L. (c/o T. L. Gilchrist, Univ. Liverpool, Robert Robinson Labs., Liverpool, L69 3BX Lancashire, England): Thermal and acid-catalysed rearrangements of 5,6-dihydro-4 H-1,2-oxazines. *J. Chem. Soc. Perkin Trans. I* (1979) 258
- FEDOROV, N. F., MEL'NIKOVA, O. V., SMO-RINA, T. P. (Lensovet Technol. Inst. Leningrad, USSR): High-temperature reaction of calcium and samarium niobates. *Inorg. Mater. transl. Izv. Akad. Nauk SSSR Neorg. Mater.*, 14 (1979) 1212
- FEDOROV, V. I., DAVYDOV, I. Y. (G. M. Krzhizhanovskii Power Engn. Inst., Moscow, USSR): Thermoelectric properties of vanadium, bismuth, and antimony oxides in the temperature interval 500–1500°K. *High Temp. transl. Teplofiz. Vysok. Temp.* 16 (1978) 654
- FEDOROVA, G. K., ANANEVA, L. G.: Thermal deamination of beta-chloroalkylthionophosphonic diamides. *Zh. Obshch. Khim.* 48 (1979) 2788 (In Russian)
- FLEROV, I. N., ISKORNEV, I. M., GUSAR, Y. P. (L. V. Kirenskii Phys. Inst., Krasnoyarsk, USSR): Thermal properties of  $\text{CsCaCl}_3$  crystal. *Fiz. Tverd. Tela* 21 (1979) 772 (In Russian)
- FRITSCHER, K. (DFVLR, Inst. Werkstoffforsch., Köln, GFR): Calorimetric study of eutectics: solid solubility limit and entropy of fusion of either phase. *Thermochim. Acta* 29 (1979) 357
- FUJIHARA, I., TAMURA, K., MURAKAMI, S., FUJISHIRO, R. (Osaka City Univ., Fac. Sci., Dept. Chem., Sumiyoshi-ku, Osaka 558, Japan): Enthalpies of dilution of polymer solutions. *Polym. J.* 11 (1979) 153

- FUJITA, T., MURAMATSU, K. (Natl. Inst. Res. Inorgan. Mat., Sakura, Ibaraki, 30031 Japan): High temperature form of  $Pb_2WO_5$  and transformation phenomena to its low form. *Mater. Res. Bull.* 14 (1979) 5
- FUJIWARA, F. Y., REEVES, L. W. (c/o L. W. Reeves, Univ. Waterloo, Dept. Chem., Waterloo, Ontario, N2L 3G1 Canada): Structural changes at hydrophobic-hydrophilic interfaces induced by thermal changes and isotopic composition of the water. *Can. J. Chem.* 57 (1979) 478
- FULLER, E. L., POULIS, J. A., CZANDERNA, A. W. (Oak Ridge Natl. Lab., Oak Ridge, Tenn., 37830 USA): Volumetric and gravimetric methods of determining monolayer capacities. *Thermochim. Acta* 29 (1979) 315
- GABELICA, Z., DEROUANE, E. G., HUBIN, R. (Fac. Univ. Namur, Dept. Chim., Catalyse Lab., B-5000 Namur, Belgium): Combined EPR and TG techniques: comparison of the thermal reduction of chromium(VI) ions in some zinc chromates and chromato-oxalate mixtures. *Thermochim. Acta* 29 (1979) 247
- GAIVORONSKI, P. E., LARIN, N. V., CHERNIKOVICH, M. P. (Acad. Sci. USSR, Inst. Chem., Gorki, USSR): Analysis of arsine, monogermande, and their thermal decomposition products by spark mass spectrometry. *Anal. Chem. USSR transl. Zh. Analit. Khim.* 33 (1978) 766
- GALLAGHER, P. K. (Bell Tel Labs. Inc., Murray Hill, N. J., 07974 USA): Thermal stability of some boracites. *Thermochim. Acta* 29 (1979) 165
- GARBATO, L., RUCCI, A. (Univ. Cagliari, CNR, Grp., Nazl. Strutt. Mat., Ist. Fis., I-99100 Cagliari, Italy): Ionicity dependence of lattice thermal conductivity in tetrahedral semiconductors. *Chem. Phys. Lett.* 61 (1979) 542
- GAST, T., WILLEMS, G. H. W., VAN DE VENNE, J. L. M., POULIS, J. A. (Tech. Univ. Berlin, Inst. Mess- und Regeltech., D-1000 Berlin 12): New results in the application of a torsion balance to liquid chromatography. *Thermochim. Acta* 29 (1979) 221
- GELFAND, L., PYTLEWSKI, L. L., OWENS, C. (Drexel Univ., Dept. Chem., Philadelphia, Pa., 19104 USA): The thermal decomposi-
- tion of sodium-N-chlorobenzene sulfonamide in KBr. *Spectrochim. Acta A* 35 (1979) 79
- GERMAIN, P., PERACHON, G., THOURAY, J. (Inst. Natl. Sci. Appl. Lyon, Thermochim. Minérale Lab., CNRS Phys. Chim. Minérale, Lab. 116, 20, Ave. Albert Einstein, F-69621 Villeurbanne, France): Étude des enthalpies de dissolution à 298 K des fluorures alcalins dans les solutions aqueuses de HF. *J. Fluorine Chem.* 13 (1979) 141
- GESINGER, G. H., CORTI, C. W., COOPER, P. D. (Brown Boveri Forschungszentrum, CH-5405 Därfwil, Switzerland): Dämpfung von Hochtemperaturwerkstoffen. *Z. Metallk.* 70 (1979) 135
- GHODSI, M., DERIE, R., LEMPEREUR, J. P. (Univ. Libre Bruxelles, Serv. Chim. Ind. et Chim. Solides, B-1050 Brüssel, Belgium): Construction of an isothermal balance with two symmetrical pans for operation under pressure. *Thermochim. Acta* 28 (1979) 259
- GIBSON, B. C., GINSBERG, D. M., TAI, P. C. L. (Hughes Aircraft Co., Space and Commun. Grp., POB 92919 Los Angeles, Calif., 90009 USA): Specific heat of superconducting films of indium and of indium alloyed with magnetic impurities. *Phys. Rev. B* 19 (1979) 1409
- GIPSTEIN, E., BARRALL II, E. M., YOON D. Y., LYERLA, J.: Thermal properties of some hydrogenated poly( $\alpha$ -methyl tyrenes). *J. Polym. Sci. Polym. Phys. Ed.* 17 (1979) 185
- GMELIN, E. (Max Planck Inst. Festkörperforsch., D-7000 Stuttgart, GFR): Modern low-temperature calorimetry. *Thermochim. Acta* 29 (1979) 1
- GODWIN, L. M., WHITE, H. W., JAMES, W. J. (Univ. Missouri, Dept. Phys., Columbia, Mo., 65211 USA): The low-temperature specific heats of  $Y_2(Co_{1-x}Al_x)_{17}$  alloys. *J. Appl. Phys.* 50 (1979) 1165
- GONCALVES, A. S., CHAGAS, A. P., AIROLDI, C. (c/o C. Airoldi, Univ. Estadual Campinas, Inst. Quím., Caixa Postal 1170, Campinas 13100, Brazil): Thermochemistry of dichlorobis [N-(2-pyridyl) acetamide]-zinc(II), -cadmium(II), and -mercury(II). *J. Chem. Soc. Dalton Trans.* (1979) 159
- GONTKOVSKAYA, V. T., OVCHINNIKOV, A. A., PEREGUDOV, A. N. (Acad. Sci. USSR, Inst. Chem. Phys., Chernogolovka, USSR): Some features of thermal explosions in the

- chain ignition peninsula. *Kinet. Catal. transl. Kinet. Katal.* 19 (1978) 661
- GOOD, W. D., SMITH, N. K. (Bartlesville Energy Res. Ctr., Dept. Energy, Bartlesville, Okla., 74003 USA): The enthalpies of combustion of the isomeric pentenes in the liquid state. A warning to combustion calorimetrists about sample drying. *J. Chem. Thermodyn.* 11 (1979) 111
- GÓRECKI, T., KRÓL, S., TOKARSKI, M. (Max Planck Inst. Met. Forsch., Inst. Werkstoffwissenschaft., Seestr. 92, D-7000 Stuttgart, 1 GFR): Effect of the rate of continuous cooling from the  $\beta$ -phase region on the phase composition structure and properties of Cu-10 Al-3 Fe-2 Mn aluminium bronze. *Trans. Jap. Inst. Met.* 29 (1979) 24
- GOUGH, S. R., RIPMEESTER, J. A., DALAL, N. S., REDDOCH, A. H. (Natl. Res. Council Canada, Div. Chem., Ottawa, Ontario, K1A OR9 Canada): Thermal hysteresis at the low temperature phase transition of  $(\text{NH}_4)_2\text{H}_2\text{PO}_4$ ,  $(\text{NH}_4)_2\text{H}_2\text{AsO}_4$ , their deuterated analogues, and of  $\text{KH}_2\text{PO}_4$  and the effect of Cr impurity ions on the transition temperature. *J. Phys. Chem.* 83 (1979) 664
- GREBENNIKOV, V. N., NAZIN, G. M. (Acad. Sci. USSR, Inst. Chem. Phys., Chernogolovka, USSR): Thermal decomposition of 2-fluoro-2,2-dinitroethyl methyl ether and its derivatives in the gas phase. *Bull. Acad. Sci. USSR Div. Chem. USSR Div. Chem. Sci. transl. Izv. Akad. Nauk SSSR Khim.* 27 (1978) 1428
- GRIGAS, J. (V. Kapsukas State Univ., Dept. Phys., Vilnius, LiSSR): Phase transitions in  $\text{Sb}_2\text{S}_3$ -type chain crystals. *Ferroelectrics* 20 (1978) 173
- GRILLO, A., REED, R., SLACK, M. W. (Grumman Aerosp. Corp., Dept. Res., Bethpage, N. Y., 11714 USA): Infrared measurements of sulfur dioxide thermal decomposition rate in shock waves. *J. Chem. Phys.* 70 (1979) 1634
- GRIME, J. K., TAN, B. (Univ. Denver, Dept. Chem., Denver, Colo., 80208 USA): Enzymatic inhibition enthalpimetry. The analytical potential of the inhibitory action of a series of physiologically active alkaloids on the activity of serum cholinesterase. *Anal. Chim. Acta* 106 (1979) 39
- GROLIER, J. P. E., WILHELM, E., HAMEDI, M. H. (Univ. Clermont Ferrand, Thermodynam. et Cinét. Chim. Lab., F-63170 Aubière, France): Molar heat capacity and isothermal compressibility of binary liquid mixtures: carbon tetrachloride + benzene, carbon tetrachloride + cyclohexane and benzene + cyclohexane. *Ber. Bunsen Ges. Phys. Chem.* 82 (1978) 1282
- GUBANOV, V. A., BRETZKE, E. B., ZEVAKIN, I. A., RYAZANOVA, R. M., RABINOVICH, R. L., DOLGOPOLSKY, I. M. (S. V. Lebedev Synthet. Rubber Res. Inst., Leningrad, USSR): The synthesis of polyfluoroacrylates and the study of their thermal and drolytic stability. *Vysokomol. Soedin. A* 21 (1979) 202 (In Russian)
- GUERID, A., LERCH, P., VALLEY, J. F.: Calorimetric determination of dosage absorbed. *Chimia* 33 (1979) 91
- GUFAN, Y. M., ROBKN, L. M., CHUBICH, A. A. (Rostov Don State Univ., Rostov, USSR): Comparative group-theoretical analysis of phase transition in  $\text{AgNa}(\text{NO}_2)_2$  and  $\text{NaNO}_2$ . *Fiz. Tverd. Tela* 21 (1979) 682 (In Russian)
- GULBRANSEN, E. A. (Univ. Pittsburgh, Dept. Met. and Mat. Engn., Pittsburgh, Pa., 15213 USA): Infra-red heating source and associated apparatus for the study of contaminants in inert gases. *Thermochim. Acta* 29 (1979) 295
- GUPTA, R. K., SINGH, A. K. (Univ. Jodhpur, Dept. Phys., Jodhpur, 342001 Rajasthan, India): Enhancement in specific heat due to anion impurities in KCl. *Solid State Commun.* 29 (1979) 607
- GUREVICH, Y. G., KAGANOV, M. I. (Acad. Sci. UkrSSR, Inst. Radiophys. and Electr., Kharkov, 108 UkrSSR): Theory of heat conductivity in solids. *Zh. Eksp. Teor. Fiz.* 75 (1978) 2330 (In Russian)
- GUST, W., PREDEL, B., STENZEL, K. J. (Univ. Stuttgart, Inst. Met., D-7000 Stuttgart, 1 GFR): Kalorimetrische Untersuchungen zur Ermittlung der spezifischen Grenzflächenenthalpie der Phasengrenzen der Eutektoid umgewandelten Legierungen Cu-24,0 At% Al und Cu-20,15 At% In. *Acta Met.* 27 (1979) 117
- GUTHRIE, J. P., CULLIMORE, P. A. (Univ. Western Ontario, Dept. Chem., London, Ontario, N6A 5B7, Canada): The enol content of simple carbonyl compounds: a thermochemical approach. *Can. J. Chem.* 57 (1979) 240

