

Bibliography Section

- ABRAHAM, J. M., TETE, C., DEVIOT, B. (École Mines, CNRS, Lab. Phys. Solide, Nancy, France): Résistivité électrique d'un niobium de haute pureté de 20 K à la température de fusion. II. Analyse des résultats. *J. Less-Common Metals* 37 (1974) 181
- ADACHI, G., UENO, K., SHIOKAWA, J. (Osaka Univ., Fac. Engr. Dept. Appl. Chem., Yamadakami, Suita, Osaka, Japan): Heats of transformation in lanthanide dicarbides and mixed lanthanide dicarbide solid solutions. *J. Less-Common Metals* 37 (1974) 313
- ADAMS, W. R., STANLEY, P. (Perkins Engines Co., Peterborough, England): A programmable machine for simulated thermal fatigue testing. *J. Phys. E Sci. Instr.* 7 (1974) 669
- AGEEV, V. A., SULTANOV, M. A. (V. I. Lenin State Univ., Stalinabad, USSR): Mechanism of ablation of metals by a supersonic plasma torch in relation to their thermal conductivity. *High Temp. transl. Teplofiz. Vysok. Temp.* 12 (1974) 15
- ALIEV, M. I., ARASLY, D. G., GUSEINOV, R. E., DZHABBAROV, R. M. (Acad. Sci. AzSSR, Phys. Inst., Baku, AzSSR): Temperature-conductance of MnSb. *Fiz. Tverd. Tela* 16 (1974) 2139 (In Russian)
- ALTUKHOV, V. I., ZAVT, G. S. (Acad. Sci. ESSR, Inst. Phys., Tartu, USSR): Theory of lattice thermal conductivity of anharmonic crystals with impurities. II. *Phys. Status Solidi B Basic Re.* 65 (1974) 83
- ANDERSON, A. C., O'HARA, S. G. (Univ. Illinois, Dept. Phys., Urbana, Ill., 61801 USA): The lattice thermal conductivity of normal and superconducting niobium. *J. Low. Temp. Phys.* 15 (1974) 323
- ANDERSON, C. W., BEEBE, R. A., KITTELBERGER, J. S. (c/o J. S. Kittelberger, Xerox Corp., Bldg. 114, 800 Phillips Rd., Webster, N. Y., 14580 USA): Programmed temperature dehydration studies of octacalcium phosphate. *J. Phys. Chem.* 78 (1974) 1631
- ANDREYEV, A. P., KUCHER, R. V., ZAITSEV, YU. S., ZAITSEVA, V. V. (Acad. Sci. UkSSR, Phys. Chem. Inst., Phys. Org. Chem. Dept., Donetsk, UkSSR): Kinetic regularities of thermal degradation of styrene copolymers. *Dopov. Akad. Nauk Ukr. SSR B* (1974) 797 (In Ukrainian)
- ANGELOWA, W. H., PENEW, P. G., MARTSCHEWSKA, M. Y., JANATSCHKOWA, I. M. (Chem. Engr. Inst., Dept. Nonferrous Met., Sofia, 56, Bulgaria): On the thermodynamics of interaction in the system of alkali-ground selenide-oxygen-alkali-ground carbonate(oxide). *Dokl. Bolg. Akad. Nauk* 27 (1974) 487
- ANISTRATOV, A. T., MEL'NIKOVA, S. V. (Acad. Sci. USSR, Phys. Inst., Krasnoyarsk, USSR): The domain structure, thermo-optical and electro-optical properties of ferroelectric crystals $\text{NaNH}_4\text{SeO}_4 \cdot 2\text{H}_2\text{O}$. *Kristallografiya* 19 (1974) 815 (In Russian)
- ARKHAROV, V. I., GAISINSKAYA, A. M., DYAGOVETS, V. I., ANTONOVA, Z. F., MARKHASIN, E. S. (Donetsk State Univ., Donetsk, UkSSR): Effect of thermal treatment and structure of the sample on the phase chemical analysis results. *Ukr. Khim. Zh.* 40 (1974) 862 (In Russian)
- ARORA, P. S., PHUTELA, R. C., SINGH, P. P. (c/o P.P. Singh, Punjab Agricultural Univ., Dept. Chem. and Biochem., Ludhiana, India): Interaction of chloroform with aniline, o-toluidine and N,N-dimethyl

- aniline. *Thermochim. Acta* 10 (1974) 39
- ARORA, P. S., PHUTELA, R. C., SINGH, P. P. (c/o P. P. Singh, Punjab Agricultural Univ. Dept. Chem. and Biochem., Ludhiana, India): Interaction of cyclopentane with benzene, carbon tetrachloride and cyclohexane. *Thermochim. Acta* 10 (1974) 47
- ASTAKHOV, O. P., FEDOROV, V. I. (Moscow Power Inst., Moscow, USSR): Thermo-electric properties of copper iodide and chloride. *Teplofiz. Vysok. Temp.* transl. *High Temp.* 11 (1973) 1170
- ATAKE, T., CHIHARA, H. (Osaka Univ., Fac. Sci., Dept. Chem., Toyonaka 560, Japan): A new condensed gas calorimeter. Thermodynamic properties of solid and liquid dinitrogen oxide. *Bull. Chem. Soc. Jap.* 47 (1974) 2126
- AUSLAENDER, J. D., GUTMANN, H., KERTES, A. S., ZANGEN, M. (c/o A.S. Kertes, Hebrew Univ., Inst. Chem., Jerusalem, Israel): Nonideal behavior of alkylammonium salts in organic solvents at elevated temperatures. *J. Solut. Chem.* 3 (1974) 251
- AUVERGNE, D., CAMASSEL, J., MATHIEU, H., CARDONA, M. (Univ. Sci. et Tech. Languedoc, Etud. Electr. Solides, 34060 Montpellier, France): Temperature dependence of the band structure of germanium- and zinc-blende-type semiconductors. *Phys. Rev. B Solid State* 9 (1974) 5168
- AVARBE, R. G., MAZAEV, A. A.: Thermodynamic analysis of equilibrium in systems of transition metal of the sixth group hydrogen at high temperatures. *Zh. Fiz. Khim.* 48 (1974) 1126 (In Russian)
- AYREY, G., HEAD, B. C., POLLER, R. C. (Univ. London, Queen Elisabeth Coll., London W8 7AH, England): The thermal dehydrochlorination and stabilization of poly(vinyl chloride). *Macromol. Rev. D* 8 (1974) 1
- BABA, Y., KATAYAMA, H., KAGEMOTO, A. (Osaka Inst. Technol., Dept. Gen. Educ., Omiya Asahi, Osaka, 535, Japan): The heats of dilution of the oligomeric ethylene oxide - benzene system. *Polymer J.* 6 (1974) 230
- BABA, Y., KAGEMOTO, A. (Osaka Inst., Technol., Dept. Gen. Educ., Omiya Asahi, Osaka, 535, Japan): Study on phase equilibrium of aqueous solutions of cellulose derivatives by differential thermal analysis. *Jap. Polymer Sci. and Technol.* 31 (1974) 446 (In Japanese)
- BABA, Y., KAGEMOTO, A. (Osaka Inst. Technol., Dept. Gen. Educ., Omiya Asahi, Osaka, 535, Japan): Phase equilibrium of methylcellulose - NaCl aqueous solution system by differential thermal analysis. *Jap. Polym. Sci. Technol.* 31 (1974) 528 (In Japanese)
- BADALOVA, R. I., MITROFANOVA, N. D., MARTYNYENKO, L. I. (Moscow State Univ., Inorg. Chem. Dept., Moscow, USSR): The thermographic and spectrographic analysis of rare earth diiminodiacetate hydrates. *Vestn. Mosk. Univ. Khim.* (1974) 181 (In Russian)
- BAEV, A. K., GAIDYM, I. L. (S. M. Kirov Technol. Inst., Minsk, BeSSR): Thermal decomposition of osmium dodecacarbonyl. *Zh. Fiz. Khim.* 48 (1974) 1937 (In Russian)
- BALABAEVA, R. F., VASILIEVA, I. A., GERASIMOV, J. I. (M. V. Lomonosov State Univ., Moscow, USSR): Thermodynamic properties of nonstoichiometric vanadium dioxide at high temperatures and 298,15°K. *Dokl. Akad. Nauk SSSR* 217 (1974) 1103 (In Russian)
- BALTÁ CALLEJA, F. J., RUEDA, D. R. (Consejo Super Invest. Cient., Inst. Quim. Fis. Rocasolano, Serrano 119, Madrid 6, Spain): Study of the interlamellar folded structure of polyethylene as revealed by melting point and crystallinity. *Polymer J.* 6 (1974) 216
- BAMKOLE, T. O. (Univ. Ibadan, Chem. Dept., Ibadan, Nigeria): The thermal decomposition of alkyl vinyl ethers. III. Maximally inhibited decompositions of n-propyl, isobutyl and 2-methoxyethyl vinyl ethers. *J. Chem. Soc. Perkin Trans. II* (1974) 801
- BANNISTER, M. J. (Australian Atom Energy Comm. Res. Estab., Mat. Div., Lucas Heights, New S. Wales, Australia): Thermal decomposition of beta uranyl dihydroxide single crystals. *J. Inorg. Nucl. Chem.* 36 (1974) 1991
- BARCLAY, G. A., BROADBENT, R. F., KINGSTON, J. V., SCOLLARY, G. R. (Macquarie Univ., School Chem., North Ryde, N.S.W., 2113, Australia): The thermal behaviour

- of some rhodium complexes. *Thermochim. Acta* 10 (1974) 74
- BARIN, I., KNACKE, O. (T. H., Lehrstuhl Met. Kernbrennstoffe und Theoret. Hüttenkund, Aachen, GFR): Simplified thermochemical functions for tabulation. *Met. Trans.* 5 (1974) 1769
- BARK, L. S., PRACHUABPAIBUL, P. (Univ. Salford, Ramage Labs., Salford M5 4WT, Lancashire, England): Determination of carbohydrates by thermometric titrimetry. *Anal. Chim. Acta.* 72 (1974) 196
- BARKHATOV, L. S., KAGAN, D. N., TSYTSARKIN, A. F., SHPIL'RAIN, É. É., YAKIMOVICH, K. A. (Acad. Sci. USSR, High Temp. Inst., Moscow, USSR): Investigation of the thermodynamic properties of molten aluminium oxide. *Teplofiz. Vysok. Temp.* transl. *High Temp.* 11 (1973) 1063
- BARNES, D. S., PILCHER, G., PITTAM, D. A., SKINNER, H. A., TODD, D., VIRMANI, Y. (Univ. Manchester, Dept. Chem., Manchester M13 9PL, England): Thermochemistry of molybdenum hexacarbonyl and molybdenum triiodide. *J. Less-Common Metals* 36 (1974) 177
- BARROETA, N., DE SANTIS, V., RINCÓN, M. (Inst. Venezolano Invest. Cient., Ctr. Petr. and Chem., Apartado 1827, Caracas, Venezuela): Thermal decomposition of ethyl cyanofornate: kinetics and mechanism. *J. Chem. Soc. Perkin Trans II. Phys. Org. Chem.* (1974) 911
- BARBUKOV, A. V., MARKAEVA, D. M. (Leningrad Technol. Inst., Leningrad, USSR): Thermal stability of thallium(III) co-ordination compounds with ethylenediamine, 1,2-propylenediamine and 1,3-propylenediamines. *Zh. Neorg. Khim* 19 (1974) 2056 (In Russian)
- BARTOSIEWICZ, R. L., BOOTH, C. (Encyclopedia Britannica Educ. Corp., Chicago, Ill., 60600 USA): Thermal degradation of bisphenol A polycarbonate. *Eur. Polym. J.* 10 (1974) 791
- BARYKIN, B. M., LEVINOV, B. M., REKOV, A. I., SPIRIDONOV, É. G. (Acad. Sci. USSR, High Temp. Inst., Moscow, USSR): Thermal conductivities of graphitized carbons containing barium oxide. *Teplofiz. Vysok. Temp.* transl. *High Temp.* 12 (1974) 80
- BATALIN, G. I., BELOBORODOVA, E. A.: The relationship between the thermodynamic properties of aluminium-base liquid alloys and the type of phase diagram. *Izv. Akad. Nauk SSSR Metallurgiya* transl. *Russ. Metallurgy* (1973) 159
- BAXTER, A. C., WILLIAMS, D. R. (c/o D. R. Williams, Univ. St. Andrews, Dept. Chem., Fife KY16 9ST, England): Thermodynamic considerations in co-ordination. XVI. Formation constants for the cyclopentylamine and cyclohexylamine-proton, cobalt(II), nickel(II), copper(II) and zinc(II) systems. *J. Chem. Soc. Dalton Trans. Inorg. Chem.* (1974) 1117
- BAYANOV, A. P., GANCHENKO, E. N., KULAGINA, N. G. (Kuban State Univ., Krasnodar, USSR): Thermochemistry of lutetium-tin alloys. *Zh. Fiz. Khim.* 48 (1974) 2120 (In Russian)
- BEDUZ, C., MEIJER, H. C. (T.H. Delft, Lab. Tech. Nat. Kunde, Delft, Netherlands): The heat conductivity of bronze and sintered bronze below 0,3 K. *Cryogenics* 14 (1974) 437
- BÉGOT, J. J., CAUDRON, R., FAIVRE, P., COSTA, P. (Off. Natl. Etud and Rech Aerosp., 29 Ave Div. Leclerc, 92320 Chatillon, France): Chaleur spécifique associée à l'effet Kondo dans les composés $Co_{1+x}Al_{1-x}$. *J. Phys. Lett.* 35 (1974) L 125
- BELL, T. N., BERKLEY, R., PLATT, A. E., SHERWOOD, A. G. (Simon Fraser Univ., Dept. Chem., Burnaby British V5A 1S6, Columbia, Canada): Kinetics of the thermal decomposition of β -trifluoroethylsilanes and hot molecule kinetics of $(CF_3CH_2SiF_3)$. *Can. J. Chem.* 52 (1974) 3158
- BEN-SHAUL, A. (Tech. Univ. München, Lehrstuhl Theoret. Chem., München, GFR): On entropies and temperature parameters characterizing product distributions in chemical reactions and corresponding thermodynamic quantities. *Mol. Phys.* 27 (1974) 1585
- BERNARD, M. A., BOIS, N., DAIREAUX, M. (Univ. Caen, Unite Etud. Rech. Sci., Grp. Cristallog. and Chim. Solide, Lab. Chim. Minérale B, Era 305, 14032 Caen, France): Étude thermochimique des alaninates de zinc de cadmium et de cuivre. *Bull. Soc. Chim. Fr. I.* (1974) 1835
- BIOT, M. A.: Thermoelastic buckling. An unstable thermodynamic equilibrium at

- minimum entropy. *Bull. Classe Sci. Acad. Roy. Belg.* 60 (1974) 116
- BIROŠ, J., MÁŠA, Z., POUCHLÝ, J. (Czechoslovak Acad. Sci., Inst. Macromolec. Chem., 16206 Prague 6, Czechoslovakia): A calorimetric investigation of the formation of a stereocomplex in poly(methyl methacrylate) solutions. *Eur. Polym. J.* 10 (1974) 629
- BLACHNIK, R., IGEL, R., WALLBRECHT, P. (Tech. Univ. Clausthal-Zellerfeld, Anorg. Chem. Inst., Paul Ernst Str. 4, D-3392 Clausthal-Zellerfeld, GFR): Thermodynamische Eigenschaften von Zinnchalcogeniden. *Z. Naturforsch. Sect. A* 29 (1974) 1198
- BLANCHARD, L. PH., HESSE, J., MALHOTRA, S. L. (Univ. Laval, Fac. Sci., Dept. Genie Chim., Québec G1K 7P4, Québec, Canada): Effect of molecular weight on glass transition by differential scanning calorimetry. *Can. J. Chem.* 52 (1974) 3170
- BOCA, M., PROUVOST, J. (Univ. Lille 1, Lab. Mineral., BP 36, 59 Villeneuve d'Ascq, France): Effet de la variation de conductibilité thermique au cours de l'analyse thermique de corps humides. *Bull. Soc. Fr. Mineral. Cristall.* 97 (1974) 84
- BOKSHTEIN, B. S., KLINGER, L. M., SHVINOLERMAN, L. S. (Moscow Steel and Alloy Inst., Moscow, USSR): Thermodynamics of melting of the grain boundaries. *Zh. Fiz. Khim.* 48 (1974) 1527 (In Russian)
- BONACINA, C., COMINI, G., FASANO, A., PRIMICERIO, M. (Univ. Padova, Consiglio Nazl. Ricerche, Ist. Fis. Tech., Padova, Italy): On the estimation of thermophysical properties in nonlinear heat-conduction problems. *Int. J. Heat Mass Transfer* 17 (1974) 861
- BONOMO, R. P., GURRIERI, S., MUSUMECI, S., RIZZARELLI, E., SIRACUSA, G. (Univ. Catania, Ist. Chim. Gen., Viale A. Doria, 8-95125 Catania, Italy): Thermal decomposition of metal complexes. II. Mixed complexes of iron(II)iodide with 1,10-phenanthroline, and 4,7-disubstituted-1,10-phenanthrolines. *Thermochim. Acta* 10 (1974) 119
- BOROWIAK, M. A., OBLICKA, M., BERAK, J. M., SZNAJDER, J. (Inst. Ind. Chem., Dept. Catalysts, 01793 Warsaw, Poland): Thermal analysis of zeolites NaY with different crystal phase contents. *Rocz. Chem.* 48 (1974) 1335
- BORUKHOVICH, A. S., MARUNYA, M. S., LOBACHEVSKAYA, N. I., BAMBUROV, V. G., GELD, P. V. (Acad. Sci. USSR, Ural Sci. Ctr., Chem. Inst., Sverdlovsk (USSR): Heat capacity of CdCr₂S₄ ferromagnetic spinel. *Fiz. Tverd. Tela* 16 (1974) 2084 (In Russian)
- BOUSQUET, J., CARRE, J., PROVENÇAL, P. (CNRS 116, Lab. Phys. Chim. Minérale, 20 Ave Albert Einstein, 69621 Villeurbanne, France): Détermination de l'enthalpie de formation du ditellure de silicium par calorimétrie de combustion dans le fluor. *J. Chim. Phys.* 71 (1974) 854
- BOWERS, L. D., CARR, P. W. (Univ. Georgia, Dept. Chem., Athens, Ga., 30602 USA): Noise measurement and the temperature resolution of negative temperature coefficient thermistors. *Thermochim. Acta* 10 (1974) 129
- BREDIKHIN, S. I., SHMURAK, S. Z. (Acad. Sci. USSR, Solid State Phys. Inst., Chernogolovka, USSR): Temperature characteristics of deformation sensibilization. *Fiz. Tverd. Tela* 16 (1974) 2430 (In Russian)
- BRITÓ, F., ASCANIO, J., FRANCESCETTO, M. (Univ. Cent. Venezuela, Fac. Equilibrios and Disolucion, Caracas, Venezuela): Termoquímica de reacciones en disolución. I. Construcción de un calorimetro. *An. Quim.* 70 (1974) 465
- BROWN, D. L. S., CONNOR, J. A., SKINNER, H. A. (c/o H. A. Skinner, Univ. Manchester, Chem. Dept., Manchester M13 9PL, England): Microcalorimetric studies. Enthalpies of formation of Cr(PF₃)₆ and Ni(PF₃)₄. *J. Chem. Soc. Faraday Trans. I.* 70 (1974) 1649
- BROWN, M. P., PUDDEPHATT, R. J., UPTON, C. E. E., LAVINGTON, S. W. (c/o R. J. Puddephatt, Univ. Liverpool, Donnan Labs., Liverpool L69 3BX, England): Thermal decomposition of some acyl-(dialkyl) -, dialkyl(allyl) -, dialkyl-(benzyl) -, and trialkyl-halogenobis-(dimethylphenylphosphine)platinum(IV) complexes. *J. Chem. Soc. Dalton Trans. Inorg. Chem.* (1974) 1613
- BRUCE, J. G., FIRING, E. (Woods Hole Oceanog. Inst., Woods Hole, Mass., 02543 USA): Temperature measurements

- in the upper 10 m with modified expandable bathythermograph probes. *J. Geophys. Res.* 79 (1974) 4110
- BUCHNEV, L. M., VOLGA, V. I., DYMOV, B. K., MARKELOV, N. V.: Enthalpy of carbon materials at 500–3250°K. *Teplofiz. Vysok. Temp.* transl. *High. Temp.* 11 (1973) 1072
- BURGESS, J., RAYMOND, I. H., PEACOCK, D., TAYLOR, P. (Univ. Leicester, Chem. Dept. Leicester LE1 7RH, England): Thermochemistry of alkali metal hexafluoromolybdates(V) and hexafluorotungstates(V). *J. Chem. Soc. Dalton Trans.* (1974) 1064
- BURGHARDT, M. D., BOWLEY, W. W. (U.S. Merchant Marine Acad., Engr. Dept., Kings Point, N.Y., 11024 USA): Sublimation in a porous continuum developed from nonequilibrium thermodynamics. *J. Heat Transfer Transact. ASME Ser. C* 96 (1974) 319
- BURNHAM, C. W., DAVIS, N. F. (Penn. State Univ., Coll. Earth and Mineral Sci., Dept. Geosci, University Park, Pa., 16802 USA): The role of H₂O in silicate melts. II. Thermodynamic and phase relations in the system NaAlSi₃O₈–H₂O to 10 kilobars, 700° to 1100°C. *Amer. J. Sci.* 274 (1974) 902
- BURYLEV, B. P., VAKHOBOV, A. V., DZHURAEV, T. D. (Krasnodar Polytech. Inst., Krasnodar, USSR): Thermodynamic activities of components in melts of aluminium with barium and strontium. *Zh. Fiz. Khim.* 48 (1974) 1377 (In Russian)
- CAMPSERVEUX, J., GERDANIAN, P. (Univ. Paris Sud, Lab. Composés Nonstoechiométriques, Bâtiment 415- 91405 Orsay, France): High-temperature microcalorimetric measurements of the partial molar enthalpy of solution of O₂ in cerium oxides: CeO_{1.5} to CeO₂. *J. Chem. Thermodyn.* 6 (1974) 795
- CAPELLI, R., FERRO, R., BORSESE, A. (Univ. Genova, Ist. Chim. Gen. Inorg., Genova, Italy): A direct isoperibol aneroid calorimeters. *Thermochim. Acta* 10 (1974) 13
- CEZAIRLIYAN, A. (N.B.S., Washington, D.C., 20234 USA): Simultaneous measurements of heat capacity, electric resistivity, and hemispherical total emittance of an alloy of niobium, tantalum, and tungsten in the range 1500 to 2800 K. *J. Chem. Thermodyn.* 6 (1974) 735
- CHAMBERS, R. D., CLARK, M., MASLAKIEWICZ, J. R., KENNETH, W., MUSGRAVE, R., URBEN, P. G. (Univ. Durham, Dept. Chem., S. Rd., Durham, England): Polyfluoroheterocyclic compounds. XXV. Thermal reactions of perfluoroalkylpyridazines. *J. Chem. Soc. Perkin Trans. I.* (1974) 1513
- CHANG, S. S. (NBS Inst. Mat. Res., Washington, D.C., 20234 USA): Heat capacities of polyethylene from 2 to 360 K. II. Two high density linear polyethylene samples and thermodynamic properties of crystalline linear polyethylene. *J. Res. Nat. Bur. Stand. A Phys. Chem.* 78 (1974) 387
- CHAU, C. K., LU, S. Y. (Illinois Inst. Technol., Dept. Phys., Chicago, Ill., 60616 USA): Low-temperature magnetothermal conductivity of pyrolytic graphite. *J. Low Temp. Phys.* 15 (1974) 447
- CHAURASIA, P. B. L., CHAUDHARY, D. R., BHANDARI, R. C. (Univ. Rajasthan, Dept. Phys., Jaipur 4, India): Prediction of effective thermal conductivity of two-phase porous media by nomogram. *J. Appl. Chem. Biotechnol.* 24 (1974) 437
- CHENTSOV, V. N., LEVITSKII, V. A., TRUNOV, V. K., GERASIMOV, J. I. (M. V. Lomonosov State Univ., Moscow, USSR): Thermodynamic investigation of scandium tungstate, Sc₆WO₁₂ at high temperatures and its roentgenometric parameters. *Dokl. Akad. Nauk SSSR* 217 (1974) 884 (In Russian)
- CHERNORUKOV, N. G., KORSHUNOV, I. A., ZHUK, M. I., SHULKINA, N. P. (N.I. Lobachevskii State Univ., Gorki, USSR): Thermal decomposition products of disubstituted zirconium arsenate monohydrate. *Zh. Neorg. Khim.* 19 (1974) 2078 (In Russian)
- CHERNYKH, G. G., VORONKOV, N. G. (Altai Machinery Technol. Res. Inst., Barnaul, USSR): Thermostat with a system for automatic temperature control. *Zavod. Lab.* 40 (1974) 430 (In Russian)
- CLEARFIELD, A., KULLBERG, L. H. (Ohio Univ., Dept. Chem., Athens, Ohio, 45701 USA): On the mechanism of ion exchange in zirconium phosphates. XII. Calorimetric determination of heats of cesium