- HAASE, J., KÖHLER, S., HOSEmann, R. (Max Planck Gesell., Teilinst. Strukturforsch., Fritz Haber Inst., Berlin-Dahlem): New aspects on melting and annealing behaviour of polymers. *Z. Naturforsch. A* 33 (1978) 1472
- HÄLDAHL, L., SØRENSEN, O. T. (Asea-Atom, Västerås, Sweden): Thermal analysis of the decomposition of ammonium uranyl carbonate (AUC) in different atmospheres. *Thermochim. Acta* 29 (1979) 253
- HARRISON, I. R., RUNT, J. (Penn. State Univ., Dept. Mat. Sci. and Engn., Polymer Sci. Sect., University Pk., Pa., 16802 USA): The heating rate dependence of polymer melting points. *J. Polym. Sci. Polym. Phys. Ed.* 17 (1979) 321
- HARRISON, I. R., RUNT, J., STANISLOW, L. J. BELL, D. A. (Penn. State Univ., Dept. Mat. Sci. and Engn., Polymer Sci. Sect., University Pk., Pa., 16802 USA): The heat of fusion of polymer crystals: polyethylene crystals in suspension. *J. Polym. Sci. Polym. Phys. Ed.* 17 (1979) 63
- HATTA, I. (Nagoya Univ., Dept. Appl. Phys., Chikusa-ku, Nagoya, Aichi, 464 Japan): Heat capacity measurements by means of thermal relaxation method in medium temperature range. *Rev. Sci. Instr.* 50 (1979) 292
- HEBRAL, B., FROSSATI, G., GODFRIN, H., SCHUMACHER, G., THOULOUSE, D. (CNRS, Crftb, Bp 166x, F-38042, Grenoble, France): Specific heat measurements on bcc  ${}^3\text{He}$  from 3 to 300 mK. *J. Phys. Lett.* 40 (1979) L-41
- HEGENBARTH, E., BREZINA, B. (Tech. Univ. Dresden, DDR-8027 Dresden, GDR): Thermal conductivity of Li-Tl-tartrate single crystals at low temperature. *Ferroelectrics* 20 (1978) 181
- HELLER, H. G., OLIVER, S., SHAWE, M. (US Epa, Pm 218, Washington, D. C., 20460 USA): Overcrowded molecules. 17. Thermal reactions of ( $\alpha$ -phenylethyldene) (substituted methylene) succinic anhydrides. *J. Chem. Soc. Perkin Trans. I* (1979) 154
- HELWIG, J., PETERSSON, J., SCHNEIDER, E. (Univ. Saarland, Fachbereich Phys., D-6600 Saarbrücken, GFR): Critical heat capacity of  $\text{AgNa}(\text{NO}_2)_2$  near  $T_c$ . *Ferroelectrics* 20 (1978) 285
- HEMMINGS, J. W., KERN, J. (CSIR, Chem. Engn. Res. Grp., POB 395, Pretoria, 0001 South Africa): The non-adiabatic calorimeter problem and its application to transfer processes in suspensions of solids. *Int. J. Heat Mass Transfer* 22 (1979) 99
- HENDERSON, D. W. (Cornell Univ., Dept. Mat. Sci. and Engn., Ithaca, N. Y., 14853 USA): Thermal analysis of non-isothermal crystallization kinetics in glass forming liquids. *J. Non-Cryst. Solids* 30 (1979) 301
- HERMAN, G. G., GOEMINNE, A. M. (State Univ. Ghent, Gen. and Inorgan. Chem., Lab. B, B-9000 Ghent, Belgium): Thermochemical study of the stepwise protonation of 1,4-diaza-7-thianonane, 1,4-diaza-7-thia-8,8'-dimethylnonane and 1,5-diaza-8-thianonane, and of their complex formation with copper(II) and nickel(II) ions in aqueous solution. *J. Coord. Chem.* 8 (1979) 231
- HERZOG, G. F., GIBSON, E. K., LIPSCHUTZ, M. E. (c/o M. E. Lipschutz, Purdue Univ., W. Lafayette, Ind., 47907 USA): Thermal metamorphism of primitive meteorites. 8. Noble gases, carbon and sulfur in Allende (C3) meteorite heated at 400–1000°C. *Geochim. Cosmochim. Acta* 43 (1979) 395
- HIROTSU, S., SUZUKI, T. (Tokyo Inst. Technol., Coll. Sci., Dept. Phys., Meguro-ku, Tokyo 152, Japan): Critical thermodynamic properties around the successive phase transitions of  $\text{CsPbBr}_3$  and  $\text{CsPbCl}_3$ . *Ferroelectrics* 20 (1978) 179
- HOINKIS, E., BEHRET, H., HARTMANN, D., KÖHLING, A., ROBENS, E. (Hahn-Meitner Inst. Kernforsch. Berlin GmbH, D-1000 Berlin, 39): The corrosion induced change of pore size distribution and surface area of a fuel element graphite. *Thermochim. Acta* 29 (1979) 345
- HOLMES, J. L., LOSSING, F. P. (Univ. Ottawa, Dept. Chem., Ottawa, Ontario, K1N 9B4 Canada): The reactivity of  $[\text{C}_3\text{H}_3]^+$  ions. A thermochemical study. *Can. J. Chem.* 57 (1979) 249
- HOOPER, R. J., BATTARD, H. A. J., EVANS, D. G. (Univ. Melbourne, Dept. Chem. Engn., Parkville 3052, Victoria, Australia): Thermal dissociation of tetralin between 300 and 450°C. *Fuel* 58 (1979) 132
- HUANG, B. J., WUNG, T. Y., NIEH, S. (Natl. Taiwan Univ., Dept. Mech. Engn., Taipei, Taiwan): Thermal analysis of black liquid cylindrical parabolic collector. *Sol. Energy* 22 (1979) 221

- HUDEC, P., SLÁMA, Z., ŠTĚPÁNKOVÁ, H. (Res. Inst. Macromol. Chem., Tkalcovská 2, CS-65649 Brno, Czechoslovakia): GPC study of thermo-oxidative degradation of poly(2,6-dimethyl-1,4-phenylene oxide). *Makromol. Chem.* 180 (1979) 351
- HUDSON, H. R., KOPLICK, A. J., POULTON, D. J. (Polytech. N. London, Dept. Chem., London, N7 8DB, England): Competitive 1,2- and 1,3-hydride shifts and the possible role of protonated and methylated cyclopropane intermediates in alkyl group rearrangements accompanying the thermal decomposition of saturated alkyl chloroformates in the liquid phase. *J. Chem. Soc. Perkin. Trans. II* (1979) 57
- IIDA, T., GOTO, K. (Osaka Inst. Technol., Dept. Appl. Chem., Asahi-ku, Osaka, 535 Japan): Color stabilization of poly(vinyl)-chloride with heat treatment. *J. Macromol. Sci. A* 12 (1978) 389
- ILARRAZ, J., DEL MORAL, A. (Univ. Navarra, Fac. Ciencias, Dept. Fis., San Sebastian, Spain): Magnetic ordering temperatures in rare earth. Fe<sub>2</sub> laves phases determined by DTA. *Phys. Status Solidi A* 51 (1979) K41
- INAGAKI, N., SAKURAI, S., KATSUURA, K. (Shizuoka Univ., Fac. Engn. Polymer Chem. Sect., Hamamatsu, Shizuoka, 432 Japan): Flame-retardant effect of tris(2,3-dibromopropyl) phosphate on polystyrene. *J. Appl. Polym. Sci.* 23 (1979) 2023
- ISHIHARA, T., MURATA, I., NAKAJIMA, Y. (Osaka Univ., Fac. Sci., Dept. Chem., Toyonaka, Osaka, 560 Japan): Synthesis and thermal stabilities of various naphthothiepins. *Heterocycles* 12 (1979) 175
- ITO, S., KAKEHI, A., TANAKA, Y., YOSHIDA, K., MATSUNO, T. (Shinshu Univ., Fac. Engn., Dept. Chem. Ind., Nagano 380, Japan): Thermal and acid-catalyzed decomposition of 3,6-diphenyl-1,4-bis-(phenylsulfonyl)-1,4-dihydro-1,2,4,5-tetrazine. *Bull. Chem. Soc. Jap.* 52 (1979) 483
- JAIN, P. C., (Natl. Phys. Lab., New Delhi, 110012 India): The prediction of the thermal conductivity of xenon. *J. Phys. D* 11 (1978) 2371
- JEHN, H. (Max Planck Inst. Metallforsch., Inst. Werkstoffwissenschaft., D-7000 Stuttgart, GFR): Suspension balance apparatus for the investigation of the oxidation of refractory and platinum metals at high temperatures and low pressures. *Thermochim. Acta* 29 (1979) 229
- JIMENEZ, E., PAZ-ANDRADE, M. I., CASANOVA, C. (Univ. Santiago, Dept. Fundamental Phys., Santiago De Compostela, Spain): Enthalpies and volumes of mixing of 1,2-ethanediol + normal-alkanol systems. *J. Chim. Phys.* 76 (1979) 46
- JIMÉNEZ-LÓPEZ, A., LÓPEZ-GONZÁLEZ, J. D., RAMIREZ-SÁENZ, A., RODRIGUEZ-REINOSO, F., VALENZUELA-CALAHORRO, C., ZURITA-HERRERA, L. (Univ. Granada, Fac. Sci., Dept. Inorgan. Chem., Granada, Spain): Evolution of surface area in a sepiolite as a function of acid and heat treatments. *Clay Miner.* 13 (1978) 375
- JOHNSON, G. K., GAYER, K. H. (Argonne Natl. Lab., Div. Chem. Engn., Argonne, Ill., 60439 USA): The enthalpies of solution and formation of the chlorides of cesium and rubidium. *J. Chem. Thermodyn.* 11 (1979) 41
- JÓNA, E., JAMNICKÝ, M., ŠRAMKO, T. (Slovakian TH, Fac. Chem. Technol., Lehrstuhl Anorgan. Chem., CS-88037 Bratislava, Czechoslovakia): Heterogeneous reactions of solid nickel(II) complexes. XIII. Stereochemical changes in isothiocyanate nickel(II) complexes with dialkylpyridine during the thermal decomposition reactions. *Z. Anorg. Allg. Chem.* 447 (1978) 207
- KABILOV, Z. A., MUINOV, T. M., SHIBAEV, L. A., SAZANOV, Y. N., KORZHAVIN, L. N., PROKOPCHUK, N. P. (Acad. Sci. USSR, Inst. Macromolec. Cpd., Leningrad, USSR): Investigations of imidization of polypyromellitamido acids and thermal degradation of polypyromellitimides by mass spectrometric thermal analysis. *Thermochim. Acta* 28 (1979) 333
- KACSALOVA, L. (Szilikátip. Közp. Kut. és Terv. Váll., Budapest, Pf. 112, H-1300 Hungary): Crystallochemical reactions during the grinding of bayerite. *Építőanyag* 31 (1979) 27 (In Hungarian)
- KAISER, J. (BBC Brown Boveri and Chie, CH-5400 Baden, Switzerland): Caloric and mechanical characterization of physical aging of highly crosslinked polymers. *Makromol. Chem.* 180 (1979) 573
- KAIERSBERGER, E. (Netzsch Gerätebau GmbH., Selb, GFR): Gas analytical meth-

- ods of thermal analysis in comparison. *Thermochim. Acta* 29 (1979) 215
- KAJIMOTO, O., YAMAMOTO, T., FUENO, T. (c/o T. Fueno, Osaka Univ., Fac. Engn. Sci., Dept. Chem., Toyonaka, Osaka 560, Japan): Kinetic studies of the thermal decomposition of hydrazoic acid in shock waves. *J. Physical Chem.* 83 (1979) 429
- KAJIWARA, M., SHIMONO, K., SAITO, H. (Nagoya Univ., Fac. Engn., Dept. Appl. Chem., Chikusa-ku, Nagoya, Aichi, 464 Japan): Phosphonitrilic chloride. 40. Relationships between electrical conductivity and thermal behavior of diaminotetraarylcyclotriphosphazenes. *J. Macromol. Sci. A* 12 (1978) 945
- KANDAUROVA, G. S., PAMYATNYKH, L. A., KOCHNEVA, N. P., TITOVA, A. G. (A. M. Gorkii State Univ., Sverdlovsk, USSR): Temperature effect on domain structure on single-crystalline plates of ferrite-garnets. *Fiz. Tverd. Tela* 21 (1979) 612 (In Russian)
- KARAPETYANTS, M. K., VASILEV, V. A., MIKHAILIN, B. V., STRAKHOV, V. N. (c/o V. A. Vasilev, D. I. Mendeleev Chem. Technol Inst., Moscow, USSR): Heat capacity and density of aqueous solutions of sodium and rubidium bromides at 25°C. *Zh. Fiz. Khim.* 53 (1979) 207 (In Russian)
- KASPER, R. B., HOLLOWAY, J. R., NAVROTSKY, A. (c/o A. Navrotsky, Arizona State Univ., Dept. Chem., Tempe, Ariz., 85251 USA): Direct calorimetric measurement of enthalpies of aqueous sodium chloride solutions at high temperatures and pressures. *J. Chem. Thermodyn.* 11 (1979) 13
- KATO, C., KORODA, K., MISAWA, M. (Waseda Univ., Sch. Sci. and Engn., Dept. Appl. Chem., Shinjuku-ku, Tokyo, 160 Japan): Preparation of montmorillonite-nylon complexes and their thermal properties. *Clays Clay Miner.* 27 (1979) 129
- KELEN, T. (Cent. Res. Inst. Chem., Pf. 17, H-1525 Budapest, Hungary): Secondary processes of thermal degradation of PVC. *J. Macromol. Sci. A* 12 (1978) 349
- KEMP, L. A. W. (Natl. Phys. Lab. Div. Radiat. Sci. and Acoust., Teddington TW11 OLW, Middlesex, England): A theoretical analysis of rod calorimeters, with special consideration of pyrolytic graphits as a rod material. *J. Phys. E* 11 (1978) 1203
- KETTRUP, A., OHRBACH, K. H. (Gesamthsch. Paderborn, Fachbereich Chem. und Chem. Tech., D-4790 Paderborn, GFR): Calorimetric and spectroscopic investigations into the stability of  $\text{SiCl}_4$  and  $\text{SnCl}_4$  complexes. *Thermochim. Acta* 29 (1979) 273
- KHARKOV, N. E., ZVERKOVA, V. G., KUDRYAVTSEVA, N. L., KHODAKOV, G. S.: Characteristics of crystallization and thermal dissociation of coprecipitated rare earth carbonates. *Zh. Neorg. Khim.* 24 (1979) 305 (In Russian)
- KHATTAK, G. D., BOHM, H. V., KEESOM, P. H. (Purdue Univ., Dept. Phys., W. Lafayette, Ind., 47907 USA): Anomalous specific heat of pure graphite around 1.45K in magnetic fields up to 13.7 T. *Phys. Rev. B* 18 (1978) 6178
- KHATTAK, G. D., KEESOM, P. H., FAILE, S. P. (Purdue Univ., Dept. Phys., W. Lafayette, Ind., 47907 USA): Specific heats of the vanadium Magnéli phases of  $\text{V}_n\text{O}_{2n-1}$  between 0.4 and 50K. *Phys. Rev. B* 18 (1978) 6181
- KHODOS, M. Y., SLOBODIN, B. V., ARAPOVA, I. A. (Acad. Sci. USSR, Ural Sci. Ctr., Inst. Chem., Sverdlovsk, USSR): Enthalpy of formation of lithium orthovanadate. *Inorg. Mater. transl. Izv. Akad. Nauk SSSR Neorg. Mater.* 14 (1978) 1059
- KIEFFER, S. W. (US Geol. Survey, Flagstaff, Ariz., 86001 USA): Thermodynamics and lattice vibrations of minerals. I. Mineral heat capacities and their relationships to simple lattice vibrational models. *Rev. Geophys. Space Phys.* 17 (1979) 1
- KIGOSHI, A. (Tohoku Univ., Res. Inst. Mineral Dressing and Met., Sendai, Miyagi 980, Japan): Differential scanning calorimetry study of fluoride complexes of germanium, tungsten, uranium, lithium and gallium. *Thermochim. Acta* 29 (1979) 147
- KIMURA, T., TAKAGI, S. (Kinki Univ., Fac. Sci. and Technol., Dept. Chem., Higashi Osaka 577, Japan): Enthalpies of solution of *o*-, *m*-, and *p*-terphenyls in benzene at 298,15 K. *J. Chem. Thermodyn.* 11 (1979) 47
- KING, M. S. (Univ. Saskatchewan, Dept. Geol. Sci., Saskatoon, Saskatchewan, S7N 0W0, Canada): Thermal conductivity measurements on saturated rocks at permafrost temperatures. *Can. J. Earth Sci.* 16 (1979) 73
- KINSHO, Y., ONODERA, N., SAKIYAMA, M., SEKI, S. (c/o S. Seki, Osaka Univ., Fac. Sci.,