- ion - hydrogen ion exchange. *J. Phys. Chem.* 78 (1974) 1812
- COLLINS, L. W., DOWNS, W. R., GIBSON, E. K., MOORE, G. W. (Lyndon B. Johnson Space Center, NASA, Structure and Mechanics Divs., Houston, Tex., 77058 USA): An evaluation of discarded tires as a potential source of fuel. *Thermochim. Acta* 10 (1974) 153
- COOKS, R. G., TERWILLIGER, D. T., BEYNON, J. H. (Purdue Univ., Dept. Chem., W. Lafayette, Ind., 47907 USA): Thermochemistry and energy partitioning in the charge separation reactions of doubly charged triatomic ions. *J. Chem. Phys.* 61 (1974) 1208
- COOKSON, P. G., DEACON, G. B., FELDER, P. W., FARQUHARSON, G. J. (Univ. Coll. London, Chem. Dept., London, England): Structures and thermal decomposition of some diphenyl-lead bispolyfluorobenzoates. *Aust. J. Chem.* 27 (1974) 1895
- CORSON, P. B. (Carolina Power and Light Co., Tech. Serv. Unit., Raleigh, N. C., 27602 USA): Correlation functions for predicting properties of heterogeneous materials. IV. Effective thermal conductivity of two phase solids. *J. Appl. Phys.* 45 (1974) 3180
- CRAWFORD, R. S., OHNO, M. (Univ. Alberta, Dept. Chem., Edmonton T6G 2G2, Alberta, Canada): Concertedness in the thermolysis of some 1-pyrazolines. *Can. J. Chem.* 52 (1974) 3134
- CROSBIE, G. M. (Northwestern Univ., Technol. Inst., Dept. Mat. Sci., Evanston, Ill., 60201 USA): Heat capacity of an ordering Fe - 16% Si alloy measured with a spherical adiabatic calorimeter. *J. Electrochem. Soc.* 121 (1974) 235 C
- CULBERT, H. V., HINKS, D., SUNGAILA, Z., SUSMAN, S. (Argonne Natl. Lab., Argonne, Ill., 60439 USA): Critical specific heat of erbium sesquioxide and the 3-dimensional Ising model. *Phys. Lett. A* 49 (1947) 187
- CULL, J. P. (Oxford Univ., Geol. Dept., Parks Rd., Oxford, OX1 3PR, England): Thermal conductivity probes for rapid measurements in rock. *J. Phys. E Sci. Instr.* 7 (1974) 771
- CUONG, N. K., FOURNIER, M. F., BASSELIER, J. J. (Ecole Supér. Phys. Chim. Ind., Lab. Rech. Org., 10 Rue Vauquelin, 75231 Paris, France): Réarrangements photochimiques et thermiques de 4H-pyranes. *Bull. Soc. Chim. Fr. II.* (1974) 2117
- DANILOV, A. V., IVANOV, V. E., KARPOV, S. V. (Lensovet Technol. Inst., Leningrad, USSR): Thermoelectric properties of RbAg_4I_5 solid electrolyte. *Fiz. Tverd. Tela* 16 (1974) 1929 (In Russian)
- DAVID, J., GORDON, J. S., RUTTER, W. J. (Univ. Missouri, Div. Biol. Sci., Columbia, Mo., 65201 USA): Increased thermal stability of chromatin containing 5-bromodeoxyuridine-substituted DNA. *Proc. Nat. Acad. Sci. USA* 71 (1974) 2808
- DAWE, R. A., SNOWDON, P. N. (Univ. Leeds, Dept. Chem. Engr., Leeds, LS2 9JT, England): Experimental enthalpy of $\text{C}_2\text{H}_{4(g)}$ in the range 0.1 to 6.0 MPa and 273.15 to 373.15 K. *J. Chem. Thermodyn.* 6 (1974) 743
- DELAY, A., FRIEDLI, C., LERCH, P. (École Polytech. Fédérale Lausanne, Inst. Electrochim. and Radiochim., 29-33 Rue César-Roux, 1005 Lausanne, Switzerland): Comportement thermique et composition des phosphates calciques basiques de Ca/P molaire inférieur ou égal à 3/2. *Bull. Soc. Chim. Fr. I.* (1974) 828
- DELAY, A., FRIEDLI, C., LERCH, P. (École Polytech. Fédérale Lausanne, Inst. Electrochim. and Radiochim., 29-33 Rue César-Roux, 1005 Lausanne, Switzerland): Comportement thermique et composition des phosphates calciques basiques de Ca/P molaire supérieur à 3/2. *Bull. Soc. Chim. Fr. I.* (1974) 839
- DELBEN, F., PAOLETTI, S. (Univ. Trieste, Ist. Chim., Lab. Chim. Macromolec., Trieste, Italy): Thermodynamics of polycarboxylate aqueous solutions. II. Dilatometry and calorimetry of nickel and barium binding. *J. Phys. Chem.* 78 (1974) 1486
- DELONG, M. C., ROSENBERGER, F. (Thatcher Chem. Co., Salt. Lake City, Utah, 84104 USA): The standard Gibbs energy of dissociation of TeCl_4 between 670 and 1170 K. *J. Chem. Thermodyn.* 6 (1974) 877
- DERYAGIN, A., ULYANOV, A. (Ural State Univ., Sverdlovsk, USSR): Temperature dependent peculiarities of magnetic prop-

- erties of SmCo_5 single crystals. *Phys. Status Solidi A* 24 (1974) K11
- DEVIATYKH, G. G., RABINOVICH, I. B., TELNOI, V. I., BORISOV, G. K., ZIUZINA, L. F. (N.I. Lobachevskii State Univ., Chem. Res. Inst., Gorki, USSR): Thermochemistry of cyclopentadienyl compounds of some rare-earth elements. *Dokl. Akad. Nauk SSSR* 217 (1974) 609 (In Russian)
- DIETZ, R. E., WALKER, L. R., HSU, F. S. L., HAEMMERLE, W. H., VIS, B., CHAU, C. K., WEINSTOCK, H. (Bell Tel. Labs. Inc., Murray Hill, N.J., 07974 USA): The specific heat of the one-dimensional anti-ferromagnet TMMC above 1 K. *Solid State Commun.* 15 (1974) 1185
- DOBROKHOTOV, S. S., KUZNETSOV, A. P., STAROSTIN, P. G.: Utilization of zst 3/3 machine for prolonged creepage tests at temperature up to 200°C. *Zavod. Lab.* 40 (1974) 467 (In Russian)
- DOI, K., TANAKA, M. (c/o M. Taraka, Nagoya Univ., Fac. Sci. Lab. Anal. Chem., Nagoya 464, Japan): The use of auxiliary complexing agents in the differential compleximetric titration of zinc and cadmium with thermometric endpoints. *Anal. Chim. Acta* 71 (1974) 464
- DOVGEI, V. V., SERGEEVA, A. N., MIKHALEVICH, K. N. (Lvov Polytech. Inst., Anal. Chem. Dept., Lvov, UkSSR): Study of potassium heptacyanovanadate(III) by infrared spectroscopy and thermogravimetry methods. *Zh. Neorg. Khim.* 19 (1974) 1527 (In Russian)
- DUBEY, K. S. (Reg. Engn. Coll. Phys. Dept., Warangal 506004, India): Lattice thermal conductivity of nylon and polyethylen at low temperatures. *Solid State Commun.* 15 (1974) 875
- DURAND, S., MASDUPUY, É. (Univ. Paul Sabatier, Lab. Chim. Coordination, 38 Rue 36 Ponts, 31078 Toulouse, France): Sur le comportement thermique de l'acide α -stannique. *Bull. Soc. Chim. Fr. I.* (1974) 1844
- DURNEY, B. R., HUNDHAUSEN, A. J. (Natl. Ctr. Atmosph. Res., Adv. Study Program, Boulder, Colo. 80302 USA): The expansion of a low-density solar corona: a one-fluid model with magnetically modified thermal conductivity. *J. Geophys. Res.* 79 (1974) 3711
- DUVAL, H., DUVAL, PH., HENRY, L. (Univ. Paris S., CNRS, Lab. Phys. Solides, 91405 Orsay, France): Influence de la diffusion thermique sur la formation des contrastes de diffraction des images électroniques. *J. Phys. Lett.* 35 (1974) L 169
- EISNER, A., BARR, P. A., FOGLIA, T. A. (U.S. D.A., ARS., Eastern Reg. Res. Ctr., Philadelphia, Pa., 19118 USA): Isomerization studies. II. Thermal alteration of oleic acid and methyl oleate in the presence of mineral catalysts. *J. Am. Oil Chem. Soc.* 51 (1974) 381
- EMONS, H. H. (Anorg. Tech. Chem. T. H. Chem. Carl Schorlemmer, Sekt. Verfahrenchem., 42 Leuna-Merseburg, GDR): Untersuchungen an binären ladungs-unsymmetrischen Salzschnmelzen aus Erdalkalimetall- und Alkalimetallchloriden. *Chem. Zvesti* 28 (1974) 447
- EMONS, H. H. (Anorg. Tech. Chem. T.H. Chem. Carl Schorlemmer, Sekt. Verfahrenchem., 42 Leuna-Merseburg, GDR): Über das Verhalten von Metallen in ihren geschmolzenen Salzen. *Chem. Zvesti* 28 (1974) 433
- ENGLER, J., FRIEND, B., HOFMANN, W., KEIM, H., NICKSON, R., SCHMIDT-PARZEFALL, W., SEGAR, A., TYRRELL, M., WEGENER, D., WILLARD, T., WINTER, K. (Inst. Exptl. Kernphys., Karlsruhe, GFR): A liquid argon ionization calorimeter for detection of electromagnetic and hadronic showers. *Nukl. Instr. Methods* 120 (1974) 157
- ERNST, L., SCHNEIDER, M., MÖSSINGER, G. (Gesell. Molek. Biol. Forsch. MBH, Mascheroder Weg 1, D-3300 Braunschweig-Stock, GFR): Thermal and photochemical decomposition of 3,5-divinyl-substituted 1-pyrazolines. *Tetrahedron Lett.* (1974) 3081
- EVSEEVA, G. V., ZENKEVICH, L. V. (Moscow State Univ., Phys. Chem. Dept., Moscow, USSR): An investigation of thermodynamic properties of ammonium iodide. *Vestn. Mosk. Univ. Khim.* 15 (1974) 359 (In Russian)
- FARBER, M., SRIVASTAVA, D. (Space Sci. Inc., Monrovia, Calif., 91016 USA): Dissociation energies of BeF and BeCl and the heat of formation of BeClF. *J. Chem. Soc. Faraday Trans. I.* 70 (1974) 1581

- FARROW, M. M., PURDIE, N., WHITE, W. D. (Oklahoma State Univ., Dept. Chem., Stillwater, Okla., 74074 USA): Calorimetric determination of the heats of formation of lanthanide monosulfate complexes in D₂C. *J. Solut. Chem.* 3 (1974) 395
- FERRO, R., CAPELLI, R., BORSESE, A., DELFINO, S. (Univ. Genoa, Ist. Chim. Gen., Genoa, Italy): Heat of formation of magnesium - germanium alloys. *J. Less-Common Metals* 37 (1974) 307
- FILONOV, A. M., NOVIKOVA, O. S., TSEKHANSKAYA, Y. V. (Moscow Nitrogen Ind. and Synth. Org. Prod. Res. and Design Inst., Moscow, USSR): Device for a rapid differential thermal analysis in studying phase conversions in crystals. *Zh. Fiz. Khim.* 48 (1974) 1597 (In Russian)
- FINCH, A., GATES, P. N., PEAKE, S. J. (Univ. London, Royal Holloway Coll., Dept. Chem., Egham, Surrey, TW20 OEX, England): Thermochemistry of fluorine compounds. IV. Rubidium tetrafluoroiodate. *Thermochim. Acta* 10 (1974) 203
- FLEMING, III. P. D. (Brown Univ., Dept. Chem., Providence, R.I., 02912 USA): Theory of the thermomagnetic force. *Phys. Rev. A* 10 (1974) 295
- FORTIER, J. L., LEDUC, P. A., DESNOYERS, J. E. (c/o P.A. Leduc, Univ. Sherbrooke, Dept. Chem., Sherbrooke, Québec, Canada): Thermodynamic properties of alkali halides. II. Enthalpies of dilution and heat capacities in water at 25°C. *J. Solut. Chem.* 3 (1974) 323
- FORTIER, J. L., PHILIP, P. R., DESNOYERS, J. E. (c/o J.E. Desnoyers, Univ. Sherbrooke, Dept. Chem., Sherbrooke, Québec, Canada): Thermodynamic properties of alkali halides. III. Volumes and heat capacities of transfer from H₂O to D₂O at 25°C. *J. Solut. Chem.* 3 (1974) 523
- FRAKTOVNIKOVA, A. A., GUSHCHIN, G. I., MASLOV, I. P.: Miniature flexible thermocouple for temperature measurement up to 800°C. *Prib. Tekhn. Eksp.* (1974) 229 (In Russian)
- FRANKE, V., HEGENBARTH, E. (Tech. Univ. Dresden, Sekt. Phys., Dresden, GDR): Specific heat measurements of SrTiO₃ near 110 K. *Phys. Status Solidi A* 25 (1974) K17
- FRANZ, G., ALTHAUS, E. (c/o E. Althaus, Univ. Karlsruhe, Mineral Inst., Kaiser Str. 12, D-7500 Karlsruhe 1, GFR): Synthesis and thermal stability of 2½ octahedral sodium mica, NaMg_{2.5}[(OH)₂Si₄O₁₀]. *Contrib. Mineral. Petrol.* 46 (1974) 227
- FREDRICKSON, D. R., CHASANOV, M. G. (Argonne Natl. Lab., Chem. Engr. Div., Argonne, Ill., 60439 USA): The enthalpy of liquid sodium to 1505 K by drop calorimetry. *J. Chem. Thermodyn.* 6 (1974) 629
- FREY, H. M., SMITH, R. A. (Univ. Reading, Chem. Dept., Whiteknights, Reading, RG6 2AD, England): Thermal unimolecular decomposition of 2,3-dihydro-p-dioxin. *J. Chem. Soc. Perkin. Trans. II.* (1974) 1407
- FRÖSCHL, H., STANGLER, F. (Univ. Vienna, Lehrkanzel Exptl. Phys. Tieftemp. Phys., Vienna, Austria): Temperature dependence of the fracture stress of polycrystalline ultra-high purity copper between 6.2 and 300 K. *Z. Metallk.* 65 (1974) 477
- FRYBURG, G. C., KOHL, F. J., STEARNS, C. A. (NASA, Lewis Res. Ctr. Cleveland, Ohio, 44135 USA): Enhanced oxidative vaporization of Cr₂O₃ and chromium by oxygen atoms. *J. Electrochem. Soc.* 121 (1974) 952
- FURUSHO, N., KOMATSU, T., NAKAGAWA, T. (Hokkaido Univ., Fac. Sci. Dept. Polymer Sci., Sapporo 060, Japan): A study of the thermal degradation of several halogen-containing polymers by torsional braid analysis. *Bull. Chem. Soc. Japan* 47 (1974) 1573
- GALWEY, A. K., JAMIESON, D. M., LE VAN, M., BERRO, C. (Queens Univ. Belfast, Chem. Dept., Belfast BT9 5AG, England): The preparation, properties, crystal lattice and thermal decomposition reactions of cobalt malonate dihydrate. *Thermochim. Acta* 10 (1974) 161
- GARRETT, K. W., ROSENBERG, H. M. (Univ. Oxford, Clarendon Lab., Oxford, OX1 3PU, England): The thermal conductivity of epoxy-resin/powder composite materials. *J. Phys. D* 7 (1974) 1247
- GATNER, K., KISZA, A. (Univ. Wrocław, Dept. Phys. Chem., 50383 Wrocław, Poland): Thermodynamic properties of metal halides in fused organic salts. III.

- The influence of solute metal ions. *Rocz. Chem.* 48 (1974) 1369
- GEIDAROV, K. I., DZHAFAROV, O. I., KHARASHARLI, K. A., KOSTRYUKOV, V. N. (Acad. Sci. AzSSR, Theoret. Prob. Chem. Technol. Inst., Baku, AzSSR): Heat capacity of ortho chlorobiphenyl in range of 12–237 K. *Zh. Fiz. Khim.* 48 (1974) 1147 (In Russian)
- GERARD, N. (Fac. Sci. Dijon, Lab. Reactiv. Solides, Dijon, France): Coupling of thermogravimetric and X-ray diffraction methods. *J. Phys. E Sci. Instrum.* 7 (1974) 509
- GHORBEL, A., D'YVOIRE, F., DORÉMIEUX-MORIN, C. (École Natl. Supér. Mines Paris, Ctr. Chim., 60 Blvd. St. Michel, 75272 Paris, France): Composés à structure dérivée de la forme haute température de Na_3PO_4 : le phosphate $\text{Na}_4\text{Mg}(\text{PO}_4)_2 \cdot \text{H}_2\text{O}$ et ses produits de déshydratation. *Bull. Soc. Chim. Fr. II* (1974) 1239
- GILBERT, J. (Ctr. Etud. and Rech. Chim. Org. Appl., 2-8 Rue Henry Dunant, 94320 Thiais, France): Sur la thermolyse de l'hydrazide anthranilique. *Bull. Soc. Chim. Fr. II* (1974) 2261
- GILL, G. B., HAWKINS, S., GORE, P. H. (Univ. Nottingham, Dept. Chem., Nottingham, NG7 2RD, England): Concerted and non-concerted hydrogen transfer: the thermal disproportionation of 1,2- and 1,4-dihydronaphthalenes. *J. Chem. Soc. Chem. Commun.* (1974) 742
- GIRGIS, B. S., MOURAD, W. E. (Natl. Res. Ctr., Dokki, Cairo, U.A.R.): The effect of heat on metal incorporated silica gels. *J. Appl. Chem. Biotechnol.* 25 (1974) 349
- GOLUB', P. D., PEREPECHKO, I. I. (Moscow Plast Mat. Res. Inst., Moscow, USSR): Thermophysical characteristics of polymers in the vicinity of the liquid helium temperature. *Vysokomol. Soedin. A* 16 (1974) 1593 (In Russian)
- GOOSSENS, M., DEVILLEZ, F. (Univ. Catholique Louvain, Lab. Écol. Veg., Louvain, Belgium): Les conditions thermiques d'incubation et la germination des akènes non dormants de *Claudium mariscus*. *Bull. Cl. Sci. Akad. Roy. Belg.* 60 (1974) 350
- GORBUNOV, Y. V., ESIN, Y. O., GELD, P. V. (S. M. Kirov Polytech. Inst., Sverdlovsk, USSR): Enthalpies of mixing of liquid manganese and silicon at 1773 K. *Zh. Fiz. Khim.* 48 (1974) 2100 (In Russian)
- GORENBEIN, E. Y. (Ukrainian Agr. Acad., Kiev, UkSSR): Calorimetric studies in formation of zinc, cadmium and mercury(II) halogenide and rhodanide complexes in dimethyl formamide and dimethyl sulphoxide. *Ukr. Khim. Zh.* 40 (1974) 923 (In Russian)
- GORENBEIN, E. Y., VAINSHEIN, M. N., SKOROBOGATKO, E. P., TROFIMCHUK, A. K. (Ukrainian Agr. Acad., Kiev, UkSSR): Calorimetric titration method for studying complex-formation of sodium iodide with zinc, cadmium and mercury(II) iodides in non-aqueous media. *Zh. Obshch. Khim.* 44 (1974) 1558 (In Russian)
- GRIFFIN, E. L., MOCHEL, J. M. (Univ. Illinois, Dept. Phys., Urbana, Ill., 61801 USA): Low temperature, thin film NiCr thermometers. *Rev. Sci. Instr.* 45 (1974) 1265
- GRIFFITHS, B., STOW, C. D., SYMS, P. H. (Univ. Auckland, Dept. Phys., Atmosph. Res. Lab., Auckland, New Zealand): An accurate diode thermometer for use in thermal gradient chambers. *J. Phys. E Sci. Instrum.* 7 (1974) 710
- GRIGOR'EV, A. N., SPIRIDONOV, F. M., MIKHEEVA, L. M.: Thermal behaviour of mixed halide complexes of gallium. *Vestn. Mosk. Univ. Khim.* (1974) 461 (In Russian)
- GRØNVOLD, F., SVEEN, A. (Univ. Oslo, Dept. Chem., Oslo 3, Norway): Heat capacity and thermodynamic properties of synthetic magnetite (Fe_3O_4) from 300 to 1050 K. Ferrimagnetic transition and zero-point entropy. *J. Chem. Thermodyn.* 6 (1974) 859
- GUSEVA, L. N., EGIZ, I. V.: High-temperature creep in nickel and its solid solution. *Izv. Akad. Nauk SSSR Metall. transl. Russ. Met.* (1973) 96
- HAASE, R., KELLER, M. H., DÜCKER, K. H. (Rhein. Westfal. Tech. Hsch., Lehrstuhl Phys. Chem., Aachen, GFR): Zum thermodynamischen Verhalten des flüssigen Systems Wasser + Essigsäure. *Z. Naturforsch. A* 29 (1974) 1383
- HABBOUSH, D. A., KERRIDGE, D. H. (Univ. Southampton, Dept. Chem., Southampton, SO9 5NH, England): A thermogravi-

- metric study of acidic and basic solutes in two molten alkali metal nitrate eutectics. *Thermochim. Acta* 10 (1974) 187
- HAIDA, O., MATSUO, T., SUGA, H., SEKI, S. (Osaka Univ., Fac. Sci., Dept. Chem., Toyonaka, Osaka, Japan): Calorimetric study of the glassy state. X. Enthalpy relaxation at the glass-transition temperature of hexagonal ice. *J. Chem. Thermodyn.* 6 (1974) 815
- HAKEN, J. K. HO, D. K. M., HOUGHTON, E. (Univ. New S. Wales, Dept. Polym. Sci., Kensington 2033, New S. Wales, Australia): Identification of the principal high molecular weight fragments in the thermal degradation of poly(methyl acrylate). *J. Polym. Sci. Polym. Chem. Ed.* 12 (1974) 1163
- HALÁSZ, A., POLYÁK, K., SZÓRÁD, R. J. (Chem. Univ. Veszprém, Anal. Chem. Inst., Veszprém, Hungary): Rapid determination of potassium in fertilizers by spectrophotometry and thermometry. *Magy. Kém. Lapja* 29 (1974) 345 (In Hungarian)
- HAMPSON, F. W., MANLEY, T. R. (Newcastle-Upon-Tyne Politech., Dept. Mat. Sci., Ellison Bldg., Ellison Pl., Newcastle, NE1 8ST, England): Differential thermal analysis of latex treated nylon fabrics. *Chem. Ind. London* (1974) 660
- HANDEREK, J. (Silesian Univ., Inst. Phys., Katowice, Poland): Thermoelectric phenomena in the systems metal-ferroelectric-metal. *Ferroelectrics* 6 (1973) 91
- HARTSHORN, S. R. (Univ. Durham, Dept. Chem. Sci. Labs. S.R.D., Durham, DH1 3LE, England): Calorimetric investigations of hydrogen bond and charge transfer complexes. *Chem. Soc. Rev.* 3 (1974) 167
- HASIAK, B. (Univ. Sci. and Tech. Lille, Lab. Chim. Org. 1, B.P. 36, 59650 Villeneuve, France): Évolution thermique de sels et d'hydroxydes de N-diméthyl pipéridinium α -substitués. I. Pyrolyse d'hydroxydes et de sels de diméthyl-1,1 alcoyl-2 pipéridinium. *Bull. Soc. Chim. Fr. II.* (1974) 2015
- HASIAK, B. (Univ. Sci. and Tech. Lille, Lab. Chim. Org. 1, B.P. 36, 59650 Villeneuve, France): Évolution thermique de sels et d'hydroxydes de N-diméthyl pipéridinium α -substitués. II. Décomposition d'hydroxydes et de sels de diméthyl-1,1 alcynyl-2 pipéridinium. *Bull. Soc. Chim. Fr. II.* (1974) 2023
- HILL, D. J. T., WHITE, L. R. (Univ. Queensland, Chem. Dept., St. Lucia Queensland, 4067, Australia): The enthalpies of solution of hexan-1-ol and heptan-1-ol in water. *Aust. J. Chem.* 27 (1974) 1905
- HILL, R. W., COSIER, J., HUKIN, D. A., WELLS, P., LANCHESTER, P. C. (Oxford Univ., Clarendon Lab., Oxford, OX1 3PU, England): The specific heat of terbium below 4 K. *Phys. Lett. A* 49 (1974) 101
- HOLM, T. (N. O. Arizona Univ., Dept. Geol., Flagstaff, Ariz., 86001 USA): The thermochemistry of alkylolithium reagents. *J. Organometall. Chem.* 76 (1974) 27
- HONDA, K. (Nagoya Univ., Dept. Appl. Phys., Nagoya, Japan): Crystals instability and premelting phenomena. *Prog. Theor. Phys.* 52 (1974) 385
- HORÁČEK, I., HRABÁK, F. (Czechoslovak Acad. Sci., Inst. Macromolec. Chem. 16206 Prague 6, Czechoslovakia): Thermal decomposition of acyl nitrates. *Collect. Czech. Chem. Commun.* 39 (1974) 2608
- HORN, H. G. (Ruhr Univ., Lehrstuhl Anorg. Chem. 2, Pf. 2148, 463 Bochum, GFR): Polymere mit Phosphor-Stickstoff-Bindungen. III. Die thermische Zersetzung von Cyclo-di(phosphazanen); Bildung von oligomeren und polymeren Phosphazenderivaten. *Z. Anorg. Allg. Chem.* 406 (1974) 199
- HORNUNG, E. W., FISHER, R. A., BRODALE, G. E., GIAUQUE, W. F. (Univ. Calif., Dept. Chem., Low Temp. Lab., Berkeley, Calif., 94720 USA): Magnetothermodynamics of gadolinium gallium garnet. II. Heat capacity, entropy, magnetic moment from 0.5 to 4.2°K, with fields to 90 kG, along the [111] axis. *J. Chem. Phys.* 61 (1974) 282
- HUDSON, R. P., PFEIFFER, E. R. (NBS Heat Div., Washington, D.C., 20234 USA): Dipolar heat capacity of CMN. *J. Low Temp. Phys.* 16 (1974) 309
- HURLEY, M., GERSTEIN, B. C. (Ford Motor Co., Sci. Res. Lab., Dearborn, Miss., 48121 USA): The low-temperature heat capacity of 1965-calorimetry — conference copper: a comparison with previous results. *J. Chem. Thermodyn.* 6 (1974) 787

- HUSSEIN, M. K., KOLTA, G. A., SABA, Y. E., EL ROUDI, A. M. (Natl. Res. Ctr. Dokki, Cairo, U.A.R.): Kinetics of calcium phosphate reduction by carbon. *Thermochim. Acta* 10 (1974) 177
- ICHIBA, S., KATADA, M., NEGITA, H. (Hiroshima Univ., Fac. Sci. Dept. Chem., Higashisenda, Hiroshima 730, Japan): Mössbauer effect of ^{119}Sn in the thermal decomposition products of tin(IV)sulfide. *Chem. Lett.* (1974) 979
- ICHIBA, S., KATADA, M., NEGITA, H. (Hiroshima Univ., Fac. Sci. Dept. Chem., Higashisenda, Hiroshima 730, Japan): Mössbauer effect of ^{119}Sn in the thermal decomposition products of tin(IV)selenide and thin(IV)-selenosulfide. *Chem. Lett.* (1974) 1061
- IGNATEVA, I. Y., BUTYLENKO, A. K., BENDELJANI, N. A. (Acad. Sci. UkSSR, Metallophys. Inst., Kiev, UkSSR): Method for thermal analysis at high pressure. *Prib. Tekhn. Eksp.* (1974) 204 (In Russian)
- IKEBE, M., KOBAYASHI, N., MUTO, Y. (Tohoku Univ., Res. Inst. Iron Steel and other Met., Sendai 980, Japan): Phonon thermal conductivity in superconducting Ta and Ta-Nb alloys below 1K. *J. Phys. Soc. Japan* 37 (1974) 278
- ISHIKAWA, T., YAMAZAKI, Y. (Tokyo Metropolitan Univ., Fac. Technol., Dept. Ind. Chem., Setagaya, Tokyo 158, Japan): Thermal decomposition of 3-(2-hydroxyethyl)-2-oxazolidinone. *J. Chem. Soc. Jap. Chem. and Ind. Chem.* (1974) 1592 (In Japanese)
- JANA, R. N. (Indian Inst. Technol., Dept. Math., Kharagpur, India): Hydromagnetic free convective flow past a vertical flat plate variable viscosity and thermal conductivity. *Jap. J. Appl. Phys.* 7 (1974) 1443
- JEFFRIES, D., FRESCO, J. (Mc Gill Univ., Montreal 101, Quebec, Canada): Study of the periodate oxidation of α -diols by direct injection enthalpimetry. *J. Chem. Educ.* 51 (1974) 545
- JONES, D. R. H. (Univ. Cambridge, Dept. Met. and Mat. Sci., Cambridge, England): The spheroidization of fibrous, eutectic composites at high temperatures. *J. Mater. Sci.* 9 (1974) 989
- JONES, H. (Univ. Sheffield, Dept. Met., Sheffield, England): Fault density and the thermal stability of the Al-Al₃Ni rod eutectic. *Scr. Met.* 8 (1974) 1011
- KADUJI, I. I., REES, J. H. (Lankro Chem. Ltd., Eccles, Manchester, M30 OBH, England): Enthalpimetric determination of hydroxyl values of glycerol - alkylene oxide polyethers and butane-1,4-diol-adipic acid polyesters. *Analyst* 99 (1974) 435
- KALINICHENKO, I. I., SIRINA, A. M., PURTOV, A. I. (S. M. Kirov Polytech. Inst., Sverdlovsk, USSR): Infrared spectroscopy method for the studies of thermal decomposition of copper, cobalt and chromium nitrate hydrates. *Zh. Neorg. Khim.* 19 (1974) 1547 (In Russian)
- KALISHEVICH, G. I., SUDAKOVA, N. P., MIKHELSON, A. V., GELD, P. V., SURIKOV, V. I. (S. M. Kirov Polytech. Inst., Sverdlovsk, USSR): Heat capacity of Mn₅Si₃, Fe₅Si₃ and Cr₅Si₃ at low temperatures. *Fiz. Tverd. Tela* 16 (1974) 2123 (In Russian)
- KAMINIR, L. B., KREINDLIN, E. Y., AFANASENKO, G. A. (Acad. Sci. USSR, Molec. Biol. Inst., Moscow, USSR): Device for studying thermal denaturation of nucleic acid micro-amounts. *Zh. Fiz. Khim.* 48 (1974) 1305 (In Russian)
- KARYAZIN, I. A., REZNICHENKO, V. A., KHALIMOV, F. B., VOROBEYCHIK, A. I., MENYAYLOVA, G. A., KIPRICH, N. A., GORDEYCHIK, R. A.: Oxidation of high-titanium slag by heating in air or steam. *Izv. Akad. Nauk SSSR Metall.* transl. *Russ. Met* (1973) 25
- KATO, T., SHIMIZU, A., ISHIDA, T. (Yamanashi Univ., Fac. Engn., Dept. Electr. Engn., Kofu 400, Japan): Temperature dependence of carrier concentration, resistivity and Hall mobility in Te-doped In_{1-x}Ga_xP. *Jap. J. Appl. Phys.* 13 (1974) 1669
- KATRICH, N. P., TIMAN, B. L.: Selective volatilisation of impurities from high-melting point metals. *Izv. Akad. Nauk SSSR Metall.* transl. *Russ. Met.* (1973) 39
- KATZIR, A. (Soreq Nucl. Res. Ctr., Yavne, Israel): A temperature-controlled cryostat for optical, electrical and glow curve measurements between 77 and 800 K. *J. Phys. E Sci. Instrum.* 7 (1974) 423