- Dept. Chem., Toyonaka, Osaka 560, Japan): Thermodynamic studies on phase transitions of potassium thiocyanate and ammonium thiocyanate crystals. *Bull. Chem. Soc. Jap.* 52 (1979) 395
- KIPNIS, A. Y., FEDOROV, Z. P. (Gipronikel Res. and Planning Inst., Leningrad, USSR): Mass spectrometric study of the thermal decomposition of nickel carbonyl. *Kinet. Catal. transl. Kinet. Katal.* 19 (1978) 669
- KIREEV, V. V., KORSHAK, V. V., MITROPOLSKAYA, G. I., SULKOVSKY, V. (D. I. Mendeleev Chem. Technol. Inst., Moscow, USSR): Thermal polymerization of cyclic chlorophosphazenes. *Vysokomol. Soedin. A* 21 (1979) 100 (In Russian)
- KISLYAKOVA, G. V., KOMLEV, G. A., TOMSKIKH, I. V. (Vladimir Polytech. Inst., Vladimir, USSR): Thermal decomposition of palladium(III) oxide. *Zh. Fiz. Khim.* 53 (1979) 494 (In Russian)
- KNAPP, G. S. (Argonne Natl. Lab., Argonne, Ill., 60439 USA): Heat capacity studies of high  $T_c$  superconductors. *J. Less-Common Metals* 62 (1978) 127
- KNEP, R., MOOTZ, D., SCHAEFER, A. (Univ. Düsseldorf, Inst. Anorgan. Chem. und Strukturchem., D-4000 Düsseldorf, 1 GFR): A DTA system with simple "Triac control" and its application in laboratory courses and research. *Thermochim. Acta* 29 (1979) 121
- KOCH, E., STILKERIEG, B. (Max Planck Inst. Kohlenforsch., Inst. Strahlenchem., Stift Str. 34–36, D-4330 Mülheim, GFR): Oscillating reactions. A phenomenon studiable by DTA? *Thermochim. Acta* 29 (1979) 205
- KOLOMYTSEV, V. I., LOBODYUK, V. A., KHANDROS, L. G. (Acad. Sci. UkrSSR, Inst. Met. Phys., Kiev, UkrSSR): Structural changes at heating of the  $\beta$ -phase in NiTi alloys. *Phys. Status Solidi A* 50 (1978) K 127
- KORNILOVICH, B. I., OVRAMENKO, N. A., OVCHARENKO, F. D. (Acad. Sci. UkrSSR, Inst. Colloid Chem. and Water Chem., Kiev, UkrSSR): Hydrothermal interaction between karolinite and  $\text{Ca}(\text{OH})_2$  at 300–500°C. *Dokl. Akad. Nauk SSSR* 244 (1979) 377 (In Russian)
- KORSHAK, V. V., PAVLOVA, S. S. A., GRIBOVA, J. A., GRIBKOVA, P. N., AVETISYAN, Y. L., BEKASOVA, N. I., KOMAROVA, L. G. (Tbilisi State Univ., Tbilisi, GeSSR): The study of thermal degradation of the pressed specimens of aromatic polyamides. *Vysokomol. Soedin. A* 21 (1979) 30 (In Russian)
- KORSHAK, V. V., PAVLOVA, S. S. A., GRIBKOVA, P. N., BALYKOVA, T. N., MIKADZE, L. A., BEHASOVA, N. I., PRIGOZHINA, M. P. (Acad. Sci. USSR, Inst. Organoelement. Cpd., Moscow, V-71 USSR): Thermal degradation of polyimides based on 1,7-m- and 1,12-p-carboranilenediamines. *Vysokomol. Soedin. A* 21 (1979) 304 (In Russian)
- KORSHAK, V. V., PAVLOVA, S. S. A., GRIBKOVA, P. N., VLASOVA, I. V., KRONGAUZ, E. S., BELOMOINA, N. M. (Acad. Sci. USSR, Inst. Organoelement. Cpd., Moscow, V-71 USSR): Thermal and thermo-oxidative degradation of polynaphthylimidophenyl-quinoxalines. *Vysokomol. Soedin. A* 21 (1979) 93 (In Russian)
- KORSHAK, V. V., TSEITLIN, G. M., KHOMUTOV, V. A., GONSALES, K. P., ATRUSHKEVICH, A. A. (D. I. Mendeleev, Chem. Technol. Inst., Moscow, USSR): The study of chemical transformations of furfurilidene acetones in the process of their thermal treatment. *Vysokomol. Soedin. A* 21 (1979) 54 (In Russian)
- KOSFELD, R., BOROWITZ, J. (Univ. Duisburg, Fachbereich Phys. Chem. 6, D-4100 Duisburg, GFR): Mechanisch-dynamische und kalorimetrische Untersuchungen an Phenolharz-Kautschuk-Mischungen. *Rheol. Acta* 18 (1979) 51
- KORZO, V. F., EPANESHNIKOVA, I. K. (Moscow Aviat. Technol. Inst., Moscow, USSR): Temperature dependence of  $\text{Cu}-\text{Al}_2\text{O}_3$  cermet films. *Inorg. Mater. transl. Izv. Akad. Nauk SSSR Neorg. Mater.* 14 (1978) 917
- KRISHNAN, T., DUER, W. C., GOLDMAN, S., FORTIER, J. L., (Univ. Guelph, Guelph Waterloo Ctr., Grad. Work Chem., Dept. Chem., Guelph, Ontario, N1G 2W1 Canada): On the use of dilution calorimetry in the study of hydrogen-bonding self-association reactions: benzoic acid in benzene. *Can. J. Chem.* 57 (1979) 530
- KROH, J., SZAJDZIŃSKA, E., ŚWIATKOWSKI, W. (Tech. Univ. Łódź, Inst. Appl. Radiat. Chem., PL-93590 Łódź, Poland): Low temperature differential thermal analysis (DTA) of alcohol matrices stabilizing primary gamma-radiolysis products. *Radiochem. Radioanal. Lett.* 36 (1978) 287

- KROWICKI, K. (Polish Acad., Sci., Inst. Organ. Chem., PL-01224 Warsaw, Poland): Thermic reaction of thiopyridones. *Polish J. Chem.* 52 (1978) 2349
- KRUKOVSKY, P. G. (Acad. Sci. UkrSSR, Inst. Tech. Thermophys., Kiev, UkrSSR): A numerical method for solution of thermal conductivity inverse problems. *Dopov. Akad. Nauk Ukr. SSR* (1979) 69 (In Ukrainian)
- KRUMIN, A. E., ILYIN, U. Y., DIMZA, V. I. (P. Stuchka State Univ., 226098 Riga, LaSSR): Thermal and spectral studies of photorefraction and photoconductivity in transparent ferroelectric PLZT ceramics. *Ferroelectrics* 22 (1978) 695
- KRUPKA, K. M., ROBIE, R. A., HEMINGWAY, B. S. (US Geol. Survey, Reston, Va., 22092 USA): High-temperature heat capacities of corundum, periclase, anorthite,  $\text{CaAl}_2\text{Si}_2\text{O}_8$  glass, muscovite, pyrophyllite,  $\text{KAlSi}_3\text{O}_8$  glass, grossular, and  $\text{NaAlSi}_3\text{O}_8$  glass. *Amer. Mineral.* 64 (1979) 86
- KUBIN, L. S., POGREBNOI, A. M., KRASNOV, K. S. (Ivanovo Chem. Technol. Inst., Ivanovo, USSR): Ion — molecular equilibrium in barium chloride and bromide vapors and their mixtures. Heats of formation of the ions. *High Temp. transl. Teplofiz. Vysok. Temp.* 16 (1978) 745
- KUENTZLER, R., KAPPLER, J. P. (Univ. Louis Pasteur, CNRS, Equipe Rech. 464 F-67084 Strasbourg, France): Heat capacity and magnetisation of gold-nickel alloys. *J. Phys. F* 9 (1979) 195
- KUKUSHKIN, Y. N., FEDOTOVA, G. P., YUSTRATOVA, V. F., POSTNIKOVA, E. S. (Lensovet Technol. Inst., Leningrad, USSR): Thermoisomerization of platinum(II) complexes with amino acids. *Zh. Neorg. Khim.* 24 (1979) 730 (In Russian)
- KUKUSHKIN, Y. N., SEDOVA, G. N., VLASOVA, R. A., PYZHOOVA, L. Y. (Lensovet Technol. Inst., Leningrad, USSR): Thermal solid-phase conversions of palladium(II) bromide complexes with amines. *Zh. Neorg. Khim.* 24 (1979) 733 (In Russian)
- KULAS, F. R., THORSHAUG, N. P. (Saga Petrokjemi As and Co, Middel Thungst 17, Oslo, Norway): PVC powder extrusion. Melting properties and particle morphology. *J. Appl. Polym. Sci.* 23 (1979) 1781
- KUMAKURA, M., ARAKAWA, K., SUGIURA, T. (Japan Atomic Energy Res. Inst., Takasaki Radiat. Chem. Res. Estab., Takasaki, Gunma, Japan): Thermal ion — molecule reactions in oxygen-containing molecules. Proton and acetyl ion transfer reactions in n-propyl acetate — acetaldehyde mixtures. *Int. J. Mass Spectrom. Ion Phys.* 29 (1979) 21
- KUSHWAHA, M. S., KUSHWAHA, S. S. (Banaras Hindu Univ., Dept. Phys., Varanasi, 221005 Uttar Pradesh, India): Lattice vibrations and heat capacities of solid neon and xenon. *J. Phys. Soc. Jap.* 46 (1979) 366
- KUTOLIN, S. A., KOTYUKOV, V. I. (Novosibirsk Railroad Transport Inst., Novosibirsk, USSR): Computer prediction of the properties of binary high-melting compounds of transition metals on the basis of their simple electron structures. *Zh. Fiz. Khim.* 53 (1979) 337 (In Russian)
- KUZNETSOVA, A. G., TURKELTAUB, G. N.: Thermal destruction products of methylphenylsiloxane of the linear structure. *Zh. Obshch. Khim.* 48 (1978) 2715 (In Russian)
- KWART, H., BENKO, D. A. (Univ. Delaware, Dept. Chem., Newark, Del., 19711 USA): Kinetic isotope effects in the mechanism of thermal allylic rearrangements. *J. Amer. Chem. Soc.* 101 (1979) 1277
- KYKER, G. S., VALAITIS, J. K. (Firestone Tire and Rubber Co., Cent. Res. Labs., Akron, Ohio, 44317 USA): Stabilization of poly-(fluoroalkoxyphosphazene) (PFAP) elastomer against thermal degradation. *Symp. Stabiliz. Degr. Polym. Ed. D. L. Allara, W. L. Hawkins, Amer. Chem. Soc. (Washington)* (1978) 293
- KYSELKA, P., RAMEŠ, J., PROCHÁZKA, K. (Czechoslovak Acad. Sci., Inst. Inorgan. Chem., CS-25068 Řež, Czechoslovakia): Heats of vaporization of nonelectrolytes. *Collect.* 44 (1979) 307
- LANDEE, C. P., WESTRUM, E. F. (Washington State Univ., Program Chem. Phys., Pullman, Wash., 99164 USA): Heat capacities of bis-tetraethylammonium tetrachloronickelate and tetrachlorozincate. I. Structural transitions and thermophysical results. *J. Chem. Thermodyn.* 11 (1979) 247
- LAWSON, A. J. (Univ. Mainz, Inst. Organ. Chem., D-6500 Mainz, GFR): Notiz über die thermische Umlagerung von *O*-benzoyl-*N*-methyl-*N*-[2-(methylthio)phenyl] hydroxylamine. *Liebigs Ann. Chem.* (1979) 142

- LEHMANN, H. (Tech. Univ. Clausthal, Inst. Steine und Erden, D-3392 Clausthal GFR): Gruß and Dankadresse an die Tagungsteilnehmer GEFTA in Kiel. *Thermochim. Acta* 29 (1979) 201
- LEPLYANIN, G. V., SALIMGAREVA, V. N., MALARCHUK, E. S., RAFIKOV, S. R. (Acad. Sci. USSR, Inst. Chem., Ufa, USSR): The effect of certain sulphur-containing compounds on the thermal degradation of irradiated polymethyl methacrylate. *Vysokomol. Soedin. B* 21 (1979) 176 (In Russian)
- LERIBAUX, H. (Texas A and M Univ., Coll. Engr., College Stn., Tex., 77843 USA): Interpretation of some metallic phase diagrams. 1. Asymmetry of enthalpy of mixing. *Acta Met.* 27 (1979) 555
- LERIBAUX, H. (Texas A and M Univ., Coll. Engr., College Stn., Tex., 77843 USA): Interpretation of some metallic phase diagrams. 2. Entropy of mixing. *Acta Met.* 27 (1979) 563
- LERIBAUX, H. R., DESRE, P. J. (c/o P. J. Desre, Ecole Natl. Super Electrochim. et Electromet., CNRS, Thermodynam. et Phys. Chim. Met. Lab. 29, B. P. 44, St. Martin Heres, France): "Constant-volume alloy" formulation of enthalpy of mixing for metallic systems. *Z. Naturforsch. A* 33 (1978) 1487
- LESLIE, J. (Univ. Maryland, Sch. Pharm., Baltimore, Md., 21201 USA): Thermal decomposition of 1,3-dimethylphenobarbital in trimethylanilinium hydroxide. Reaction pathway. *J. Chromatogr.* 169 (1979) 397
- LÉVAI, G., OCSKAY, G., SZEBENI, S. (Res. Inst. Organ. Chem. Ind., H-1428 Budapest, 41 Hungary): Investigation of thermal degradation of PVC in the solid state. *J. Macromol. Sci. A* 12 (1978) 467
- LIPKA, A. (Univ. Düsseldorf, Inst. Anorgan. Chem. und Strukturchem., D-4000 Düsseldorf, 1 GFR): Thermal analysis and structural studies of systems of  $SbCl_3$  with diphenylamine, triphenylamine, aniline hydrochloride and sulphur. *Thermochim. Acta* 29 (1979) 269
- LITVINEKO, V. F., BOLGAR, A. S., KULIK, O. P., KHORPYAKOV, O. T. (Acad. Sci. UkrSSR, Inst. Mat. Technol., Kiev, UkrSSR): High-temperature enthalpy and heat capacity of hafnium-mononitride. *Zh. Fiz. Khim.* 53 (1979) 318 (In Russian)
- LOGASHEVA, A. I., TSOI, G. K., TOPOR, N. D., KARAPET'YANTS, M. K., OLEVSKII, V. M., TSEKHANSKAYA, Y. V. (Moscow Nitrogen Ind. and Organ. Synth. Prod. Res. Inst., Moscow, USSR): Influence of the experimental conditions in thermal investigations of ammonium nitrate. *J. Appl. Chem. USSR* transl. *Zh. Prikl. Khim.* 51 (1978) 1623
- LOHSE, U., ALSDORF, E., STACH, H. (Akad. Wissensch. DDR, Zent. Inst. Phys. Chem., DDR-1199 Berlin): Dealuminated molecular sieves of Y type. Preparation and characterization by IR spectra, DTA/DTG and adsorption measurements. *Z. Anorg. Allg. Chem.* 447 (1978) 64
- LØNVIK, K. (Univ. Trondheim, Norwegian Inst. Technol., Inst. Eksperimentalfys., N-7034 Trondheim, Norway): Thermosonimetry of some alkali metal dichromates. *Thermochim. Acta* 29 (1979) 243
- LUGSCHEIDER, E., KNOTEK, O., KLÖHN, K. (Rhein. Westfal. TH Aachen, Inst. Werkstoffkunde, D-5100 Aachen, GFR): Melting behaviour of nickel-chromium-silicon alloys. *Thermochim. Acta* 29 (1979) 323
- LYON, W. G., OSBORNE, D. W., FLOTOW E. (c/o H. E. Flotow, Argonne Natl. Lab., Div. Chem., Argonne, Ill., 60439 USA): Thermodynamics of the lanthanide trifluorides. II. The heat capacity of praseodymium trifluoride  $PrF_3$  from 5 to 350°K. *J. Chem. Phys.* 70 (1979) 675
- MACFARLANE, J. C., COLLINS, H. C. (Nat'l. Measurement Lab., Bradfield Rd., Lindfield 2070, New S. Wales, Australia): The low-temperature resistivity of platinum-rhodium alloys. *Cryogenics* 18 (1978) 668
- MACKAY, H. B., WOLFF, L. D., MAPLE, M. B., JOHNSTON, D. C. (Univ. Calif., San Diego, Inst. Pure and Appl. Phys. Sci., La Jolla, Calif., 92093 USA): Specific-heat anomalies at the lower critical temperature in reentrant ferromagnetic superconductors. *Phys. Rev. Lett.* 42 (1979) 918
- MADHAVA, M. R., SAUNDERS, G. A. (Indian Inst. Sci., Dept. Phys., Bangalore, 560012 India): Latent heats and entropies of fusion in soft mode indium alloys. *Phil. Mag. B* 38 (1978) 575
- MAEDA, M., ARNEK, R., BIEDERMANN, G. (Royal Inst. Technol., Dept. Inorgan. Chem., S-10044 Stockholm, Sweden): A potentiometric and calorimetric study of the system  $Ag^+ - NH_3$  in 3 M  $NaClO_4$ , 3 M