- KELLY, M. J., LIELMEZS, J. (Prince Georg Pulp and Paper, Prince George, B.C., Canada): Ideal gas state thermodynamic functions for monohalogenated cycloalkanes. *Thermochim. Acta* 10 (1974) 63
- KERN, A. P., IVANOVA, E. F. (A. M. Gorkii State Univ., Kharkov, UkSSR): Thermochemistry of para-toluenesulfonic acid in water — ethanol mixtures. *Zh. Fiz. Khim.* 48 (1974) 1652 (In Russian)
- KERR, G. T., CHESTER, A. W., REAGAN, W. J., OLSON, D. E. (Mobil Res. and Dev. Corp., Cent. Res. Div., Princeton, N.J., 08540 USA): Discovery of monoamminepalladium(II)-chloride using thermogravimetry. *Inorg. Chem.* 13 (1974) 2294
- KHAIREDINOV, E. F., BOLDYREV, V. V. (Acad. Sci. SSSR, Chem. Kinetics and Combustion Inst., Siberian Sect., Novosibirsk 90, USSR): Charge transfer and thermal decomposition of NH_4ClO_4 crystals. *J. Solid. State Chem.* 11 (1974) 67
- KHVLIVITSKII, R. YA., SEMCHIKOV, YU. D., RAZURAEV, G. A., TERMAN, L. M., CHERNOVSKAYA, R. P., KOPYLOVA, N. A., KOCHNEVA, L. S. (Acad. Sci. USSR, Chem. Inst., Gorki, USSR): Influence of zinc salts on the thermal degradation of polymethacrylates. *Vysokomol. Soedin. Ser. B* 16 (1974) 660 (In Russian)
- KILIAN, H. G. (Univ. Ulm, Abt. Exptl. Phys., Oberer Eselberg, 7900 Ulm, GFR): Thermodynamik der Gleichgewichtschmelze von Polymer-Homologen bei der quasi-statischen Glastemperatur. *Colloid. Polym. Sci.* 252 (1974) 353
- KINOSHITA, K., ROUTSIS, K., BETT, J. A. S. (Materials Engr. Res. Lab., Pratt and Whitney Aircraft, Middletown, Conn., 06457 USA): The thermal decomposition of platinum(II) and (IV) complexes. *Thermochim. Acta* 20 (1974) 109
- KIPTON, H., POWELL, J. (Univ. Canterbury, Chem. Dept., Christchurch, New Zealand): Entropy titrations: a reassessment of data for the reaction of the sulphate ion with trivalent lanthanoid ions. *J. Chem. Soc. Dalton Trans.* (1974) 1108
- KRUPICHEV, E. P., RUBTSOV, Y. I., SOROKINA, T. V., TITOV, L. V., GAVRILOVA L. A.: Standard enthalpies of formation of tetraethylammonium and tetrabutylammonium hydridoborates. *Zh. Fiz. Khim.* 48 (1974) 2097 (In Russian)
- KISELEV, V. A., VLASOV, V. G., KAZANBAEV, L. A.: Properties of carbothermal reduction of uranium and niobium oxides. *Zh. Prikl. Khim.* 47 (1974) 1135 (In Russian)
- KITAZAWA, K., COBLE, R. L. (Univ. Tokyo, Dept. Chem., Tokyo, Japan): Electrical conduction in single-crystal and polycrystalline Al_2O_3 at high temperatures. *J. Am. Ceram. Soc.* 57 (1974) 245
- KLEPPA, O. J., HONG, K. C. (Univ. Chicago, James Franck Inst., Chicago, Ill., 60637 USA): Enthalpies of mixing in liquid alkaline earth fluoride — alkali fluoride mixtures. II. Calcium fluoride with lithium, sodium and potassium fluorides. *J. Phys. Chem.* 78 (1974) 1478
- KNIAZEV, G. I., KOZLOV, I. T.: Thermoelectrical properties of ilmenites as a search-appraisal criterion of diamond deposits. *Dokl. Acad. Nauk SSSR* 217 (1974) 1401 (In Russian)
- KO HON CHUNG, MATSUI, T., HEPLER, L. G. (Univ. Lethbridge, Dept. Chem., Lethbridge, Alberta, Canada): Enthalpy of formation of aqueous tungstate ion and of crystalline tungstic acid (H_2WO_4). *Thermochim. Acta* 10 (1974) 211
- KOLESOV, C. P., VOROB'EV, V. N., SARZHINA, E. A., PENTIN, YU. A., TIMOSHENKOVA, YU. D. (Moscow State Univ., Moscow B-234, 117234 USSR): Heat capacity from 12 to 300 K, phase transitions, and thermodynamic functions of 1,1,1-trifluoro-3-chloropropane and 1,1,1,3-tetrachloropropane. *J. Chem. Thermodyn.* 6 (1974) 613
- KOPACH, I. I., LUKASHENKO, E. E., BAKHIREVA, T. P.: Thermodynamic functions of liquid magnesium — lead alloys. *Izv. Akad. Nauk SSSR Metall. transl. Russian Metal.* (1973) 53
- KORNEEV, V. V., STAROSTIN, A. N., ZIMDAHL, W. (M. V. Lomonosov State Univ., Nucl. Phys. Inst., Moscow, USSR): The Luttinger method in the theory of thermomagnetic phenomena. *Zh. Eksp. Teor. Fiz.* 66 (1974) 2240 (In Russian)
- KORSHAK, V. V., BERESTNEVA, G. L., AS-TAF'EVA, T. S., RUSANOV, A. L., TUGUSHI, D. S. (Acad. Sci. USSR, Inst. Organoelement Cpd., Moscow, USSR): Study of the thermal polycyclodehydration process of poly(o-phenylamino)amides. *Vysoko-*

- mol. Soedin. Ser. B* 16 (1974) 681 (In Russian)
- KORVOLA, J., MÄLKÖNEN, P. (Univ. Jyväskylä, Dept. Chem., SF-40100, Jyväskylä, Finland): The thermal decomposition of p-nitrobenzoates and 3,5-dinitrobenzoates of borneol and isborneol. *Finn. Chem. Lett.* (1974) 23
- KOSKIMAKI, D. C., GSCHNEIDNER, K. A. JR. (Armco Steel Corp. Armco Res. Ctr., Middletown, Ohio, 45042 USA): The heat capacity of β -cerium between 1.5 and 23 K. *Phys. Rev. B Solid State* 10 (1974) 2055
- KOŠTENSÁ, I., MALINOVSKÝ, M. (Slovak Tech. Univ., Dept. Inorg. Technol., 88037 Bratislava, Czechoslovakia): Problems of the stability of the anion AlF_6^{3-} in the molten system $\text{NaCl} - \text{Na}_3\text{AlF}_6$. *Chem. Zvesti* 28 (1974) 553
- KOSTRYUKOVA, M. O., SEDOVA, L. P. (Moscow State Univ., Moscow, USSR): Specific heat of alloys of the system $\text{Ni}_x\text{Mn}_{1-x}\text{Cl}_2$ at low temperatures. *Zh. Eksper. Teoret. Fiz. Pisma Redakt.* transl. *JETP Lett.* 19 (1974) 177
- KRAVCHENKO, V. E. (M. I. Kalinin Non Ferrous Met. Inst., Krasnoyarsk, USSR): Laboratory set-up for thermal treatment of metals in vacuum. *Zavod. Lab.* 40 (1974) 992 (In Russian)
- KRESHECK, G. C., HARGRAVES, W. A. (No. Illinois Univ., Dept. Chem., DeKalb, Ill., 60115 USA): Thermometric titration studies of the effect of head group, chain length, solvent, and temperature on the thermodynamics of micelle formation. *J. Colloid Interface Sci.* 48 (1974) 481
- KRICHELDORF, H. R., LEPPERT, E. (Univ. Freiburg, Inst. Makromolek. Chem., Stefan Meier Str. 31, 78 Freiburg, GFR): Versuche zum thermischen Abbau von Copolyamiden aliphatischer und aromatischer Aminocarbonsäuren. *Makromol. Chem.* 175 (1974) 1731
- KROESE, C. J., MAASKANT, W. J. A. (State Univ. Leiden, Dept. Theoret. Inorg. Chem., Gorlaeus Lab., P.O.B. 75, Leiden, Netherlands): The relation between the high-temperature and room-temperature structure of CsCuCl_3 . *Chem. Phys.* 5 (1974) 224
- KUGAEVSKII, A. F., KOZIN, G. A. (Siberian Metrol. Res. Inst., Novosibirsk, USSR): Stable thermostat for 243–323 K temperatures. *Zavod. Lab.* 40 (1974) 986 (In Russian)
- KÜHNERT—BRANDSTÄTTER, M., ULMER, R. (Univ. Innsbruck, Inst. Pharmak., Innsbruck, Austria): Beitrag zur thermischen Analyse optischer Antipoden: Mandelsäure. *Mikrochim. Acta* (1974) 927
- KUKUSHKIN, Y. N., KISELEVA, N. P., BAKHIREVA, S. I., KIRILLOVA, M. A. (Lensovet Technol. Inst., Leningrad, USSR) Thermoisomerization of platinum(II) complexes. *Zh. Obshch. Khim.* 44 (1974) 1741 (In Russian)
- KUKUSHKIN, Y. N., KRYLOVA, G. S., BAKHIREVA, S. I. (Lensovet Technol. Inst. Leningrad, USSR): Thermal conversions of platinum(II) dithio ether complexes. *Zh. Neorg. Khim.* 19 (1974) 1694 (In Russian)
- KUMAR, A. (Univ. Allahabad, Dept. Phys., Allahabad 211002, India): Higher order corrections of low-temperature thermal conductivity of n-Ge. *Indian J. Pure Appl. Phys.* 12 (1974) 323
- KURITNYK, I. P., STADNYK, B. I. (Termopribor., Lvov, UkSSR): The thermoelectromotive force of single crystals of refractory metals. *Teplofiz. Vysok. Temp.* transl. *High. Temp.* 11 (1973) 1173
- KUZNETSOV, V. A., EFREMOVA, E. P., KOTELNIKOV, A. R. (Acad. Sci. USSR, Cryst. Inst., Moscow, USSR): Thermodynamical analysis of the formation conditions of the Cd, Mn, Zn, Pb sulfides and the Zn selenide in high-temperature aqueous solutions. *Geokhimiya* (1974) 963 (In Russian)
- KVEDER, A., TAUČER, M. (Met. Inst., Ljubljana, Yugoslavia): Einfluss der Temperaturführung bei Warmverdrehsversuchen zur Beurteilung der Warmumformbarkeit von Stählen. *Arch. Eisenhüttenw.* 45 (1974) 465
- LANKIN, D. C., PETERSON, R. C., VELAZQUEZ, R. A. (c/o R. C. Peterson, Loyola Univ., Dept. Chem., New Orleans, La., 70118 USA): Thermal decomposition of 2-(cyanoethylthio)benzenediazonium tetrafluoroborate in acetonitrile solution. *J. Org. Chem.* 39 (1974) 2801
- LAPITSKII, A. N., TIKAVYI, V. F. (V. I. Lenin State Univ., Inorg. Chem. Dept., Minsk,

- BeSSR): Thermolysis of zirconium antimonate. *Zh. Neorg. Khim.* 19 (1974) 1500 (In Russian)
- LARSEN, J. W., MAGID, L. J. (Univ. Tennessee, Dept. Chem., Knoxville, Tenn., 37916 USA): Calorimetric and counterion binding studies of the interactions between micelles and ions. The observation of lyotropic series. *J. Amer. Chem. Soc.* 96 (1974) 5774
- LAŠEK, J., HYKEL, L. (Czechoslov. Acad. Sci., Ustav Fyz. Pevných Latek, Cukrovarnicka 10, 16253 Prague 6, Czechoslovakia): Apparatus for simultaneous graphical and digital record of the temperature dependence of the electrical resistance of alloys. *Cesk. Cas. Fys. A* 24 (1974) 246 (In Czech)
- LAZÁR, M., AMBROVIČ, P., BORSIG, E. (Polymer Inst. Slovak Acad. Sci., Bratislava, Czechoslovakia): Thermal decomposition of cyclic alkylidene peroxides (tetraoxanes). *Thermochim. Acta* 10 (1974) 55
- LAZORENKO, V. I., RUD', B. M., PADERNO, YU., B., KLOCHKOV, L. A., TIMOFEEVA, I. I. (Acad. Sci. UkSSR, Mat. Technol. Inst., Kiev, UkSSR): Thermal expansion and character of interatomic interaction in lanthanide silicides. *Dopov. Akad. Nauk UkSSR A* 38 (1974) 850 (In Ukrainian)
- LEE, W. K., LAU, P. C., CHOY, C. L. (Chinese Univ. Hong-Kong, Dept. Phys., Shatin, Hong-Kong): Heat capacity of polychlorotrifluoroethylene. *Polymer* 15 (1974) 487
- LEVANTOVSKAIA, I. I., URMAN, J. G., BARSTEIN, R. S., SLONIM, I. J., KOVARSKAIA, B. M., RADETSKAIA, M. P., BULAI, A. KH., AFANASIEVA, I. N.: Investigation of the mechanism of thermooxidative destruction of polyethereous plastifiers. *Dokl. Acad. Nauk SSSR* 217 (1974) 1351 (In Russian)
- LEVITAN, M. M., PERELMAN, T. L. (Acad. Sci. BeSSR, Heat and Mass Exchange Inst., Minsk, BeSSR): Principles for theory and calculation of thermal pipes. *Zh. Tekh. Fiz.* 44 (1974) 1569 (In Russian)
- LINDSLEY, D. H., LINDH, A. (State Univ. New York, Dept. Earth and Space Sci., Stony Brook, N.Y., 11790 USA): A hydrothermal investigation of the system $\text{FeO}-\text{Fe}_2\text{O}_3-\text{TiO}_2$: A discussion with new data. *Lithos* 7 (1974) 65
- LITSOV, N. I., BURMISTROVA, N. P., TRUNIN, A. S., SHTER, G. E. (Kuibyshev Polytech. Inst., Kuibyshev, USSR): Thermal analysis of the system $\text{Cs}_2\text{BaCl}_2\text{SO}_4$. *Ukr. Khim. Zh.* 40 (1974) 603 (In Russian)
- LIPSON, H. G., SKOLNIK, L. H., STIERWALT, D. L. (USAF, Cambridge Res. Lab., Bedford, Mass., 01730 USA): Small absorption coefficient measurement by calorimetric and spectral emittance techniques. *Appl. Opt.* 13 (1974) 1741
- LITSOV, N. I., NEGIEVICH, L. A., KACHAN, A. A. (Acad. Sci. UkSSR, Inst. Chem. Macromolec. Cpds., Kiev, UkSSR): Analysis of thermal transformations in polyacrylonitrile grafted onto aerosil. *Dopov. Akad. Nauk UkSSR B* (1974) 627 (In Ukrainian)
- LOGVINENKO, S. P., ROSOSHANSKII, O. A., POLADICH, V. V., ZAROCHEVSEVA, T. M., DERBYSHEVA, S. L., EREMENKO, V. I. (Acad. Sci. UkSSR, Low Temp. Engn. Phys. Inst., Kharkov, UkSSR): Thermometer from gas for 1 divided by 100 K range. *Prib. Tekhn. Eksp.* (1974) 203 (In Russian)
- LYON, W. G., WESTRUM, E. F. JR. (c/o E.F. Westrum, Univ. Michigan, Dept. Chem., Ann Arbor, Mich., 48104 USA): Heat capacities of zinc tungstate and ferrous tungstate from 5 to 550 K. *J. Chem. Thermodyn.* 6 (1974) 763
- LYON, W. G., WESTRUM, E. F. JR. (c/o E. F. Westrum, Univ. Michigan, Dept. Chem., Ann Arbor, Mich., 48104 USA): High-temperature thermal functions and the thermochemistry of zinc tungstate. *J. Chem. Thermodyn.* 6 (1974) 781
- MACDONALD, D. D., ESTEP, M. E., SMITH, M. D., HYNNE, J. B. (Victoria Univ., Dept. Chem. Wellington, New Zealand): Heats of solution and the influence of solutes on the temperature of maximum density of water. *J. Solut. Chem.* 3 (1974) 713
- MACKLIET, C. A., GILLESPIE, D. J., SCHINDLER, A. I. (Noval, Res. Lab., Washington, D. C., 20375 USA): Specific heat of superconducting Pd-H alloys. *Solid State Commun.* 15 (1974) 207
- MADELMONT, C., PERRON, R. (Labs. Vitry Thiais, CNRS, 2-8 Rue Henry Dunant, 94320 Thiais, France): Étude du système myristate de sodium—eau par analyse thermique différentielle. I. Le savon

- anhydre et la courbe Ti. *Bull. Soc. Chim. Fr. I.* (1974) 1795
- MADLMONT, C., PERRON, R. (Labs. Vitry Thiais, CNRS, 2-8 Rue Henry Dunant, 94320 Thiais, France): Étude du système myristate de sodium—eau par analyse thermique différentielle. II. Description des différentes régions du diagramme. *Bull. Soc. Chim. Fr. I.* (1974) 1799
- MÄLKÖNEN, P., KORVOLA, J. (Univ. Helsinki, Dept. Chem., SF- 00100 Helsinki, Finland): Thermal decomposition of the urethans of borneol and isborneol. *Finn. Chem. Lett.* (1974) 19
- MALLIK, A. K. (Indian Inst. Technol., Dept. Met. Engn., Bombay, India): Influence of modified thermal and thermo-mechanical treatment on phase transformations. *J. Sci. Ind. Res. India* 32 (1973) 713
- MARKOV, B. F., LOICHENKO, V. YA. (Acad. Sci. UkSSR, Gen. and Inorg. Chem. Inst., Kiev, UkSSR): Thermoelectrical properties of fusions of the systems $PbCl_2$ —KCl, $CaCl_2$ —KCl, $ZnCl_2$ —CsCl. *Ukr. Khim. Zh.* 40 (1974) 871 (In Russian)
- MARTIRE, D. E. (Georgetown Univ., Dept. Chem., Washington, D.C., 20007 USA): Determination and comparison of association constants for weak organic complexes by thermodynamic, resonance, and optical methods. *Anal. Chem.* 46 (1974) 1712
- MARTOSUDIRDJO, S., PRATT, J. N. (Univ. Birmingham, Dept. Phys. Metall. and Sci. Materials, Birmingham, England): Calorimetric studies of the heats of formation of IIIB—VB adamantine phases. *Thermochim. Acta* 10 (1974) 23
- MARUCCO, J. F. (Univ. Paris Sud., Lab. Composés Nonstoechiométriques, 91405 Orsay, France): Thermodynamic study of the system NbO_2 — Nb_2O_5 at high temperature. *J. Solid State Chem.* 10 (1974) 211
- MATSUI, T., KO, H. CH. HEPLER, L. G. (Univ. Lethbridge, Dept. Chem., Lethbridge T1K 3M4, Alberta, Canada): Calorimetric heats of ionization of aqueous benzoic acid from 5—100°C and derived thermodynamic quantities. *Can. J. Chem.* 52 (1974) 2912
- MATSUZAKI, R., SOFUE, A., MASUMIZU, H., SAEKI, Y. (Tokyo Inst. Technol, Res. Lab. Resources Utilization, Meguro Tokyo 152, Japan): Thermal decomposition process of $Bi_2(SO_4)_3$. *Chem. Lett.* (1974) 737
- MCCREARY, J. R., THORN, R. J. (Argonne Natl. Lab., Argonne, Ill., 60439 USA): Entropies and enthalpies of sublimation of neodymium and terbium trifluorides. *High Temp. Sci.* 6 (1974) 205
- MC ELROY, R. G. C., THOMSON, R. T., PINTAR, M. M. (Univ. Toronto, Dept. Phys., Toronto, Ont., Canada): Proton-spin thermometry at low fields in liquid crystals. *Phys. Rev. A* 10 (1974) 403
- MCLAREN, E., YENCHA, A. J., KUSHNIR, J. M., MOHNEN, V. A. (State Univ. New York, Dept. Chem., Albany, N.Y., 12222 USA): Some new thermal data and interpretations for the system SO_2 — NH_3 — H_2O — O_2 . *Tellus* 26 (1974) 291
- MCMASTERS, O. D., GSCHNEIDNER, K. A., KALDIS, E., SAMPIETRO, G. (Atom Energy Comm., Ames Lab., Ames, Ia., 50010 USA): High-temperature enthalpies and standard Gibbs free energies of formation of the europium chalcogenides: EuO, EuS, EuSe, and EuTe. *J. Chem. Thermodyn.* 6 (1974) 845
- MEIJER, H. C., BEDUZ, C., MATHU, F. (T. H. Delft, Lab. Tech. Naturkunde, Delft, Netherlands): Thermal contact at very low temperatures: the use of bismuth solder. *J. Phys. E* 7 (1974) 424
- MELNIKOV, L. F., NABIEV, N. M., KASYMOVA, M. A. (Acad. Sci. UzSSR, Chem. Inst., Tashkent, UzSSR): Polythermal method for the studies of $Fe(NO_3)_3 \cdot 9H_2O$ — $CO(NH_2)_2$ — H_2O ternary system. *Zh. Neorg. Khim.* 19 (1974) 2564 (In Russian)
- MEN', A. A., CHECHEL'NITSKII, A. Z. (D. I. Mendeleev Metrol. Inst., Moscow, USSR): Thermal conductivity of fused quartz. *Teplofiz. Vysok. Temp.* transl. *High Temp.* 11 (1973) 1176
- MESSERLY, J. F., FINKE, H. L., TODD, S. S. (US Dept. Interior, Bur. Mines, Energy Res. Ctr., Bartlesville, Okla., 74003 USA): Low-temperature thermal studies on six organosulfur compounds. *J. Chem. Thermodyn.* 6 (1974) 635
- MILLAR, D. B., GRAFIUS, M. A., WILD, J. R., PALMER, D. A. (USN, Bur. Med. and Surg., Med. Res. Inst., Natl. Naval Med. Ctr. Environm. Biosci. Dept., Bethesda, Md., 20014 USA): High pres-

- sure stabilization of acetylcholinesterase bioxymes against thermal denaturation. *Biophys. Chem.* 2 (1974) 189
- MILSTEIN, F., BALDWIN, J. A., SPINGARN, J. (Univ. Calif., Coll. Engr., Santa Barbara, Calif., 93106 USA): Electrical and thermal behaviour of Gd—C alloys in the neighborhood of the Curie temperature. *Phys. Status Solidi A* 25 (1974) 107
- MIRONOV, V. E., KOLOBOV, N. P., KOMAROVA, A. V., MAVRIN, I. F. (Lensovet Technol. Inst., Leningrad, USSR): Thermodynamics of outer spheric complexes. XIV. Thermochemistry of outer-spheric complexes of cobalt(III)-acidopentaamine with anions. *Zh. Fiz. Khim.* 48 (1974) 1675 (In Russian)
- MITA, K., OKUBO, T. (Kyoto Univ., Dept. Polymer Chem., Kyoto, Japan): Heat of dilution of aqueous solutions of sodium carboxymethylcellulose and sodium polyacrylate. *J. Chem. Soc. Faraday Trans. I.* 70 (1974) 1546
- MITROFANOVA, N. D., FEDOROV, B. M., MARTYENKO, L. I. (M. V. Lomonosov State Univ., Inorg. Chem. Dept., Moscow, USSR): Thermographic and spectrographic studies of various hydrate forms of neodymium mononitrotetraacetate. *Zh. Neorg. Khim.* 19 (1974) 2056 (In Russian)
- MORIMOTÓ, Y. (OKI Elect. Ind. Co. Ltd., Res. Lab., 550—5 Higashiasakawa, Hachioji, Tokyo 193, Japan): Few characteristics of epitaxial GaN. Etching and thermal decomposition. *J. Electrochem. Soc.* 121 (1974) 1383
- MORIN, P., PIERRE, J., CHAUSSY, J. (CNRS, Lab. Magnetisme, Grenoble, France): Specific heat in TbZn and HoZn compounds. *Phys. Status Solidi A* 24 (1974) 425
- MÖRL, K., SCHRÖDER, H. (DAWB, Zent. Inst. Festkörperphys. und Werkstofforsch., Jena, GDR): On the thermomagnetic writing on MnBi(Sb) films. *Phys. Status Solidi A* 25 (1974) 451
- MOROZOV, A. I. (N.S. Kurnakov Gen. and Inorg. Chem. Inst., Moscow, USSR): Thermal stability and composition of vapor above alkali metal dichlorodioxotantalates. *Zh. Neorg. Khim.* 19 (1974) 1514 (In Russian)
- MORTIMER, C. T., McNAUGHTON, J. L. (Univ. Keele, Chem. Dept., Staffordshire, England): The thermal decomposition of transition-metal complexes containing heterocyclic ligands. 3. Substituted pyridine complexes of cobalt. *Thermochim. Acta* 10 (1974) 125
- MORTIMER, C. T., McNAUGHTON, J. L. (Univ. Keele, Chem. Dept., Staffordshire, England): The thermal decomposition of transition-metal complexes containing heterocyclic ligands. 4. Substituted-pyridine complexes of Mn, Ni, Cu and Cd. *Thermochim. Acta* 10 (1974) 207
- MOŽE, A., VIZOVIŠEK, I., MALAVAŠIČ, T., ČERNEC, F., LAPANJE, S. (Chem. Inst. Boris Kidric, Hajdrihova 19, Ljubljana, Yugoslavia): Study of the isothermal bulk polymerization of vinyl acetate by differential scanning calorimetry. *Makromol. Chem.* 175 (1974) 1507
- MRAW, S. C., GIAUQUE, W. F. (c/o W. F. Giauque, Univ. Calif., Dept. Chem., Low Temp. Lab., Berkeley, Calif., 94720 USA): Entropies of the hydrates of sodium hydroxide. III. Low temperature heat capacities and heats of fusion of the α and β crystalline forms of NaOH · 4H₂O. *J. Phys. Chem.* 78 (1974) 1701
- MUKAI, J. (Hitach Ltd., Hitachi Res. Lab., Hitachi, Ibaraki, Japan): Effects of phenylene and cyclohexylene groups and branching on the thermal stabilities of unsaturated polyester resins. *Jap. Polym. Sci. and Techn.* 31 (1974) 440 (In Japanese)
- MUKAI, J. (Hitach, Ltd., Hitachi Res. Lab., Hitachi, Ibaraki, Japan): Effect of maleic anhydride and styrene content on the thermal stability of unsaturated polyester resins. *Jap. Polym. Sci. and Techn.* 31 (1974) 434 (In Japanese)
- MULINA, T. V., KHAIRETDINOV, E. F., BOLDYREV, V. V., SAVINTSEV, Y. P. (Acad. Sci. USSR, Chem. Kinetics and Combustion Inst., Novosibirsk, USSR): Effect of proton-donor additions on NH₄ClO₄ thermolysis. *Zh. Fiz. Khim.* 48 (1974) 2067 (In Russian)
- MÜLLER, P., SIEMES, H. (Vereinigte Glaswerke, Aachen, GFR): Festigkeit, Verformbarkeit und Gefügeregelung von Anhydrit. Experimentelle Stauchverformung unter Manteldrucken bis 5 kbar bei Temperaturen bis 300°C. *Tectonophys.* 23 (1974) 105
- MUSBALLY, G. M., PERRON, G., DESNOYERS, J.