- $\text{LiClO}_4$  and 3 M  $\text{NaNO}_3$  media. *J. Inorg. Nucl. Chem.* 41 (1979) 343
- MAJOR, M. A., BURCZAK, J. D., KELLOGG, T. F. (Mississippi State Univ., Ctr. Isotope State Coll., Miss., 39762 USA): An improved technique for the determination of respiratory  $^{14}\text{CO}_2$  as  $\text{Ba}^{14}\text{CO}_3$ , utilizing thermal decomposition in a sample oxidizer. *Int. Appl. Radiat. Isotop.* 30 (1979) 177
- MALHOTRA, L., BAILLET, C., BLANCHARD, L. P. (Himachal Pradesh Univ., Dept. Chem., Simla, 171001, Himachal, Pradesh, India): Polymerization of  $\alpha$ -methylstyrene with potassium as initiator. VII. Thermal decomposition of the reaction products. *J. Macromol. Sci. A* 12 (1978) 909
- MALTSEV, V. T., KUTOLIN, S. A. (Rostov Don Construct. Engn. Inst., Rostov, USSR): Calculation of the Gibbs energy and enthalpy of formation of compounds in binary and ternary oxide systems. *Zh. Neorg. Khim.* 24 (1979) 12 (In Russian)
- MAMEDOV, A. P., MARUKHAEV, V. R., SALAEV, E. Y. (Y. G. Mamediev Petrochem. Proc. Inst., Tashkent, UzSSR): ESR study of the thermal stability of radical-ions in some irradiated trialkyl ammonium chlorides. *High Energy Chem. transl. Khim. Vysok. Energ.* 12 (1978) 351
- MANGIN, J., HADNI, A. (Univ. Nancy 1, Infra-rouge Lointain Lab., CNRS, Equipe Rech., 14, F-54037 Nancy, France): Low-temperature pyroelectricity: the case of saccharose and  $\text{Nd}(\text{BrO}_3)_3 \cdot 9 \text{H}_2\text{O}$  single crystals. *Ferroelectrics* 22 (1978) 705
- MARTINEZ, G., MILLAN, J. (CSIC, Inst. Plast. and Caucho, Juan de La Sierra, 3 Madrid, Spain): Influence of the tacticity on thermal degradation of PVC. 3. Verification by ozonization of degraded samples. *Angew. Makromol. Chem.* 75 (1979) 215
- MARUCCO, J. F. (Univ. Paris 11, Composes Non Stoechimet. Lab., F-91405 Orsay, France): Electrical resistance and defect structure of stable and metastable phases of the system  $\text{Nb}_{12}\text{O}_{29} - \text{Nb}_2\text{O}_5$  between 800 and 1100 °C. *J. Chem. Phys.* 70 (1979) 649
- MASUDA, Y., SHISHIDO, S. (Niigata Univ., Dept. Gen. Educ., Niigata, Japan): Thermal decompositions of formates. IV. Thermal dehydrations of  $\text{Mg}(\text{II})$ ,  $\text{Mn}(\text{II})$ ,  $\text{Fe}(\text{II})$ ,  $\text{Co}(\text{II})$ ,  $\text{Ni}(\text{II})$ ,  $\text{Cu}(\text{II})$ ,  $\text{Zn}(\text{II})$  and  $\text{Cd}(\text{II})$  formate dihydrates. *Thermochim. Acta* 28 (1979) 377
- MATKOVSKII, P. E., CHERNAIA, L. I., DIACKOVSKII, F. S. (Acad. Sci. USSR, Inst. Chem. Phys., Chernogolovka, USSR): The mechanism of thermo and photodestruction of  $(\pi\text{-C}_5\text{H}_5)_2\text{TiC}_2\text{H}_3\text{Cl}$ . *Dokl. Akad. Nauk SSSR* 244 (1979) 1351 (In Russian)
- MATO, F., BERRUETA, J. (Univ. Valladolid, Dept. Quim. Técnica, Valladolid, Spain): Heat of mixture in exothermal systems. *An. Quim.* 74 (1978) 1290 (In Spanish)
- MATSUURA, M., SUZUKI, K. (Miyagi Tech. Coll., Natori, 98112 Japan): Kinematical transformations of amorphous selenium by DTA measurement. *J. Mater. Sci.* 14 (1979) 395
- MEDZHIDOV, R. A., RASULOV, S. M. (Acad. Sci. USSR, Inst. Phys., Makhachkala, USSR): Contribution of the point defects to enthalpy excess, heat capacity and entropy of  $\text{SnTe}$  and  $\text{Sb}_2\text{Te}_3$ . *Zh. Fiz. Khim.* 53 (1979) 191 (In Russian)
- MEI, C. C., MOORE, B. C. (Univ. Calif., Dept. Chem., Berkeley, Calif., 94720 USA): Thermal rate constants, energy dependence, and isotope effect for halogen-hydrogen halide reactions. *J. Chem. Phys.* 70 (1979) 1759
- MEINERT, H., SCHIFFERDECKER, W. (Humboldt Univ., DDR-104 Berlin): System tungsten-tungsten hexafluoride in the high temperature range. *Z. Chem.* 19 (1979) 33
- MEOT-NER, M., HUNTER, E. P., FIELD, F. H. (Rockefeller Univ., New York, N. Y., 10021 USA): Ion thermochemistry of low-volatility compounds in the gas phase. 1. Intrinsic basicities of  $\alpha$ -amino acids. *J. Amer. Chem. Soc.* 101 (1979) 686
- MIFSUD, A., RAUTUREAU, M., FORNES, V. (CSIC, Inst. Edafol and Biol. Vegetal., Madrid, Spain): Étude de l'eau dans la polygorskite à l'aide des analyses thermiques. *Clay Miner.* 13 (1978) 367
- MIKHAIL, R. S., GUINDY, N. M., HANAFI, S. (Ain Shams Univ., Fac. Sci., Dept. Chem., Cairo, Egypt): Effect of structure on the mechanism of dehydration of clay minerals. *Thermochim. Acta* 29 (1979) 289
- MILLERO, F. J., DUER, W. C., SHEPARD, E., CHETIRKIN, P. V. (Univ. Miami, Rosenthal Sch. Marine and Atomspher. Sci., Miami, Fla., 33149 USA): The enthalpies of dilution of phosphate solutions at 30 °C. *J. Solut. Chem.* 7 (1978) 877
- MINSKER, K. S., ABDULLIN, M. I., ARZHAKOV,

- J. A., MANUSHIN, V. I., MAMYKIN, A. V., KRAIKIN, V. A. (Bashkir State Univ., Ufa, USSR): Thermal degradation of PVC in a liquid phase. *Vysokomol. Soedin. B* 21 (1979) 194 (In Russian)
- MISHRA, U. C., DAS, B. K., DAS, P. K. (Ravenshaw Coll., Mayurbhanj Chem. Lab., Cuttack, 753003 Orissa, India): Thermodynamic studies of hydrogen iodide in dioxane-water mixtures from electromotive force measurements. *Thermochim. Acta* 28 (1979) 277
- MIYASHI, T., NISHIZAWA, Y., MUKAI, T. (c/o T. Mukai, Tohoku Univ., Coll. Gen. Educ., Dept. Chem., Sendai, Miyagi, 980 Japan): Syntheses, photochemical and thermal isomerizations of pyrazolotropilidenes and pyrazolonorcaradienes. *Heterocycles* 11 (1978) 293
- MIZUTA, S. (Natl. Chem. Lab. Ind., Div. Energy Chem., Shibuya-ku, Tokyo, Japan): Thermal decomposition of magnesium iodate. *J. Electrochem. Soc. Jap.* 47 (1979) 33 (In Japanese)
- MOHANTY, S. R., SATAPATHY, M. (Utkal Univ., Nucl. Chem. Lab., Bhubaneswar, 751004 Orissa, India): Comparative study of the influence of doping and irradiation on the thermal decomposition of barium bromate. *Radiochem. Radioanal. Lett.* 37 (1979) 345
- MØLLER, P. J. (Univ. Copenhagen, HC Ørsted Inst., Dept. Phys. Chem., DK-2100 Copenhagen, Denmark): Microgravimetry on the high temperature oxidation of short range ordered crystals of near  $\text{Au}_2\text{Cu}_3$  composition. *Thermochim. Acta* 29 (1979) 339
- MONKHORST, H. J., PACK, J. D. (Univ. Florida, Dept. Phys. and Astron., Gainesville, Fla., 32611 USA): The high-temperature resistivity of beryllium. *Solid State Commun.* 29 (1979) 675
- MORACHEVSKII, A. G., CHEKOV, N. G., DEMIDOV, A. I. (M. I. Kalinin Polytech. Inst., Leningrad, USSR): Thermodynamic properties of melts of the lithium-sulfur system. *J. Appl. Chem. USSR transl. Zh. Prikl. Khim.* 51 (1978) 1208
- MORISAKI, S. (Minist. Labour, Ind. Safety Res. Inst., Kiyose, 18004 Japan): Thermal decomposition of ethylene- and propylene-tetrafluoroethylene copolymers. *J. Chem. Soc. Jap. Chem. Ind. Chem.* (1979) 364 (In Japanese)
- MOROZ, Y. A., MOKHOSOEV, M. V., KALINICHENKO, A. M., ZAYATS, M. N. (Donetsk State Univ., Donetsk, UkrSSR): Application of thermal analysis, proton magnetic resonance and infrared spectroscopy methods for the studies of water state in potassium tungstonickelates(II). *Zh. Neorg. Khim.* 24 (1979) 77 (In Russian)
- MORTIMER, C. T., WILKINSON, M. P., PUDDEPHATT, R. J. (Univ. Keele, Dept. Chem., Keele ST5 5BG, Staffordshire, England): Thermochemistry of addition of  $\text{C}_2(\text{CN})_4$  to  $\text{Pt}(\text{PMe}_2\text{Ph})_2 \text{CH}_3\text{Cl}$  and  $\text{Pt}(\text{PPh}_3)_2\text{HCl}$ . *J. Organometal. Chem.* 165 (1979) 269
- MORTON, A. A. (MIT, Cambridge, Mass., 02139 USA): Boiling and melting points of the alkali metal halides. *J. Phys. Chem. Solids* 40 (1979) 175
- MOSKALEWICZ, R. (Polfer Res. Lab., Dzielna 60, PL-01029 Warsaw, Poland): Quantitative interpretation of TG and DTG curves obtained for some ferromagnetic substances in low intensity a.c. generated magnetic field. *Thermochim. Acta* 28 (1979) 229
- MÜLLER, H. P., BAIKER, A., RICHARZ, W. (c/o W. Richarz, ETH, Tech. Chem. Lab., CH-8092 Zürich, Switzerland): Thermo-gravimetric Untersuchung der reduzierenden Chlorierung von Tonerde. *Helv. Chim. Acta* 62 (1979) 76
- MÜLLER-SCHULTE, D. (Atom Energy Board, Div. Chem., Pretoria, 0001 South Africa): Application of calorimetry to the characterization of biochemical compounds. II. Studies of insulin and cross-linked insulin. *S. Afr. J. Chem.* 31 (1978) 131
- MURANEVICH, A. K. (Hebrew Univ. Jerusalem, Dept. Inorgan. and Analyt. Chem., Jerusalem, 91000 Israel): Lattice thermal conductivities of  $\text{TiO}-\text{MeO}$  ( $\text{Me} = \text{Ni}, \text{Co}, \text{Mn}$ ) solid solution. *Int. J. Heat Mass Transfer* 22 (1979) 173
- NAFZIGER, R. H., TRESS, J. E., PAIGE, J. I. (US Dept. Interior, Bur. Mines, Albany Met. Res. Ctr., Albany, Oreg., 97321 USA): Carbothermic reduction of domestic chromites. *Met. Trans. B* 10 (1979) 5
- NAGATA, I., FUJIWARA, K., OGASAWARA, Y. (Kanazawa Univ., Dept. Chem. Engn., Kanazawa, 920 Japan): Excess enthalpies of 2-propanol + cyclohexane and 2-propa-