- E. (c/o J. E. Desnoyers, Univ. Sherbrooke, Dept. Chem., Sherbrooke, Quebec, Canada): Apparent molal volumes and heat capacities of ionic surfactants in water at 25°C. *J. Colloid Interface Sci.* 48 (1974) 494
- NAGASE, K., YOKOBAYASHI, H. (Tohoku Univ., Coll. Gen. Educ. Dept. Chem., Kawauchi, 980 Sendai, Japan): The thermal deaquation. Anation reactions of aquopentamminechromium(III) complexes in the solid state. *Bull. Chem. Soc. Japan* 47 (1974) 2036
- NAITO, K., INABA, H., ISHIDA, M., SAITO, Y., ARIMA, H. (Nagoya Univ., Fac. Engn., Dept. Nucl. Engn., Nagoya, Japan): Study on a dynamic adiabatic calorimeter. II. Adiabatic scanning calorimeter and some applications. *J. Phys. E* 7 (1974) 464
- NAKAMORI, I., NAKAMURA, H., HAYANO, T., KAGAWA, S. (Kyushu Univ., Fac. Engn., Dept. Chem. Engn., Hakazaki, 812 Fukuoka, Japan): The thermal decomposition and reduction of silver(I) oxide. *Bull. Chem. Soc. Jap.* 47 (1974) 1827
- NAKASE, Y., ARAI, H., KURIYAMA, I. (Japan Atom Energy Res. Inst., Takasaki Radiat., Chem. Res. Estab., Takasaki, Japan): Differential thermal analysis of polyethylene obtained by radiation-induced polymerization. *J. Macromol. Sci. B.* 10 (1974) 41
- NATARAJAN, M., RAMAMURTHY, P., SECCO, E. A. (c/o E. A. Secco, St. Francis Xavier Univ., Dept. Chem., Antigonish, Nova Scotia, Canada): Alkali tin paraperiodates (MSnIO₆): Thermal analyses, electrical conductivity, infrared, and X-ray diffraction studies. *Can. J. Chem.* 52 (1974) 3187
- NESBITT, L. E., WENDLANDT, W. W. (c/o W. W. Wendlandt, Univ. Houston, Dept. Chem., Houston, Tex., 77004 USA): An automated evolved gas detection apparatus. *Thermochim. Acta* 10 (1974) 85
- NEWTON, A. M., SWADDLE, T. W. (c/o T. W. Swaddle, Univ. Calgary, Dept. Chem., Calgary T2N 1N4, Alberta, Canada): Kinetics and mechanism of the thermal decomposition of hexaamminecobalt(III) and aquopentaamminecobalt(III) ions in acidic aqueous solution. *Can. J. Phys.* 52 (1974) 2751
- NGUYEN-DUY, P., RIGAUD, M. (Ecole Polytech. Montreal, Dept. Met. Engn., Montreal, Quebec H3C 3A7 Canada): Thermodynamic properties of zinc in dilute solution with silver in molten tin in the range 723 to 923 K. *J. Chem. Thermodyn.* 6 (1974) 727
- NICOLAU, I. F. (Inst. Fiz. Atom. Casuta, Postala Nr. 35, Bucharest, Romania): Thermodynamic analysis of transport of impurities via halides by the close-spaced epitaxial growth of InP. *Z. Anorg. Allg. Chem.* 407 (1974) 83
- NURTDINOV, S. K., ISMAGILOVA, N. M., FILIPPOVA, I. G., SHIKHMURATOVA, D. V., KOROBCHENKO, V. A., SULTANOVA, R. B., ZYKOVA, T. V., TSVUNIN, V. S. (S. M. Kirov Chem. Technol. Inst., Kazan, USSR): Data on phosphorus chloride reaction with ketones, prepared by differential thermal analysis method. *Zh. Obshch. Khim.* 44 (1974) 1678 (In Russian)
- O'CALLAGHAN, P. W., PROBERT, S. D. (Cranfield Inst. Technol., Sch. Mech. Engn. Ctr. Thermal Insulation Studies, Dept. Engn. Thermodynam., Cranfield, Bedfordshire, England): Thermal resistance and directional index of pressed contacts between smooth non-wavy surfaces. *J. Mech. Eng. Sci.* 16 (1974) 41
- O'HARE, P. A. G., JENSEN, K. J., HOEKSTRA, H. R. (Argonne Natl. Lab., Chem. Engn. Div., Argonne, Ill., 60439 USA): Thermochemistry of molybdates. IV. Standard enthalpy of formation of lithium molybdate, thermodynamic properties of the aqueous molybdate ion, and thermodynamic stabilities of the alkali-metal molybdates. *J. Chem. Thermodyn.* 6 (1974) 681
- OHTANI, T., ADACHI, K., KOSUGE, K., KACHI, S. (Kyoto Univ., Fac. Sci., Dept. Chem., Kyoto, Japan): Specific heat of hexagonal NiS at low temperature. *J. Phys. Soc. Jap.* 36 (1974) 1489
- OKAZAKI, R., SIMAMURA, O. (Univ. Tokyo, Fac. Sci. Dept. Chem., Hongo Tokyo, 113, Japan): Preparation and thermal decomposition of acyl carbamoyl peroxides. *Bull. Chem. Soc. Jap.* 47 (1974) 1981
- OLIVEIRA, A. C., GARG, V. K. (Univ. Brasilia, Dept. Phys., Brasilia, Brazil):

- Mössbauer aqueous frozen solution and thermal decomposition studies of $\text{Fe}(\text{NH}_4\text{SO}_4)_2 \cdot 6\text{H}_2\text{O}$. *Radiochem. Radioanal. Lett.* 18 (1974) 43
- OOTA, A., MAMIYA, T., MASUDA, Y. (Nagoya Univ., Dept. Phys., Chikusa, Nagoya, Japan): Thermal conductivity minimum of niobium in mixed state. *J. Phys. Soc. Japan* 37 (1974) 279
- ORLOV, I. G., KETSKALO, V. M., VAVILKIN, A. S., VICHUTINSKII, A. A., CHERKASHIN, M. I. (Acad. Sci. USSR, Petr. Chem. Inst., Tomsk, USSR): Microcalorimetric study of weak donor - acceptor complexes. *Dokl. Akad. Nauk SSSR* 218 (1974) 143 (In Russian)
- OSBORNE, D. W., FLOTOW, H. E., DALLINGER, R. P., HOEKSTRA, H. R. (Argonne Natl. Lab., Chem. Div., Argonne, Ill., 60439 USA): Heat capacity of α -sodium, uranate ($\alpha\text{-Na}_2\text{UO}_4$) from 5 to 350 K. Standard Gibbs energy of formation at 298.15 K. *J. Chem. Thermodyn.* 6 (1974) 751
- OSBORNE, D. W., FLOTOW, H. E., FRIED, S. M., MALM, J. G. (Argonne Natl. Lab., Chem. Div., Argonne, Ill., 60439 USA): Heat capacity, entropy, and enthalpy of $^{242}\text{PuF}_3$ from 10 to 350°K. *J. Chem. Phys.* 61 (1974) 1463
- OSTRONOV, M. G., SAMARIN, Y. B., GELPERIN, I. I., KOLOSHINA, V. N. (Moscow Nitrogen Ind. and Synth. Org. Prod. Inst., Moscow USSR): Heat capacity and thermodynamic properties of silica gel at low-temperatures. *Zh. Fiz. Khim.* 48 (1974) 1822 (In Russian)
- OTA, K. (Kyushu Inst. Technol., Dept. Chem., Tobata, Kitakyushu 804, Japan): The thermal rearrangement of mono- and di-sodium hydroxybenzoates. *J. Chem. Soc. Jap.* (1974) 1697 (In Japanese)
- OTA, Y., BUTLER, S. R. (Bell Tel. Labs. Inc., Reading, Pa., 19604 USA): Reexamination of some aspects of thermal oxidation of silicon. *J. Electrochem. Soc.* 121 (1974) 1107
- OTTENBRITE, R. M., BROCKINGHTON, J. W. (Virginia Comm. Univ., Dept. Chem. and Pharm. Chem., Richmond, Va., 23284 USA): A Hammett relationship study for the thermal decomposition of sterically hindered hydrogen phthalate esters in solution. *J. Org. Chem.* 39 (1974) 2463
- PARRY-JONES, R. (Univ. London, Goldsmith Coll., Dept. Chem., London, SE14 6NW, England): Observation of a colour change during the catalytic thermometric titration of aromatic acids when anionic polymerisation of acrylonitrile is used as an end-point indicator. *Chem. Ind.* (1974) 770
- PARSHIN, A. YA., PESHKOV, V. P. (Acad. Sci. USSR, Phys. Prob. Inst., Moscow, USSR): On Mössbauer thermometry in the millikelvin region. *J. Low Temp. Phys.* 15 (1974) 417
- PAVESE, F. (Natl. Res. Council Italy, Ist. Metrol. G. Colonnetti, Sezione Termometrica, Strada Cacce 73, 10135 Torino, Italy): An accurate equation for the V-T characteristic of GaAs diode thermometers in the 4-300 K range. *Cryogenics* 14 (1974) 425
- PETERSTRÖM, S., HOLMÉN, G. (Chalmers Univ. Technol., Dept. Phys., S-40220 Gothenburg 5, Sweden): Isothermal annealing of boron implanted silicon. *Phys. Scr.* 10 (1974) 142
- PETZEL, T. (Hsch. Bundeswehr Hamburg, Hamburg, GFR): The thermodynamics of vaporization of europium(II)telluride. *High. Temp. Sci.* 6 (1974) 246
- PHILIPPE, R., JAMBON, C. (Univ. Claude Bernard, Dept. Chim. et Biochim., Lab. Chim. Anal. 1, 43 Blvd. 11 Novembre 1918, 69621 Villeurbanne, France): Variation des grandeurs thermodynamiques d'excès avec la température. Application au système diméthylsilfoxyde + eau. *J. Chim. Phys.* 71 (1974) 1041
- PHUTELA, R. C., ARORA, P. S., SINGH, P. P. (Punjab Agr. Univ., Dept. Chem. and Biochem., Ludhiana, India): Excess enthalpies at 308,15K of chloroform + pyridine + α -picoline, + β -picoline, + γ -picoline, and + cyclohexane. *J. Chem. Thermodyn.* 6 (1974) 801
- PIACENTE, V., BALDUCCI, G. (Univ. Rome, Ist. Chim., Lab. Chim. Fis. and Elettrochim., Rome 00185, Italy): The dissociation energy of the molecule GaSb. *High Temp. Sci.* 6 (1974) 254
- POLK, D. E., CHEN, H. S. (Bell Tel. Labs. Inc., Murray Hill, N. J., 07974 USA): Formation and thermal properties of glassy Ni-Fe based alloys. *J. Non-Cryst. Solids* 15 (1974) 165