- nol + benzene + cyclohexane at 298.15 K. *J. Chem. Thermodyn.* 10 (1978) 1201
- NAGATA, I., KAWAMURA, Y., ASANO, H., FUJIWARA, K., OGASAWARA, Y. (Kanazawa Univ., Dept. Chem. Engr., Kanazawa Ishikawa, 920 Japan): Excess enthalpies for binary mixtures of chloroform with alcohols. *Z. Phys. Chem.* 259 (1978) 1109
- NAKAMOTO, M., TANAKA, K., TANAKA, T. (c/o T. Tanaka, Osaka Univ., Fac. Engr., Dept. Appl. Chem., Suita, Osaka, 565 Japan): Thermolysis of some carbamatotetra-carbonyl- and carbamatopentacarbonyl-rhenium(I)complexes in the solid state and in solution. *J. Chem. Soc. Dalton Trans. Inorg. Chem.* (1979) 87
- NAUMOV, V. N., NOGTEVA, V. V., PAUKOV, I. E. (Acad. Sci. USSR, Inst. Inorgan. Chem., Novosibirsk, 90 USSR): Heat capacity, entropy and enthalpy of white tin (beta-Sn) in 1,8-311 K range. *Zh. Fiz. Khim.* 53 (1979) 497 (In Russian)
- NEKLYUDOV, V. P.: Complex formation of molecules and volume heat capacity of liquids. *Zh. Fiz. Khim.* 53 (1979) 310 (In Russian)
- NEPOCHATOV, V. M., KISELEVA, E. V., BUNDDEL, A. A. (D. I. Mendeleev Chem. Technol. Inst., Moscow, USSR): Determination of specific surface value by calorimetric method. *Zh. Fiz. Khim.* 53 (1979) 738 (In Russian)
- NEWMAN, J. J., KATZ, E. R. (Nemorex Corp., Santa Clara, Calif., 95052 USA): Thermal-magnetic properties of CrO<sub>2</sub> powder. *IEEE Trans. Magn.* 15 (1979) 967
- NIRSHA, B. M., ALLAKHVERDOV, G. R. (All Union Chem. Reagent and Highly Pure Chem. Subst. Res. Inst., Moscow, USSR): Thermal dehydration of Na<sub>2</sub>HPO<sub>4</sub>·12 H<sub>2</sub>O. *Zh. Neorg. Khim.* 24 (1979) 825 (In Russian)
- NIRSHA, B. M., BOGOMOLOV, V. I., KUZNETSOVA, R. V., SAMOLYUK, S. I. (All Union Chem. Reagent and Highly Pure Chem. Subst. Res. Inst., Moscow, USSR): Composition of gaseous phase during thermal decomposition of titaniumhydroxyoxochloroformate. *Zh. Obshch. Khim.* 49 (1979) 13 (In Russian)
- NODA, Y., NAITO, K. (Nagoya Univ., Fac. Engr., Dept. Nucl. Engr., Chikusa-ku, Nagoya, Aichi, 464 Japan): The thermal conductivity of U<sub>3</sub>O<sub>8-z</sub> from 200 to 750 K. *J. Nucl. Mater.* 80 (1979) 102
- OCHKIN, A. V., FROLOV, Y. G., VINETSKAYA, T. N., SERGIEVSKII, V. V. (D. I. Mendeleev Chem. Technol. Inst., Moscow, USSR): Correlation of thermal effects with the extraction constants of acids and salts of metals, using macromolecular amines. *Zh. Fiz. Khim.* 73 (1979) 605 (In Russian)
- ODLER, I., SCHÜPPSTUHL, J., DÖRR, H. (Tech. Univ. Clausthal, D-3392 Clausthal, GFR): Thermoanalytical studies on hydrated tricalciumsilicate. *Thermochim. Acta* 29 (1979) 283
- OGUNI, M., MATSUO, T., SUGA, H., SEKI, S. (Osaka Univ., Fac. Sci., Dept. Chem., Toyonaka 560, Japan): Mechanism of the ferroelectric phase transition in K<sub>4</sub>[Fe(CN)<sub>6</sub>] · 3 H<sub>2</sub>O and K<sub>4</sub>[Fe(CN)<sub>6</sub>] · 3 D<sub>2</sub>O. *Bull. Chem. Soc. Jap.* 52 (1979) 941
- OHNARI, I., TAKADA, S. (Kanagawa Univ., Inst. Phys., Rokkakuba, Yokohama 221, Japan): Central peak and thermal diffusion mode near structural phase transition. Hydrodynamical approach. *Progr. Theor. Phys.* 61 (1979) 11
- OKAMOTO, M., SUZUKI, T., ISHIZUKA, O. (Yamagata Univ., Fac. Engr., Dept. Polymer and Text. Technol., Yonezawa, Yamagata 992, Japan): Heat treatment of poly(alpha-chloroacrylonitrile) and its effect. *J. Chem. Soc. Jap. Chem. Ind. Chem.* (1979) 259 (In Japanese)
- OKAZAKI, R., WATANABE, M., INAMOTO, N. (Univ. Tokyo, Fac. Sci., Dept. Chem., Tokyo, 113 Japan): Photochemical and thermal reactions of cyclohexadienone oximes. *Bull. Chem. Soc. Jap.* 52 (1979) 175
- OLENIK, B. N., MIKINA, V. D., ALEKSANDROV, Y. I., USHCEVICH, V. F., OSIROVA, T. R., HRUSTALEVA, K. A. (D. I. Mendeleev Metrol. Inst., Leningrad, USSR): A new determination of the energy of combustion of hippuric acid. *J. Chem. Thermodyn.* 11 (1979) 145
- ONODERA, S. (Sci. Univ. Tokyo, Fac. Pharmaceut. Sci., Shinjuku-ku, Tokyo, 162 Japan): Gas-chromatographic studies of the thermal decomposition of nitropentaammine, dinitrotetraammine, trinitrotriammine, tetranitrodiammine and pentanitroamminecobalt(III) complexes in the solid state. *Bull. Chem. Soc. Jap.* 52 (1979) 911
- OREKHOVA, A. I., SAVINKOVA, E. P., SUDARKINA, N. V. (S. M. Kirov Polytech. Inst.,

- Sverdlovsk, USSR): Influence of technological impurities on thermal decomposition of carnallite. *J. Appl. Chem. USSR transl. Zh. Prikl. Khim.* 51 (1978) 1414
- OSTRONOV, M. G., GELPERIN, I. I., SILANTEV, V. B. (Moscow Nitrogen Ind. and Organ. Synth. Prod. Res. Inst., Moscow, USSR): Enthalpy of liquid and gas-liquid systems at average and low pressures 1. Enthalpy determination at low pressure, using the method of adiabatic throttling of single-phase systems. *Zh. Fiz. Khim.* 53 (1979) 759 (In Russian)
- OZARI, Y., CHOW, R. H., GILLHAM, J. K. (Gaf Corp., 1361 Alps Rd., Wayne, N. J., 07470 USA): A water-sensitive thermomechanical transition in a polyimide. *J. Appl. Polym. Sci.* 23 (1979) 1189
- PADROS, E., AVILES, F. J., ALBERT, A., PALAU, J. (Univ. Autonoma Barcelona, Fac. Med., Dept. Fisiol., Barcelona, 16 Spain): Thermal denaturation studies on the globular region of histone HI from calf thymus. *An. Quim.* 74 (1978) 1417
- PAMPLIN, B. R., FEIGELSON, R. S. (Stanford Univ., Ctr. Mat. Res., Stanford, Calif., 94305 USA): Spray pyrolysis of complex sphalerite materials. *Mater. Res. Bull.* 14 (1979) 1
- PANDYA, N. M., SHAH, N. P. (Univ. Ahmedabad, Sch. Sci., Dept. Phys., Ahmedabad, 380009 India): Higher-order anharmonic contribution to the thermal expansion of KF at high temperatures. *J. Phys. C* 12 (1979) L5
- PANTALONI, J., FAVRE, O., BAILLEUX, R., FINIELS, G., MARCHISIO, J. (Univ. Provence, CNRS, Dynam. et Thermophys. Fluides Lab., 72 Ctr. St Jerome, F-13397 Marseille, France): Stockage thermique de l'énergie par chaleur latente de fusion d'un sel minéral: étude d'un échangeur dynamique à contact direct avec cristallisation du sel durant l'écoulement. *Rev. Phys. Appl.* 14 (1979) 113
- PAORICI, C., ZECCHINA, L. (Univ. Parma, Ist. Fis., CNR, Grp. Nazl. Struttura Mat., I-43100 Parma, Italy): Thermal conductivity in In-Se-Te alloys. *Phys. Status Solidi A* 50 (1978) K 235
- PAQUET, J., FRANÇOIS, P. (Univ. Lille CNRS, Propriétés et Struct. État. Solide Lab. 234, B.P. 36, F-59650 Villeneuve-d'Ascq, France): Influence de la fusion sur le comportement mécanique de roches granitiques à 800 °C et 250 MPa de confinement. *Compt. Rend. D* 288 (1979) 799
- PARAMESWARAN, K., HEALY, G. (Arthur D. Little Inc., Cambridge, Mass., 02140 USA): A calorimetric investigation of the copper-zinc system. *Met. Trans. B* 9 (1978) 657
- PARTYKA, S., ROUQUEROL, J. (CNRS, Ctr. Rech. Microcalorimétrie et Thermochim., 26 Rue 141e RIA, F-13003 Marseille, France): Calorimetric determination of surface areas: possibilities of a modified Harkins and Jura procedure. *J. Colloid Interface Sci.* 68 (1979) 21
- PAULSON, D. N., KRUSIUS, M., WHEATLEY, J. C., SAFRATA, R. S., KOLAC, M., TETHAL, T., SVEC, K., MATAS, J. (Univ. Calif. San Diego, Dept. Phys., La Jolla, Calif., 92037 USA): Magnetic thermometry to below one millikelvin with lanthanum-diluted cerium magnesium nitrate. *J. Low Temp. Phys.* 34 (1979) 63
- PAULUHN, J., ZIMMERMANN, H. W. (Univ. Fribourg, Inst. Phys. Chem., CH-1700 Fribourg, Switzerland): Recent investigations of the binding of ethidium bromide to DNA. 1. Communication: equilibrium model, enthalpies and entropies of competitive and non-competitive binding. *Ber. Bunsen Ges. Phys. Chem.* 82 (1978) 1265
- PAZ-ANDRADE, M. I., BRAVO, R., GARCIA, M., GROLIER, J. P. E., KEHIAIAN, H. V. (Univ. Santiago, Fac. Ciencias, Dept. Fis. Fundamental, Santiago de Compostela, Spain): Enthalpies de mélange des 1-chloroalkanes avec les alcanes normaux et le tétrachlorure de carbone. *J. Chim. Phys.* 76 (1979) 51
- PAZ-ANDRADE, M. I., JONES, M. N., SKINNER, H. A. (c/o H. A. Skinner, Univ. Manchester, Dept. Biochem. and Chem., Manchester, M13 9PL, Lancashire, England): Enthalpy of interaction between some cationic polypeptides and n-alkyl sulphates in aqueous solution. *J. Chem. Soc. Faraday Trans. I*, 74 (1978) 2923
- PERRON, G., DESNOYERS, J. E. (Univ. Sherbrooke, Dept. Chem., Sherbrooke, Quebec, J1K 2R1 Canada): Volumes and heat capacities of benzene derivatives in water at 25 °C: group additivity of the standard partial molal quantities. *Fluid Phase Equilibria* 2 (1979) 239

- PETCAVICH, R. J., PAINTER, P. C., COLEMAN, M. M. (Penn. State Univ., Dept. Mat. Sci. and Engn., Polymer Sci. Sect., University Pk., Pa., 16802 USA): Fourier-transform infrared studies on the thermal degradation of poly- $\alpha$ -deuteroacrylonitrile under reduced pressure. *J. Polym. Sci. Polym. Phys. Ed.* 17 (1979) 165
- PETTIFOR, D. G. (Univ. London Imperial Coll. Sci. and Technol., Dept. Math., London, SW7 2AZ England): Theory of the heats of formation of transition-metal alloys. *Phys. Rev. Lett.* 42 (1979) 846
- POLLÁK, V., ROMANOV, A. (Slovak Acad. Sci., Inst. Polymer, CS-80934 Bratislava, Czechoslovakia): Study of elastic and thermoelastic properties of ethylene-propylene and ethylene — vinyl acetate copolymers. I. Elastic properties. *J. Appl. Polym. Sci.* 23 (1979) 985
- POLLÁK, V., ROMANOV, A. (Slovak Acad. Sci., Inst. Polymer, CS-80934 Bratislava, Czechoslovakia): Study of elastic and thermoelastic properties of ethylene — propylene and ethylene — vinyl acetate copolymers. II. Thermoelastic properties. *J. Appl. Polym. Sci.* 23 (1979) 995
- POOL, M. J., PREDEL, B., SCHULTHEISS, E. (Univ. Cincinnati, Cincinnati, Ohio, 45221 USA): Application of the SETARAM high temperature calorimeter for determination of mixing enthalpies of liquid alloys. *Thermochim. Acta* 28 (1979) 349
- POPOVA, Z. I., DIMITROV, CHR. G., MLADEV, S. B. (Univ. Sofia, Fac. Chem., Chair Organ. Chem., Sofia, 1126 Bulgaria): Effect of Ca-Mn cationite localization in X zeolites on their thermal stability, acidity and catalytic activity. *Dokl. Bolg. Akad. Nauk* 31 (1978) 1309
- POUCHLÝ, J., BIROŠ, J., BENES, Š. (Czechoslovak Acad. Sci., Inst. Macromolec. Chem., CS-16206 Prague 6, Czechoslovakia): Heat capacities of water swollen hydrophilic polymers above and below 0 °C. *Makromol. Chem.* 180 (1979) 745
- PRASAD, J. S., RAJALAKSHMI, P. K. (Univ. Mysore, Dept. Phys., Mysore, 570006 India): Thermal stabilities, packing coefficients and molecular packings in a series of homologous liquid crystals. *J. Phys.* 40 (1979) 309
- PRINCE, E. T., HELBIG, H. F., CZANDERNA, A. W. (Clarkson Coll. Technol., Potsdam, N. Y., 13676 USA): Apparatus for simultaneous measurement of mass change, optical transmittance and reflectance of thin films. *Thermochim. Acta* 29 (1979) 353
- PRISYAZHNYYUK, Z. P., LEVUSH, S. S., SHEVCHUK, V. U.: Effect of various materials on the thermal decomposition of peracetic acid in the gas phase. *J. Appl. Chem. USSR transl. Zh. Prikl. Khim.* 51 (1978) 1341
- PRIVALKO, V. P., TROV, G. V. (Acad. Sci. UkrSSR, Inst. Chem. Macromolec. Cpd., Kiev, UkrSSR): Heat capacity of filled amorphous polymers. *Vysokomol. Soedin. A* 21 (1979) 348 (In Russian)
- PROCHASKA, K., WYPYCH, J. (Univ. Łódź, Ctr. Comp., PL-90131 Łódź, Poland): Basic principles of thermal degradation and thermal stabilization of poly(vinyl chloride). Synergism of stabilizer action. *J. Appl. Polym. Sci.* 23 (1979) 2031
- PROKS, I. (Slovak Acad. Sci., Inst. Inorgan. Chem., CS-80934 Bratislava, Czechoslovakia): Calculation of thermodynamic excess functions in binary systems on the basis of isobaric phase equilibria and calorimetric measurements of changes in enthalpy. *Chem. Zvesti* 32 (1978) 433
- RACHWALSKA, M., PHUC, N. X. (Jagellonian Univ., Inst. Chem., PL-30060 Kraków, Poland): An adiabatic calorimetric study of phase situation in HOAB (4,4'-di-n-heptyloxyazoxybenzene). *Acta Phys. Pol. A* 55 (1979) 95
- RAHMAN, A. A., SING, K. S. W. (CNRS, Ctr. Rech. Phys. Chim. Surfaces Solides, 24 Ave. Président Kennedy, F-68200 Mulhouse, France): Gravimetric studies of ageing in microporous zirconia gels. *Thermochim. Acta* 29 (1979) 277
- RAI, A. K., PARASHAR, G. K. (Rajasthan Univ., Chem. Labs., Jaipur, 302004 Rajasthan India): Thermogravimetric analysis of some higher carboxylate derivatives of chromium(III). *Thermochim. Acta* 29 (1979) 175
- RAKHMENKULOV, F. S., IKORSKII, V. N., PAUKOV, I. E. (Acad. Sci. USSR, Inst. Inorgan. Chem., Novosibirsk, 90 USSR): Electronic structure and heat capacity of samarium monophosphide. *J. Struct. Chem. transl. Zh. Strukt. Khim.* 19 (1978) 423
- RAM, A., CALAHORRA, A. (Technion Israel Inst. Technol., Dept. Chem. Engr., Haifa,

- Israel): Flame retardant polyesters based on bromine derivatives. *J. Appl. Polym. Sci.* 23 (1979) 797
- RAMEŠ, J., KYSELKA, P., PROCHÁZKA, K. (Czech. Acad. Sci., Inst. Inorgan. Chem., CS-25068 Řež, Czechoslovakia): Heats of mixing of nonelectrolytes. *Collect.* 44 (1979) 313
- RAO, A. S. (Jawaharlal Inst. Postgrad. Med. Educ. and Res., Dept. Phys., Pondicherry, 605006 India): Ising model and the configurational heat capacity of water. *Indian J. Pure Appl. Phys.* 16 (1978) 1001
- RAO, C. R. M., MEHROTRA, P. N. (Univ. Roorkee, Dept. Chem., Roorke, 247672 India): Effect of impurities on orthorhombic(II) — hexagonal(I) transformation of potassium sulphate. *Thermochim. Acta* 29 (1979) 180
- RAO, R. R., RAJPUT, A. (Indian Inst. Technol., Dept. Phys., Madras, 600036 India): Some aspects of thermal and elastic properties of yttrium. *Can. J. Phys.* 57 (1979) 120
- RAO, R. R., RAJPUT, A. (Indian Inst. Technol., Dept. Phys., Madras, 600036 India): Lattice specific heat of zirconium. *J. Phys. Chem. Solids* 39 (1978) 1329
- RAPP, R. E., DE SOUZA, E. P., LERNER, E. (Univ. Fed. Rio de Janeiro, Inst. Fis., Rio de Janeiro, Brazil): Low temperature specific heat of exfoliated graphite. *Cryogenics* 19 (1979) 121
- REMIZOVA, L. A. (Moscow Rare Met. Ind., Moscow, USSR): Thermal conductivity of pure and activated lanthanum fluoride at high temperatures. *High Temp. transl. Teplofiz. Vysok. Temp.* 16 (1978) 661
- RISBOROUGH, P. S. (Univ. Calif. Los Angeles, Dept. Phys., Los Angeles, Calif., 90024 USA): The low temperature electronic specific heats of disordered one dimensional chains. *Solid State Commun.* 29 (1979) 649
- ROBERTSON, R. E. (Ford Motor Co., Engr. and Res. Staff, Dearborn, Mich., 48121 USA): Possible complications in using scanning calorimetry to determine the enthalpic state of aged polymer glasses. *J. Polym. Sci. Polym. Lett. Ed.* 17 (1979) 213
- ROGERS, D. W., CHOUDHURY, D. N. (Long Isl. Univ., Brooklyn Ctr., Dept. Chem., Brooklyn, N. Y., 11201 USA): Heats of hydrogenation of large molecules. 3. Five simple unsaturated triglycerides (triacylglycerols). *J. Chem. Soc. Faraday Trans. I,* 74 (1978) 2868
- ROGERS, D. W., DAGDAGAN, O. A., ALLINGER, N. I. (Univ. Georgia, Dept. Chem., Athens, Ga., 30602 USA): Heats of hydrogenation and formation of linear alkynes and a molecular mechanics interpretation. *J. Amer. Chem. Soc.* 101 (1979) 671
- RONDELLI, G., OLZI, E. (CNR, Technol. Mat. Met. Tradiz. Lab., I-20133 Milan, Italy): Influence of chemical composition, heat treatments and cold working on the superconducting properties of niobium-titanium alloys. *Mater. Chem.* 3 (1978) 255
- ROOZEBOOM, F., FRANSEN, T., MARS, P., GELLINGS, P. J. (Tech. Hogesch. Twente, Chem. Technol., P.B. 217, NL-7500 Enschede, Netherlands): Vanadium oxide monolayer catalysts. I. Preparation, characterization, and thermal stability. *Z. Anorg. Allg. Chem.* 449 (1979) 25
- ROSE, R. L., KELLEY, R. E., LESUER, D. R. (Univ. Calif., Lawrence Livermore Lab., Livermore, Calif., 94550 USA): Dilatometry and differential thermal analysis of americium metal. *J. Nucl. Mater.* 79 (1979) 414
- Rossi, M., GOLDEN, D. M. (c/o D. M. Golden, Sci. Inst., Thermochem. and Chem. Kinet. Grp., Menlo Pk., Calif., 94025 USA): Absolute rate constants for metathesis reactions of allyl benzyl radicals with HI(DI) heat of formation of allyl and benzyl radicals. *J. Amer. Chem. Soc.* 101 (1979) 1230
- ROUQUEROL, J., ROUQUEROL, F., GANTEAUME, M. (CNRS, Ctr. Rech. Microcalorimétrie et Thermochim., 26 Rue 141e R.I.A., F-13003 Marseille, France): Thermal decomposition of gibbsite under low pressure. II. Formation of microporous aluminia. *J. Catal.* 57 (1979) 222
- ROZANTSEV, A. V., TRET'YAKOV, Y. D., KESLER, Y. A., GORDEEV, I. V., KAUL', A. R. (M. V. Lomonosov State Univ., Moscow, 117234 USSR): Thermal stability and thermochemical properties of thiorhodites. *Inorg. Mater. transl. Izv. Akad. Nauk SSSR Neorg. Mater.* 14 (1978) 979
- RÜCHARDT, C., WEINER, S. (Univ. Freiburg, Chem. Lab., Albert Str. 21, D-7800 Freiburg, GFR): Thermal decomposition of tri-tert-butylmethane. *Tetrahedron Lett.* (1979) 1311

- RUSU, M., MARCU, G., PERTE, E. (Babeș Bolyai Univ., Chair Inorgan. Chem., R-3400 Cluj, Romania): Thermal behavior of potassium bis(phospho-11-tungsto) uranate. *Rev. Roum. Chim.* 24 (1979) 159
- SAHRAOUI, Z., DAVID, J. C., VERGNAUD, J. M. (Univ. St. Etienne, UER Sci., Dept. Chim., F-42100 St. Etienne, France): Étude de la décomposition thermique du polymère de l' $\alpha$ -acétoxystyrène. *J. Chim. Phys.* 76 (1979) 41
- SAKHAROVA, Y. G., BOGDOKHOVA, T. I., EVTUSHENKO, I. Y., LOGINOV, V. I.: Thermal decomposition of carbamide compounds of thulium, ytterbium and lutetium propionates. *Zh. Neorg. Khim.* 24 (1979) 323 (In Russian)
- SAMPATHKUNAR, R., IYER, R. H. (Bhabha Atom Res. Ctr., Div. Radiochem., Bombay, 400085 India): On the heating of cellulose nitrate plastics and alpha track revelation characteristics. *Radiat. Eff.* 40 (1979) 57
- SANDLER, S. I., FISZDON, J. K. (Univ. Delaware, Dept. Chem. Engn., Newark, Del., 19711 USA): On the viscosity and thermal conductivity of dense gases. *Physica A* 95 (1979) 602
- SATO, S., KLEPPA, O. J. (Kyushu Univ., Dept. Nucl. Engr., Fukuoka, 812 Japan): Thermochemistry of liquid alloys of transition metals. I. The systems Mn-Cu and Mn-Sn. *Met. Trans. B* 10 (1979) 63
- SAZANOV, Y. N., FEDOROVA, G. N., FLORINSKY, F. S., KISELEVA, T. M., VOLKOVA, M. S., KOTON, M. M. (Acad. Sci. USSR, Inst. Macromolec. Cpd., Leningrad, USSR): Thermal stability of polyimide containing oxymethylene groups in the main chain. *Vysokomol. Soedin. B* 21 (1979) 90 (In Russian)
- SCHEIBA, M., TAUSEND, A., WOBIG, D. (Tech. Univ. Berlin, Inst. Festkörperphys., D-1000 Berlin, 12): Determination of the K-Se phase diagram in the range from 55 to 100 atomic per cent selenium. *Thermochim. Acta* 29 (1979) 265
- SCHIFREEN, R. S., MILLER, C. S., CARR, P. W. (c/o P. W. Carr, Univ. Minnesota, Dept. Chem., Minneapolis, Minn., 55455 USA): High sensitivity, continuous flow thermochemical analyzer. *Anal. Chem.* 51 (1979) 278
- SCHMIDT, C. (Kernforschungszentrum Karlsruhe, Inst. Tech. Phys., Pf. 3640, D-7500 Karlsruhe, GFR): Simple method to measure the thermal conductivity of technical superconductors, e.g., NbTi. *Rev. Sci. Instr.* 50 (1979) 454
- SCHNECK, J., PAQUET, D. (Ctr. Natl. Etud. Telecommun., F-92220 Bagneux, France): Low temperature behaviour of barium sodium niobate. *Ferroelectrics* 21 (1978) 577
- SCHUG, K. P., WAGNER, H. GG., ZABEL, F. (Princeton Univ., Dept. Aerosp. and Mech. Sci., Princeton, N. J., 08540 USA): Gas phase  $\alpha$ ,  $\alpha$  elimination of hydrogen halides from halomethanes. I. Thermal decomposition of chlorodifluoromethane, trifluoromethane, and trichloromethane behind shock waves. *Ber. Bunsen Gesell. Phys. Chem.* 83 (1979) 167
- SCHULTZE, D. (Akad. Wissensch. DDR, Cent. Inst. Opt. und Spectr., DDR-1199 Berlin): Simultaneous DTA and high temperature thermomicroscopy. *Thermochim. Acta* 29 (1979) 233
- SCOTT, K. F., ABDULLA, M. A., HUSSEIN, F. H. (Univ. Oxford, Inorgan. Chem. Lab., Oxford, England): Kinetics thermochemistry and mechanism of hydrogenolysis of aliphatic aldehydes on Ni-SiO<sub>2</sub>. *J. Chem. Soc. Faraday Trans. I*, 74 (1978) 2873
- SEBASTIAN, D. H., BIESENBERGER, J. A. (Stevens Inst. Technol., Dept. Chem. and Chem. Engr., Hoboken, N. J., 07030 USA): Thermal ignition phenomena in chain-addition copolymerizations. *J. Appl. Polym. Sci.* 23 (1979) 661
- SEIFER, G. B., PROKOSHIN, D. A. (N. E. Bauman Grad. Tech. Sch., Moscow, USSR): Thermolysis of potassium cyanate in an inert and oxidative atmosphere. *Dokl. Akad. Nauk SSSR* 245 (1979) 162 (In Russian)
- SEKHAR, M. V. C., TERNAN, M. (Dept. Energy Mines and Resources, Energy Res. Labs., Ottawa, Ontario, K1A0G1, Canada): Pyrolysis of pitch derived from hydrocracked athabasca bitumen. *Fuel* 58 (1979) 92
- SEKIYA, T., OKUDA, H. (Govt. Ind. Res. Inst. Nagoya, Hirate-cho, Kita-ku, Nagoya 462, Japan): Growth of Cr<sub>2</sub>O<sub>3</sub> crystals by the decomposition of a K<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> melt. *J. Cryst. Growth* 46 (1979) 410
- SEREBRENNIKOV, V. V., NOVOZHENOV, V. A., SHKOLNIKOVA, T. M.: Heats of formation

- of Nd-Ga compounds. *Russ. Metal transl. Izv. Akad. Nauk SSSR Metal* (1977) 33
- SERENE, J. W., RAINER, D. (Sunny Stony Brook, Dept. Phys., Stony Brook, N. Y., 11794 USA): Specific heat of superfluid  $^3\text{He}$ . *Comment. J. Low Temp. Phys.* 34 (1979) 589
- SERENI, J. G., HUBER, T. E., LUENGO, C. A. (Univ. Köln, Inst. Phys. 2, 77 Zülpicher Str., D-5000 Köln, FRG): Low temperature specific heat of Th-Gd spin glass. *Solid State Commun.* 29 (1979) 671
- ŠESTÁK, J. (Czechoslovak Acad. Sci., Inst. Solid State Phys., CS-16253 Prague, 6 Czechoslovakia): Thermodynamic basis for the theoretical description and correct interpretation of thermoanalytical experiments. *Thermochim. Acta* 28 (1979) 197
- SHAFIZADEH, F., BRADBURY, A. G. W. (Univ. Montana, Dept. Chem. Wood Chem. Lab., Missoula, Mont., 59812 USA): Thermal degradation of cellulose in air and nitrogen at low temperatures. *J. Appl. Polym. Sci.* 23 (1979) 1431
- SHAIKH, A. M., VISWAMITRA, M. A., NARAYANAN, P. S. (Indian Inst. Sci., Dept. Phys., Bangalore, 560012 India): Thermal expansion and phase transition in  $\text{NaVO}_3$ . *Ferroelectrics* 20 (1978) 311
- SHARMA, R. G., KISHAN, H., TRIPATHI, T. C. (Natl. Phys. Lab., New Delhi, 110012 India): Improved apparatus for measuring the thermal conductivity of cryogenic insulation. *Indian J. Pure Appl. Phys.* 16 (1978) 1004
- SHARNIN, V. A., SHORMANOV, V. A., KRESTOV, G. A. (Ivanovo Chem. Technol. Inst., Ivanovo, USSR): Thermochemistry of solvation in aqueous acetone solutions of perchloric acid. *Zh. Fiz. Khim.* 53 (1979) 600 (In Russian)
- SHARYGIN, L. M., BARYBIN, V. I., GONCHAR, V. F.: Changes in the physicochemical properties of hydrated tantalum pentoxide during heat treatment. *Inorg. Mater. transl. Izv. Akad. Nauk SSSR Neorg. Mater.* 14 (1978) 1148
- SHIMASAKI, C., NAKAYAMA, T., IINO, Y. (Tohoku Univ., Fac. Engn., Takaoka 933, Japan): Pyrolysis and mass spectra of tris(hydroxyalkyl) isocyanurates. *J. Chem. Soc. Jap. Chem. Ind. Chem.* (1979) 375 (In Japanese)
- SHIMOKAWABE, M., FURUCHI, R., ISHII, T. (Hokkaido Univ., Fac. Engn. Dept. Appl. Chem., Sapporo, Hokkaido 060, Japan): Influence of the preparation history of  $\alpha\text{-Fe}_2\text{O}_3$  on its reactivity for hydrogen reduction. *Thermochim. Acta* 28 (1979) 287
- SHIMOMURA, K., OGAWA, K., OBA, M., KOTERA, Y. (Nat'l. Chem. Lab. Ind., Div. Ind. Catalysts, 2-19-19 Mita, Meguro-ku, Tokyo 153, Japan): Formation and phase transition of cobalt molybdate in cobalt oxide — molybdenum trioxid — alumina system. *J. Solid. State Chem.* 27 (1979) 215
- SHPIL'RAIN, E. E., KAGAN, D. N., BARKHATOW, L. S., KOROLEVA, V. V., COUTURES, J. P., FOEX, M. (Acad. Sci. USSR, Inst. High Temp., Moscow, V-71 USSR): Investigation of fusion and phase transition enthalpies of  $\text{Y}_2\text{O}_3$  and  $\text{Sc}_2\text{O}_3$ . *Rev. Int. Hautes Temp. Refract.* 15 (1978) 249
- SHUTOVA, V. I., KOSORUKOV, A. A., OVCHARENKO, F. D. (Acad. Sci. UkrSSR, Inst. Colloid Chem. and Water Chem., Kiev, UkrSSR): Thermal decomposition of  $3\text{SrO}\cdot 2\text{Al}_2\text{O}_3\cdot 2\text{H}_2\text{O}$  and  $3\text{SrO}\cdot \text{Al}_2\text{O}_3\cdot 6\text{H}_2\text{O}$ . *Zh. Neorg. Khim.* 24 (1979) 153 (In Russian)
- SIBBITT, W. L., DODSON, J. G., TESTER, J. W. (Univ. Calif., Los Alamos Sci. Lab., Los Alamos, N. M., 87545 USA): Thermal conductivity of crystalline rocks associated with energy extraction from hot dry rock geothermal systems. *J. Geophys. Res.* 84 (1979) 1117
- SIDOROVICH, A. V., MIKHAILOVA, N. V., BAKLAGINA, Y. G., KOTON, M. M., GUSINSKAYA, V. A., BATRAKOVA, T. V., ROMASHKOVA, K. A. (Acad. Sci. USSR, Inst. Macromolec. Cpd., Leningrad, USSR): Peculiarities in the thermomechanical behavior of polyamidoimides regarding their molecular structure. *Vysokomol. Soedin. A* 21 (1979) 172 (In Russian)
- SIMÁNEK, E., YOKSAN, S. (Univ. Calif. Dept. Phys., Riverside, Calif., 92521 USA): Anomalous specific heat and nuclear spin relaxation in Al-transition metal alloys. *Phys. Lett. A* 70 (1979) 122
- SING, K. S. W.: Use of DTA and other techniques for the characterization of oxide gels. *Chimia* 33 (1979) 91
- SINGH, M., NANDI, U. S. (Indian Inst. Sci., Dept. Inorgan. and Phys. Chem., Bangalore, 560012 India): Thermal degradation of polystyrene in air. *J. Polym. Sci. Polym. Lett. Ed.* 17 (1979) 121

- SINITSA, A. D., PARKHOMENKO, N. A., KRISHTAL, V. S., MARKOVSKII, L. N. (Acad. Sci. UkrSSR, Inst. Organ. Chem., Kiev, UkrSSR): Thermal decomposition of N-trimethylsilyl-N[2,2,2-trichloro-1-alkoxy-(aroxy)]-ethylurea and urethans. *Zh. Obshch. Khim.* 49 (1979) 130 (In Russian)
- SIVASANKAR, V. S., WHIPPEY, P. W. (Univ. Western Ontario, Dept. Phys., London, Ontario, N6A 3K7 Canada): Thermal stability of some radiation damage products in irradiated  $\text{NaClO}_3$ . *Can. J. Phys.* 57 (1979) 128
- SLATEN, B. L., SPIVAK, S. M., SMITH, B. F. (Auburn Univ., Coll. Home Econ., Dept. Consumer Affairs, Auburn, Al., 36830 USA): The effects of weathering and atmospheric pollutants on cotton fabric and cotton fabric treated with selected flame retardants. I. Physical, chemical, and flammability properties. *J. Appl. Polym. Sci.* 23 (1979) 695
- SMITH, N. P., STEVENS, I. D. R. (c/o I. D. R. Stevens, Univ. Southampton, Dept. Chem., Southampton, SO9 5NH, Hampshire, England): Kinetics of the thermal decomposition of diazirines: 3-chloro-methoxy-diazirine. *J. Chem. Soc. Perkin. Trans. II* (1979) 213
- SMITH, R. D. (Battelle Mem. Inst., Pacif. NW Labs., Dept. Phys. Sci., Richland, Wash., 99352 USA): Mass-spectrometric study of the thermal pyrolysis of tetrasulphur tetranitride over quartz wool and silver wool. *J. Chem. Soc. Dalton Trans.* (1979) 478
- SMITH, S. V. (Univ. Hawaii, Hawaii Inst. Marine Biol., Kaneohe, Haw., 96744 USA): Strontium-calcium thermometry in coral skeletons. *Science* 204 (1979) 404
- SMUTNÝ, F. (Czechoslovak Acad. Sci., Inst. Phys., Naslovance 2, CS-18040 Prague, 8 Czechoslovakia): Specific heat anomaly at the  $\text{F}4\bar{3}\text{c} \rightarrow \text{P}ca2$ , Phase transition in nickel-chlorine boracite,  $\text{Ni}_3\text{B}_2\text{O}_{13}\text{Cl}$ . *Phys. Status Solidi A* 50 (1978) K 201
- SOLOMONOV, B. N., ANTIPIN, I. S., GORBACHUK, V. V., KONOVALOV, A. I. (V. I. Lenin State Univ., Kazan, USSR): Investigation of solvation effects in the organic reactions using the data on solution enthalpies. *Dokl. Akad. Nauk SSSR* 243 (1978) 1499 (In Russian)
- SONG, K. S., GASKELL, D. R. (Carnegie Mellon Univ., Dept. Met. and Mat. Sci., Pittsburgh, Pa., 15213 USA): Free energies of mixing of melts in the systems  $2\text{FeO}-\text{SiO}_2-2\text{MnO}-\text{SiO}_2$  and  $2\cdot33\text{FeO}-\text{TiO}_2-2\cdot33\text{MnO}-\text{TiO}_2$ . *Met. Trans. B* 10 (1979) 15
- SØRENSEN, O. T. (Riso Natl. Lab., Roskilde, Denmark): Interpretation of quasi-isothermal thermogravimetric weight curves. *Thermochim. Acta* 29 (1979) 211
- SPIESS, M., GRUEHN, R. (Univ. Giessen, Inst. Anorgan. und Analyt. Chem., D-6300 Giessen, GFR): Beiträge zum thermischen Verhalten von Sulfaten. IV. Neues zum Verhalten von  $\text{PbSO}_4$  bei höherer Temperatur. *Z. Naturforsch. B* 34 (1979) 431
- SPINNLER, G.: Choice of calorimetric methods in medicine. *Chimia* 33 (1979) 90
- SPITZER, J. J., OLOFSSON, I. V., SINGH, P. P., HEPLER, L. G. (Univ. Lethbridge, Dept. Chem., Lethbridge, Alberta, T1K 3MK, Canada): Apparent molar heat capacities and volumes of aqueous electrolytes at 298.15 K:  $\text{Ca}(\text{NO}_3)_2$ ,  $\text{Co}(\text{NO}_3)_2$ ,  $\text{Cu}(\text{NO}_3)_2$ ,  $\text{Mg}(\text{NO}_3)_2$ ,  $\text{Mn}(\text{NO}_3)_2$ ,  $\text{Ni}(\text{NO}_3)_2$  and  $\text{Zn}(\text{NO}_3)_2$ . *J. Chem. Thermodyn.* 11 (1979) 233
- SPRINGER, G. S., LOOS, A. C. (c/o A. C. Loos, Univ. Michigan, Dept. Mech. Engr., Ann Arbor, Mich., 48109 USA): Effects of thermal spiking on graphite-epoxy composites. *J. Compos. Mater.* 13 (1979) 17
- SRINIVASAN, M. R., RAO, A. H. R., BHAT, H. L., NARAYANAN, P. S. (Indian Inst. Sci., Dept. Phys., Bangalore, 560012 India): Studies on the phase transitions in thiourea. *Ferroelectrics* 21 (1978) 539
- SRIVASTAVA, G. P. (New Univ. Ulster, Dept. Phys. Coleraine, North Ireland): Role of optical phonons in the high-temperature lattice thermal conductivity of semiconductors. *Phys. Status Solidi B* 90 (1978) K 125
- STARENCHENKO, V. A., KOBYTEV, V. S., TEPLYAKOVA, L. A., POPOV, L. Y. (Tomsk Construct. Engr. Inst., Tomsk, USSR): Temperature dependence of mechanical properties of  $\text{Ni}_3\text{Ga}$  and  $\text{Ni}_3\text{Ge}$  single crystals. *Fiz. Metal Metalloved.* 47 (1979) 188 (In Russian)
- STEELE, W. V. (Univ. Stirling, Dept. Chem., Stirling FK9 4LA, Stirlingshire, Scotland): The standard enthalpies of formation of the triphenyl compounds of the group V elements. 2. Triphenylbismuth and the Ph-Bi

- mean bond-dissociation energy. *J. Chem. Thermodyn.* 11 (1979) 187
- ŠTEPEK, J., VYMAZAL, Z., CZAKÓ, E. (Inst. Chem. Technol., Inst. Chem. Technol., Dept. Polymers, CS-16628 Prague, Czechoslovakia): Study of stabilized poly(vinyl chloride) mixtures under different conditions of thermal treatment. *J. Macromol. Sci. A* 12 (1978) 401
- STEPHENS, J. R., WITZKE, W. R. (NASA, Lewis Res. Ctr., Cleveland, Ohio, 44135 USA): Effects of thermomechanical processing on strength and toughness of Fe-12 Ni reactive metal alloys at 77K. *Cryogenics* 19 (1979) 153
- STEVENSON, G. R., CALDWELL, G., WILLIAMS, E. (Illinois State Univ., Dept. Chem., Normal, Ill., 61761 USA): Anion radical solvation enthalpies. *J. Phys. Chem.* 83 (1979) 643
- STEVENSON, G. R., WILLIAMS, E., CALDWELL, G. (Illinois State Univ., Dept. Chem., Normal, Ill., 61761 USA): Calorimetric disproportionation enthalpies. *J. Amer. Chem. Soc.* 101 (1979) 520
- STEVENSON, R., BAILEY, D. J., THOMAS, G. (G. M. Corp. Res. Labs., Dept. Phys., Warren, Mich., 48090 USA): High strength low carbon sheet steel by thermomechanical treatment. 2. Microstructure. *Met. Trans. A* 10 (1979) 57
- STEWART, G. R., BARCLAY, J. A., STEYERT, W. A. (Univ. Calif., Los Alamos, Sci. Lab., Los Alamos, N. M., 87545 USA): The specific heat of C-phase  $\text{Gd}_2\text{O}_3$ . *Solid State Commun.* 29 (1979) 17
- STOKES, R. H., ADAMSON, M., RICHARDS, A. (Univ. New England, Dept. Phys. and Inorgan. Chem., Armidale, 2351 New S. Wales, Australia): Excess enthalpies of 2,2,4-trimethylpentane with several alcohols at low mole fractions of 2,2,4-trimethylpentane. *J. Chem. Thermodyn.* 11 (1979) 303
- STOLIAROVA, T. A., KOLPAKOVA, N. N. (Acad. Sci. USSR, Inst. Exptl. Mineral., Chernogolovka, USSR): Enthalpy of formation of antimonite  $\text{Sb}_2\text{S}_3$ . *Dokl. Akad. Nauk SSSR* 243 (1978) 1550
- STRUKOV, B. A., TARASKIN, S. A., MELESHINA, V. A., BELUGINA, N. V., YURIN, V. A. (M. V. Lomonosov State Univ., Moscow, 117234 USSR): Thermal properties gamma radiation defects and inhomogeneity of domain deposition pictures of TGS crystals. *Ferroelectrics* 22 (1978) 727
- SUGISAKI, M. (Kyushu Univ., Fac. Engn. Dept. Nucl. Engn., Fukuoka 812, Japan): Shell model calculation of enthalpy of solution of  $\text{MgO}$  in  $\text{UO}_{2+x}$ . *J. Nucl. Mater.* 79 (1979) 338
- SZATURA, L. (Szilikátip. Közp. Kutató és Terv. Váll., Pf. 112, H-1300 Budapest, Hungary): Examination of autoclave-cured cement-quartz and cement-pumicite systems. *Építőanyag* 31 (1979) 49 (In Hungarian)
- TAKEUCHI, J., MASUDA, Y. (Nagoya Univ., Dept. Phys., Chikusa-ku, Nagoya, Aichi, 464 Japan): Low temperature specific heat of itinerant electron ferromagnet  $\text{Sc}_3\text{In}$ . *J. Phys. Soc. Jap.* 46 (1979) 468
- TALEKAR, S. V., BAKORE, P. V., TALEKAR, V. L. (Natl. Inst. Mental Hlth. and NeuroSci., Dept. Biophys., Bangalore, 560029 India): A kinematic approach to ionic transport in aqueous electrolyte solutions and structural theory of hydration of alkali metal ions. *Thermochim. Acta* 28 (1979) 239
- TANIEWSKA-OŚIŃSKA, S., PIEKARSKI, H. (Univ. Łódź, Inst. Chem., Dept. Phys. Chem., PL-90237 Łódź, Poland): Enthalpies of solution of  $\text{NaI}$  in aqueous isobutanol, sec-butanol, and tert-butanol mixtures. *J. Solut. Chem.* 7 (1978) 891
- TARDY, D. C., IRETON, R., GORDON, A. S. (Univ. Iowa, Dept. Chem., Iowa City, Ia., 52242 USA): Thermal decomposition of labeled cyclohexene. A complex reaction involving a forbidden 1,2-hydrogen elimination. *J. Amer. Chem. Soc.* 101 (1979) 1508
- TARDY, Y. (Lab. Pérol. et Géochim., 38, Rue Trente Six Ponts, F-31078 Toulouse, France): Relationships among Gibbs energies of formation of compounds. *Amer. J. Sci.* 279 (1979) 217
- TATSUMI, M., MATSUO, T., SUGA, H., SEKI, S. (c/o S. Seki, Osaka Univ., Fac. Sci., Dept. Chem., Toyonaka, Osaka 560, Japan): High-resolutional calorimetric study on solid solutions  $\text{SnCl}_2(\text{H}_2\text{O})_x(\text{D}_2\text{O})_{2-x}$ . *Bull. Chem. Soc. Jap.* 52 (1979) 716
- TATSUMI, M., MATSUO, T., SUGA, H., SEKI, S. (c/o S. Seki, Osaka Univ., Fac. Sci., Dept. Chem., Toyonaka, Osaka 560, Japan): Phase transition of  $\text{SnCl}_2(\text{H}_2\text{O})_x(\text{D}_2\text{O})_{2-x}$

- as studied by high resolution heat capacity measurement. *Bull. Chem. Soc. Jap.* 52 (1979) 728
- TETENBAUM, M. (Argonne Natl. Lab., Div. Chem. Engr., 9700 S. Cass Ave., Argonne, Ill., 60439 USA): Some aspects of the high temperature vaporization behavior and valence effects in actinide-oxide rare-earth-oxide systems. *Rev. Int. Hautes Temp. Refract.* 15 (1978) 253
- TEWARI, K. C., KAN, N., SUSCO, D. M., LI, N. C. (c/o N. C. Li, Duquesne Univ., Dept. Chem., Pittsburgh, Pa., 15219 USA): Viscosity, calorimetric, and proton magnetic resonance studies on coal liquid fractions in solution. *Anal. Chem.* 51 (1979) 182
- THOMSON, R. M. (Univ. Leeds, Dept. Comp. Studies, Leeds LS2 9JT, W. Yorkshire, England): The thermal conductivity of gases with vibrational internal energy. *J. Phys. D.* 11 (1978) 2509
- TISSOT, P., WOEFLER, J. P.: Study on thermolysis of polyhalogenated carboxylates. *Chimia* 33 (1979) 92
- TIWARI, M. D., RAM, P. N. (Garhwal Univ., Dept. Phys., Srinagar 246174, Uttar Pradesh, India): Low-temperature thermal conductivity impure insulators. *Nuovo Cimento B* 49 (1979) 114
- TOMIYAMA, T., IKEDA, S. (c/o S. Ikada, Nagoya Univ., Fac. Sci., Dept. Chem., Nagoya, Aichi, 464 Japan): Effect of  $D_2O$  on the thermal stability of the  $\beta$  conformation of poly[S-((3-hydroxypropyl)carbamoyl-methyl)L-cysteine]. *Macromolecules* 12 (1979) 165
- TOPIĆ, M. (Rudjer Bošković Inst., POB 1016, YU-41001 Zagreb, Yugoslavia): Pyroelectric temperature analysis as a method for study of ferroelectric transitions in polycrystalline materials. *J. Appl. Crystallography* 12 (1979) 54
- TORRESGOMEZ, M. P., MARTINEZ, O. G., LAVERAT, A. G. (Univ. Complutense Madrid, Fac. Ciencias Quim., CSIG, Inst. Quim. Inorgan., Elhuyar, Madrid, Spain): Hydroxide salts. 27. Mixed hydroxyseLENates of cobalt(II) and nickel(II). Mixed oxides obtained through thermal decompositions. *An. Quim.* 74 (1978) 1214
- TRAVKIN, N. N., SKACHKOV, B. K., TONOVAN, I. G., KOZYRKIN, B. I.: Thermography of organometal compounds. 6. Thermal decomposition of alkyl compounds of indium and antimony. *Zh. Obshch. Kim.* 48 (1978) 2678 (In Russian)
- TSVETKOV, V. G., KUPRIYAMOV, V. F., FUKIN, K. K., FROLOV, I. A. (N. I. Lobachevskii State Univ., Chem. Res. Inst., Gorki, USSR): Enthalpy of mixing of alkyl compounds of aluminum with metal halides. *Zh. Obshch. Khim.* 49 (1979) 7 (In Russian)
- UGLOV, A. A., LOKHOV, Iu. N., GNEDOVETS, A. G. (A. A. Baikov Met. Inst., Moscow, USSR): Heating, melting and evaporation of refractory material particles in hot gas. *Dokl. Akad. Nauk SSSR* 244 (1979) 354 (In Russian)
- UENO, A., ANZAI, J., OSA, T. (Tohoku Univ., Inst. Pharmaceut., Sendai, Miyagi, 980 Japan): Thermal isomerization of azoaromatic residues in the side chain of poly-peptides. *J. Polym. Sci. Polym. Lett. Ed.* 17 (1979) 149
- VALAITIS, J. K., KYKER, G. S. (Firestone Tire and Rubber Co., Cent. Res. Labs., Akron, Ohio, 44317 USA): Thermal stability of phosphonitrilic fluoroelastomers. *J. Appl. Polym. Sci.* 23 (1979) 765
- VALIGI, M., GAZZOLI, D. (Univ. Rome, CNR, Ctr. Studio Struttura ed Attività Catalit. Sist. Ossidi, I-00160 Rome, Italy): An X-ray and thermogravimetric study of  $SnO_2-TiO_2$  and  $ZrO_2-TiO_2$  solid solutions. *Z. Phys. Chem.* 110 (1978) 51
- VAN DEN BOSCH, A., VANSUMMEREN, J. (C.E.N., S.C.K., Dept. Mat. Sci., D-2400 Mol, Belgium): On sample positioning at low temperatures. *Thermochim. Acta* 29 (1979) 225
- VANDERZEE, C. E., KING, D. L. (Univ. Nebraska, Dept. Chem., Lincoln, Nebr., 68588 USA): Enthalpies of dilution and relative apparent molar enthalpies of aqueous chromium(III) perchlorate. *J. Chem. Thermo-dyn.* 11 (1979) 25
- VAN MILtenBURG, J. C., OBBINK, J. H., MEDER, E. L. (State Univ. Utrecht, Chem. Thermodynam. Grp., Gen. Chem. Lab., Utrecht, Netherlands): Excess enthalpies from displacement calorimetry. Excess enthalpies for 1,1,1-trichloroethane + carbon tetrachloride and 2-chloro-2-methylpropane + carbontetrachloride at 298.15 K. *J. Chem. Thermo-dyn.* 11 (1979) 37
- VARCHENKO, A. A., KRAFTMAKHER, Y. A., PINREGINA, T. Y. (Acad. Sci. USSR, Inst.

- Inorgan. Chem., Novosibirsk, 630090 USSR): Use of electronic heating in the modulation method of measuring specific heat capacity. *High Temp. transl. Teplofiz. Vysok. Temp.* 16 (1978) 720
- VÁRHEGYI, G. (Hungarian Acad. Sci., Inorgan. Chem. Res. Lab., Budaörsi út 45, H-1053 Budapest, Hungary): Kinetic evaluation of non-isothermal thermoanalytical curves in the case of independent thermal reactions. *Thermochim. Acta* 28 (1979) 367
- VARYUKHIN, S. V., YEGOROV, V. S. (I. V. Kurchatov Atom Energy Inst., Moscow, USSR): Anomalous temperature dependence of the resistance of beryllium containing impurities. *Zh. Eks. Teor. Fiz.* 76 (1979) 597 (In Russian)
- VASILEV, V. P., KOCHERGINA, L. A., ORLOVA, T. D. (Ivanovo Chem. Technol. Inst., Ivanovo, USSR): Thermal effects of dissociation and neutralization of ethylenediamine-tetraacetic acid according to 3 and 4 stages at various temperatures. *Zh. Obshch. Khim.* 48 (1979) 2770 (In Russian)
- VASIL'eva, I. A., MAIOROVA, A. F. (M. V. Lomonosov State Univ., Dept. Phys. Chem., Moscow, 117234 USSR): Thermodynamic properties of cerium, proseeodymium and thorium oxides at high temperatures. *Vestn. Mosk. Univ.* 20 (1979) 47 (In Russian)
- VASILIEV, L. L., MAIOROV, V. A. (Acad. Sci. BeSSR, Inst. Heat and Mass Transfer, Minsk, BeSSR): An analytical study of resistance, heat transfer and stability in evaporative cooling of a porous heat producing element. *Int. Heat Mass Transfer* 22 (1979) 301
- VASOFSKY, R., CZANDERNA, A. W., THOMAS, R. W. (Clarkson Coll. Technol., Potsdam, N. Y., 13676 USA): UHV system for the ultramicrogravimetric study of samples loaded in a controlled environment. *Thermochim. Acta* 29 (1979) 355
- VETERE, A. (Lab. Ric. Chim. Ind., San Donato, Milanese, Italy): Empirical correlations for predicting vaporization enthalpies of pure compounds. *Chim. Ind.* 61 (1979) 8
- VEZIROĞLU, T. N., WILLIAMS, A., KAKAÇ, S., NAYAK, P. (Univ. Miami, Coral Gables, Fla., 33124 USA): Prediction and measurement of the thermal conductance of laminated stacks. *Int. J. Heat Mass Transfer* 22 (1979) 447
- VIALARON, A. (CNRS, Programme Interdisciplinaire Rech., Dev. Energie Solaire, 282, Bd. St. Germain, F-75006 Paris, France): Le programme solaire du CNRS (P.I.R.D.E.S.) et la thermochimie. *Rev. Int. Hautes Temp. Refract.* 15 (1978) 221
- VIDAL, C., NOYAU, A. (CNRS Ctr. Rech. Paul Pascal, Domaine Utile, F-33405 Talence, France): Chemical oscillations and thermochemical oscillations. *Nouv. J. Chem.* 3 (1979) 83
- VIEILLARD, P., GARRELS, R. M., TARDY, Y. (Univ. Toulouse, 3 Pedol. and Geochim. Lab., F-31078 Toulouse, France): Use of refractive indexes and molar volumes for the calculation of the Gibbs free energies and the enthalpy of mineral formation. Application to phosphates. *Compt. Rend. D* 288 (1979) 583 (In French)
- VILCU, R., PERISANU, S. (Natl. Inst. Chem., Phys. Chem. Lab., Bucharest, Romania): Standard enthalpies of formation of some C, H, O containing compounds. *Rev. Roum. Chim.* 24 (1979) 1237
- VISHNEVSKAYA, G. P., GUMEROV, F. M., YAGFAROV, M. S. (Kazan Engn. Phys. Inst., Kazan USSR): Study on phase composition of Mn(II) frozen aqueous nitrate solutions using the methods of dynamic calorimetry and electron paramagnetic resonance. *Zh. Fiz. Khim.* 53 (1979) 609 (In Russian)
- VISTIN', L. K., CHISTYAKOV, I. G. (Acad. Sci. USSR, Inst. Crystallogr., Moscow, V-71 USSR): Temperature dependence of electric conductivity in nematic liquid crystals. *Kristallografiya* 24 (1979) 315 (In Russian)
- VLADIMIROV, P. S., GAVRILOVA, N. Y. (All Union Aluminium Magnesium and Electrode Ind. Res. and Planning Inst., Moscow, USSR): Thermal decomposition of calcium sulfate by reduction with a gas containing hydrogen carbon monoxide, water vapor, and carbon dioxide. *J. Appl. Chem. USSR* transl. *Zh. Prikl. Khim.* 51 (1978) 1157
- WADSTEN, T. (Univ. Stockholm, Arrhenius Lab., Dept. Inorgan. Chem., Stockholm, Sweden): Thermal decomposition of the binary compounds GaS, GaSe and GaTe. *Thermochim. Acta* 29 (1979) 261
- WASIM, S. M. (Univ. Los Andes, Fac. Ciencias, Dept. Fis., Merida, Venezuela): Ther-

- mal conductivity of ternary compounds. *Phys. Status Solidi A* 51 (1979) K 35
- WEBER, H. HANAČEK, L.: Calorimetric study on deformation behavior of reactor beams. *Chimia* 33 (1979) 92
- WERTZ, D. H., ALLINGER, N. L. (Univ. Georgia, Dept. Chem., Athens, Ga., 30602 USA): Conformational analysis. 129. Heats of formation and thermodynamic parameters for hydrocarbons, calculated by the molecular mechanics method including the effects of molecular vibrations. *Tetrahedron* 35 (1979) 3
- WESTRUM, E. F., ESSENE, E. J., PERKINS, D. (Univ. Michigan, Dept. Chem., Ann Arbor, Mich., 48109 USA): III. Thermophysical properties of the garnet, grossular:  $\text{Ca}_3\text{Al}_2\text{Si}_3\text{O}_{12}$ . *J. Chem. Thermodyn.* 11 (1979) 57
- WILLIAMS, I. S., GOPAL, E. S. R., STREET, R. (Australian Natl. Univ., Res. Sch. Phys. Sci., Directors Unit, Canberra, 2600 ACT, Australia): The specific heat of strained and annealed chromium. *J. Phys. F* 9 (1979) 431
- WILLIAMS, O. M., CARDEN, P. O. (Australian Natl. Univ., Res. Sch. Phys. Sci., Dept. Engn. Phys., Canberra, 2600 ACT, Australia): Screening reversible reactions for thermochemical energy transfer. *Sol. Energy*, 22 (1979) 191
- WIRTH, H. O. (CIBA Geigy Marienbad GmbH, D-6140 Marienbad, GFR): Stabilization of PVC to light and heat. *J. Macromol. Sci. A* 12 (1978) 345
- WOLFERS, H., RUDOLPH, H., ROSENKRANZ, H. J. (c/o H. Rudolph, Bayer A. G. Wissenschaft. Hauptlab., Rheinuferstr., D-4150 Kreifeld-Uerdingen, GFR): Thermische Zersetzung von Benzpinakol und Benzpinakolbis(trimethylsilyl)-ethern in UP-Harzen. *Makromol. Chem.* 180 (1979) 649
- WORMALD, C. J., LEWIS, E. J., HUTCHINGS, D. J. (Univ. Bristol, Sch. Chem., Bristol BS9 1TS, England): Excess enthalpies of gaseous mixtures of n-alkanes. *J. Chem. Thermodyn.* 11 (1979) 1
- WÓYCICKI, W. RHENSIUS, P. (Polish Acad. Sci., Inst. Phys. Chem., Warsaw, 42 Poland): Excess enthalpies of binary mixtures containing unsaturated hydrocarbons. 3. n-Alkane + n-alkyne and tetrachloromethane + n-alkyne. *J. Chem. Thermodyn.* 11 (1979) 153
- WROBEL, A. M., KRYSZEWSKI, M. (Univ. Kiel, Math. Seminar, D-2300 Kiel, 1 GFR): Effect of glow discharge condition on structure and thermal properties of polysilazane thin films. *J. Macromol. Sci. A* 12 (1978) 1041
- WU, C. H., KUDO, H., IHLE, H. R. (KFA Jülich GmbH, Inst. Chem. Inst. Nucl. Chem. I, D-5170 Jülich, 1 GFR): Thermochemical properties of gaseous  $\text{Li}_3\text{O}$  and  $\text{Li}_2\text{O}_2$ . *J. Chem. Phys.* 70 (1979) 1815
- WU, M. L., DESMOND, M. J., DRAGO, R. S. (c/o R. S. Drago, Univ. Illinois, Sch. Chem. Sci., Urbana, Ill., 61801 USA): Spectroscopic and calorimetric titration studies of the reactions of chloro-bridged rhodium(I) dimers with trimethyl phosphite. *Inorg. Chem.* 18 (1979) 679
- YAKUB, I. S. (I. I. Mechnikov State Univ., Odessa, UkrSSR): Effect of thermoconductivity on the process of spinodal decay of ordering system. *Fiz. Tverd. Tela* 21 (1979) 524 (In Russian)
- YAKUB, I. S. (I. I. Mechnikov State Univ., Odessa, UkrSSR): Thermoconductivity effect on relaxation process of unstable states of systems with non-conserving order parameter. *Fiz. Tverd. Tela* 21 (1979) 904 (In Russian)
- YAMAGUCHI, M., UMAKOSHI, Y. (Osaka Univ., Fac. Engn., Dept. Mat. Sci. and Engn., Suita, Osaka 565, Japan): The deformation of AgMg single crystals at high temperatures. *Phil. Mag. A* 39 (1979) 33
- YANES, C., PELLICER, J., ROJAS, E., ZAMORA, M. (Univ. Seville, Fac. Sci., Dept. Thermol., Seville, Spain): Calorimetric cell for the measurement of excess enthalpy of volatile liquids. Excess enthalpy of cis-9-octadecenoic acid + cyclohexane at 298.15 K. *J. Chem. Thermodyn.* 11 (1979) 177
- YANG, P. H., RUPLEY, J. A. (Univ. Arizona, Dept. Chem., Tucson, Ariz., 85721 USA): Heat capacity of nicotinamide adenine dinucleotide in aqueous solution and in the crystal. *J. Chem. Thermodyn.* 11 (1979) 301
- YAO, T., KAMIYA, Y. (c/o Y. Kamiya, Univ. Tokyo, Fac. Engn. Dept. React. Chem., Bunkyo-ku, Tokyo 113, Japan): Thermal decomposition of coal-related aromatic compounds in hydrogen-donating solvent. *Bull. Chem. Soc. Jap.* 52 (1979) 492

- ZAGRAY, A. I., ZYRYANOV, V. V., LYAKHOV, N. Z., CHUPAKIN, A. P., BOLDYREV, V. V. (Acad. Sci. USSR, Inst. Physicochem. Bases Mineral Proc., Novosibirsk, 90 USSR): Study of the products of the dehydration of  $\text{CuSO}_4 \cdot 5 \text{H}_2\text{O}$  in x-shaped and elliptic nuclei. *Thermochim. Acta* 29 (1979) 115
- ZAHRA, A., ZAHRA, C. Y., LAFFITTE, M., LACOM, W., DEGISCHER, H. P. (CNRS, Ctr. Rech. Thermodynam. et Microcalorimétrie, F-13003 Marseille, France): Entmischungsvorgänge in einer Al—5% Zn—1% Mg—Legierung. I. Kalorimetrische Untersuchungen. *Z. Metallk.* 70 (1979) 172
- ZAKUMBAEVA, G. D., ARTAMONOV, S. V. (Acad. Sci. KaSSR, Inst. Organ. Catalysis and Electrochem., Alma Ata, KaSSR): Calorimetric study of the interaction of oxygen with Pd-black and Pd/ $\text{Al}_2\text{O}_3$ . *React. Kinet. Catal. Lett.* 10 (1979) 183
- ZAKURDAEV, I. V., LIBEROVA, G. I., YAKOVLEV, V. N.: Thermoelectroconductivity of atoms on surface of tungsten and molibdeum crystals. *Fiz. Tverd. Tela* 21 (1979) 456 (In Russian)
- ZEER, E. P., KUBAREV, Y. G., LUNDIA, A. G. (L. V. Kirenskii Phys. Inst., Krasnoyarsk, UkrSSR): Nature of phase transition in the potassium ferrocyanide crystal family. *Ferroelectrics* 20 (1978) 223
- ZILBERMAN, E. N., STARKOV, A. A., EREMEEV, I. V., TRACHENKO, V. I., KOLESNIKOV, V. A. (Dzerzhinsk Polytech. Inst., Dzerzhinsk, USSR): High-temperature hydrolysis of polyacrylamide. *Vysokomol. Soedin. B* 21 (1979) 30 (In Russian)
- ZINATO, E., RICCIERI, P., SHERIDAN, P. S. (Univ. Perugia, Dept. Chem., I-06100 Perugia, Italy): Photochemical and thermal reactions of tris(acetylacetonato)chromium(III) in water-ethanol solution. *Inorg. Chem.* 18 (1979) 720
- ZORIN, A. D., UNILIN, V. A., KARATAEV, E. N., SOROKOUMOVA, T. A. (N. I. Lobachevskii State Univ., Chem. Res. Inst., Gorki, USSR): Thermal decomposition kinetics of bisarene pi-complexes of vanadium and chromium. *Zh. Fiz. Khim.* 53 (1979) 302 (In Russian)