- POLOVOV, V. M. (Acad. Sci. USSR, Solid State Phys. Inst., Moscow, USSR): Specific heat of a chromium single crystal at 80–345°K. *Zh. Eksp. Teoret. Fiz.* 66 (1974) 2164 (In Russian)
- POLYANSKY, N. G., LIPUNOV, I. N., ISAEVA, G. Y., AKOPOV, G. A., GORBUNOV, G. V. (Tambov Chem. Machinery Inst., Tambov, USSR): Application of infrared spectroscopy for studying thermal stability of phosphoric acid cationite in oxidative media. *Zh. Fiz. Khim.* 48 (1974) 2048 (In Russian)
- POMMIER, J. C., KUIVILA, H. G. (State Univ. New York, Dept. Chem., Albany, N.Y., 12222 USA): Thermal decomposition of 4-tosyloxybutyltrimethyltin: three pathways in the protonolysis of 3-butenyltrimethyltin. *J. Organometall. Chem.* 74 (1974) 67
- Poo, G. S. (Univ. Malaya, Dept. Phys., Kuala Lumpur, Malaysia): Temperature dependence of local magnetic moments in dilute alloys. *Phys. Lett. A* 48 (1974) 273
- POULIS, J. A. (Univ. Techn., Dept. Phys., Eindhoven, Netherlands): An approach to thermodynamics. *Thermochim. Acta* 10 (1974) 1
- PREDEL, B., OEHME, G. (Univ. Stuttgart, Inst. Met., Stuttgart, GFR): Thermodynamische Eigenschaften der Verbindung Hg_5Ti_2 und Analyse der Mischungsenthalpien flüssiger Quecksilber – Thallium – Legierungen unter dem Aspekt eines Assoziationsgleichgewichts. *Z. Metallk.* 65 (1974) 509
- PROCHÁZKA, M., REJMANOVÁ, P., RYBA, O. (Czechoslovak Acad. Sci., Inst. Macromolec. Chem., 16206 Prague 6, Czechoslovakia): Thermal decomposition of arylazo(methyl) malononitriles. *Collect. Czech. Chem. Commun.* 39 (1974) 2404
- PRODAN, E. A., PAVLYUCHENKY, M. M., LESNIKOVICH, L. A. (Acad. Sci. BeSSR, Gen. and Inorg. Chem. Inst., Minsk, BeSSR): Effect of steam on thermal conversion of $Na_5P_3O_{10} \cdot 6H_2O$ hexahydrate into form of sodium tripolyphosphate. *Zh. Prikl. Khim.* 47 (1974) 980 (In Russian)
- PROKHORENKO, V. Ya., GAPCHIN, B. M., KONSTANTINOVA, G. V.: Calculation of the resistivity temperature dependence of liquid metals. *Izv. Akad. Nauk SSSR Metall. transl. Russ. Met.* (1973) 50
- PUDOVIK, A. N., SUDAREV, I. I., PASHINKIN, A. P., KOVALENKO, V. I., KIBARDIN, A. M., GAZIZOV, T. KH. (A. E. Arbuzov Org. and Phys. Chem. Inst., Kazan, USSR): On thermal decomposition of α -trimethylsilyloxyderivatives of tetracoordinate phosphorus. *Dokl. Akad. Nauk SSSR* 218 (1974) 359 (In Russian)
- QUADRIFOGLIO, F., CRESCENZI, V. (Univ. Trieste, Inst. Chem., Lab. Macromolec. Chem., Trieste, Italy): On the binding of actinomycin and of daunomycin to DNA: A calorimetric and spectrographic investigation. *Biophys. Chem.* 2 (1974) 64
- RABETTE, P., OLIVIER, D. (Univ. Paris 6, Lab. Chim. Solides, 4 Pl. Jussieu, 75230 Paris, France): Thermal decomposition of reduced and non-reduced silicomolybdic acids (isomer α). — Nature and oxidation — reduction reactivity of oxides obtained. *J. Less-Common Metals* 36 (1974) 299
- RABETTE, P., OLIVIER, D., PEZERAT, H. (Univ. Paris 6, Lab. Chim. Solides, 4 Pl. Jussieu, 75230 Paris, France): Décomposition thermique des isomères α des acides silicomolybdiques cristallisés. Nature des phases obtenues. *Rev. Chim. Miner.* 11 (1974) 151
- RANDZIO, S., BOJARSKI, K. (Polish Acad. Sci., Inst. Phys. Chem. 01224 Warsaw, Poland): Calorimetric measurements of heat of hydrogen desorption from non-stoichiometric chromium hydrides. *Rocz. Chem.* 48 (1974) 1375
- RAPAPORT, N. L., IOFFE, O. V., ALLAKHVERDOV, G. R., STEPN, B. D. (All Union Reactor Chem. and Spec. Pure Chem. Subst. Inst., Moscow, USSR): Thermal and elastic characteristics of potassium, rubidium and cesium hexachlorotellurates. *Zh. Fiz. Khim.* 48 (1974) 1972 (In Russian)
- REICHEL, W. H., STARK, E. E., STRATTON, T. F. (Univ. Calif., Los Alamos Sci. Lab., Los Alamos, N. M., 87544 USA): A gas calorimeter for use at 10.6 μ m. *Opt. Commun* 11 (1974) 305
- REKIN, A. D. (Baranov Cent. Aviat. Machines Inst., Baranov, USSR): A calori-

- metric system for continuous enthalpy measurement on a high-temperature gas flow. *Teplofiz. Vysok. Temp.* transl. *High Temp.* 11 (1973) 1186
- REUCROFT, P. J., GHOSH, S. K. (Univ. Kentucky, Dept. Met. Engn. and Mat. Sci., Lexington, Ky., 40506 USA): Temperature dependence of the dark current in amorphous poly(N-vinylcarbazole) films. *J. Non-Cryst. Solids* 15 (1974) 399
- ROMANOVSKAYA, V. G., FINKELSTEIN, N. A.: Reaction of lithium, rubidium and barium chlorides and sulfates in melts. *Zh. Neorg. Khim.* 19 (1974) 2244 (In Russian)
- ROSENBAUM, R. L., LANDAU, J., ECKSTEIN, Y. (Tel Aviv Univ., Dept. Phys. and Astronomy, Ramat Aviv, Tel Aviv, Israel): Temperature, pressure and concentration dependence of the thermal conductivity of very dilute solutions of ^3He in superfluid ^4He . *J. Low. Temp. Phys.* 16 (1974) 131
- ROSS, P. D., GOLDBERG, R. N. (Natl. Inst. Arthritis, Metabolism and Digestive Diseases, Lab. Molecular Biol., Natl. Inst. Health, Bethesda, Md., 20014 USA): A scanning microcalorimeter for thermally induced transitions in solution. *Thermochim. Acta* 10 (1974) 143
- ROTH, K. H., FLECK, R. G., TAPLIN, D. M. R. (Rubbermaid Ltd., Toronto, Ont. Canada): The role of solutes during intergranular failure of zinc under isothermal and thermal cycling creep. *Mater. Sci. Eng.* 16 (1974) 251
- RUBINSON, M., STEINFELD, J. I. (MIT, Dept. Chem., Cambridge, Mass., 02139 USA): Entropy analysis of product energy distributions in nonreactive inelastic collisions. *Chem. Phys.* 4 (1974) 467
- RUBTSOV, Y. I., MANELIS, G. B., GRIGOROVICH, Z. I., ROSOLOVSKII, V. Y.: Thermal decomposition kinetics of aqueous perchloric acid solutions. *Zh. Fiz. Khim.* 48 (1974) 1394 (In Russian)
- RUBTSOV, Y. I., MANELIS, G. B., GRIGOROVICH, Z. I., ROSOLOVSKII, V. Y.: Thermal decomposition kinetics of aqueous perchloric solutions in a region of high HClO_4 concentrations. *Zh. Fiz. Khim.* 48 (1974) 1399 (In Russian)
- RUPERT, G. N. (Hughes Res. Labs., Malibu, Calif., 90265 USA): Calibrated derivative thermal analysis apparatus for detecting phase transitions in high temperature materials. *Rev. Sci. Instrum.* 45 (1974) 1127
- RUSIN, A. D., YAKOVLEV, O. P., ERESHKO, N.A. (Moscow State Univ., Phys. Chem. Dept., Moscow, USSR): Enthalpies of formation of silicon subchlorides. *Vestn. Mosk. Univ. Khim.* (1974) 154 (In Russian)
- SABBAH, R., CHASTEL, R., LAFFITTE, M. (CNRS, Ctr. Rech. Microcalorimetrie et Thermochim., 26 Rue 141ème R.I.A. 13003 Marseille, France): Thermodynamique de composés azotés. I. Étude calorimétrique des trois acides aminobenzoïques. *Can. J. Chem.* 52 (1974) 2201
- SAFONOV, V. V., LEMESHKO, O. V., CHERNYKH, S. M., KORSHUNOV, B. G. (M. V. Lomonosov Fine Chem. Technol. Inst., Moscow, USSR): Tensimetric and thermogravimetric studies of TeI_4 and Me_2TeI_6 stability. *Zh. Neorg. Khim.* 19 (1974) 1454 (In Russian)
- SAKSENA, M. P., HARMINDER (Univ. Rajasthan, Phys. Dept., Jaipur 302004, India): Thermal conductivity of binary liquid mixtures. *Chem. Phys. Lett* 27 (1974) 448
- SAKSENA, M. P., HARMINDER (Univ. Rajasthan, Phys. Dept., Jaipur 302004, India): Thermal conductivity of binary liquid mixtures. *Ind. Eng. Chem. Fundam.* 13 (1974) 245
- SAMATOV, A. G., MARKOVA, I. F., ZHELIGOVSKAYA, N. N. (Moscow State Univ., Inorg. Chem. Dept., Moscow, USSR): A study of dehydration processes of platinum compounds by derivatographic method. *Vestn. Mosk. Univ. Khim.* 15 (1974) 360 (In Russian)
- SAMCHENKO, Z. A., NEKRYACH, E. F., KURILENKO, O. D. (Acad. Sci. UkSSR, Colloidal Chem. and Water Chem. Inst., Kiev, UkSSR): Calorimetric study of exchange of heterovalent ions on sulphosterol cation exchange resin "KY"-2. *Ukr. Khim. Zh.* 40 (1974) 707 (In Russian)
- SAMOILOV, S. M., SEMENOVA, L. S., ITSIKSON, L. B., TSATSKINA, T. Z., MONASTYRSKII, V. N. (All Union Petr. Reproc. Res. Inst. Moscow, USSR): Study of the mechanism of thermal degradation of copolymers of ethylene with vinylphosphonic acid esters. *Vysokomol. Soedin. A* 16 (1974) 1873 (In Russian)
- SAMOSEIKO, T. N., PAVLYUCHENKO, M. M.,

- PRODAN, E. A. (Acad. Sci. BeSSR, Gen. and Inorg. Chem. Inst., Minsk, BeSSR): Effect of gaseous medium on thermal stability and decomposition rate of ammonium bicarbonate. *Zh. Prikl. Khim.* 47 (1974) 963 (In Russian)
- SARID, D., CANNELL, D. S. (Univ. Calif., Dept. Phys., Santa Barbara, Calif., 93106 USA): A ± 15 microdegree temperature controller. *Rev. Sci. Instrum.* 45 (1974) 1082
- SAVITSKII, A. V., SHUBOCHKIN, L. K.: Structure and catalytic properties of oxygenic compounds of transition metals. 5. Thermogravimetry of cobalt carriers of oxygen. *Zh. Obshch. Khim.* 44 (1974) 1426 (In Russian)
- SAVVATIMSKII, A. I. (Acad. Sci. USSR, High Temp. Inst., Moscow, USSR): Heat of melting and electrical conductivity of niobium and rhodium at the melting point. *Teplofiz. Vysok. Temp.* transl. *High Temp.* 11 (1973) 1057
- SAZANOV, YU. N., SYSOEV, V. A. (High Molec. Weight Cpd. Inst., Leningrad, USSR): Investigation of conversion of polyamido acid into polyimide by thermovolumetric analysis. *Eur. Polym. J.* 10 (1974) 867
- SCHERZER, K., KNOLL, H., GEISELER, G. (Karl Marx Univ., Sekt. Chem., Linne Str. 18, 701 Leipzig, GDR): Zur Kinetik des termischen Zerfalls von Pentandion-(2,3). II. Thermische und durch Methylradikale initiierte Spaltung von Pentandion-(2,3) bei geringen Umsätzen. *J. Prakt. Chem.* 316 (1974) 415
- SCHOENFELD, I., BERMAN, A. (Soreq. Nucl. Res. Ctr., Yavne, Israel): Spectrochemical method for determination of tellurium in geological materials. *Anal. Chem.* 46 (1974) 1826
- SCHULZ, G. O., HARWOOD, H. J. (Univ. Akron, Inst. Polymer Sci., Akron, Ohio, 44325 USA): Thermal decomposition of poly(tert-butyl N-vinylcarbamate). *J. Polym. Sci. Polym. Chem. Ed.* 12 (1974) 1451
- SCHUMM, R. H., PROSEN, E. J., WAGMAN, D. D. (NBS, Inst. Mat. Res., Washington, D. C., 20234 USA): Enthalpy of formation of phosphorus pentachloride; derivation of the enthalpy of formation of aqueous orthophosphoric acid. *J. Res. Nat. Bur. Stand. A* 78 (1974) 375
- SEEL, F. BLIEFERT, C. (c/o C. Bliefert, Fach. H. Sch. Münster, Fachbereich Chem., 44 Münster, GFR): Über die Bildung von HNO durch thermische Zersetzung des Natriumsalzes der Benzolsulphhydroxamsäure. *Z. Anorg. Allg. Chem.* 406 (1974) 277
- SELLERS, G. J., ANDERSON, A. C. (Univ. Illinois, Dept. Phys., Urbana, Ill., 61801 USA): Calorimetry below 1 K: The specific heat of copper. *Rev. Sci. Instr.* 45 (1974) 1256
- SEMENENKO, K. N., KRAVCHENKO, O. V., KOROBOV, I. I.: Thermography of the reaction in aluminium borohydride-tetra-butylammonium borohydride (iodide) systems. *Zh. Neorg. Khim.* 19 (1974) 1696 (In Russian)
- SENÖ, M., IWAMOTO, K., ASAHARA, T. (Univ. Tokyo, Inst. Ind. Sci., Minato 106, Tokyo, Japan): Thermochemical studies on platinum-olefin complexes. I. *Bull. Chem. Soc. Japan* 47 (1974) 2189
- SERES, I., SZABÓ, Z. G. (József Attila Univ., Dept. Inorg. Anal. Chem., Szeged, Hungary): The thermal decomposition of diethyl ether. I. *Magy. Kém. Foly.* 80 (1974) 337 (In Hungarian)
- SERES, I., HUHN, P. (József Attila Univ., Dept. Inorg. Anal. Chem., Szeged, Hungary): The thermal decomposition of diethyl ether. II. *Magy. Kém. Foly.* 80 (1974) 343 (In Hungarian)
- SERGEEV, G. B., SMIRNOV, V. V., BAKARINOVA, G. A. (Moscow State Univ., Chem. Kinetics Dept., Moscow, USSR): The thermodynamic characteristics of bromine, iodine, and iodine chloride complexes with olefins. *Vestn. Mosk. Univ. Khim.* 15 (1974) 358 (In Russian)
- SHARMA, S. K., THEINER, W. A., GESERICH, H. P. (Natl. Phys. Lab., New Delhi, India): DTA investigations on amorphous FeSi₂. *Phys. Status Solidi A* 25 (1974) K65
- SHATSKII, V. M., CHUVAEV, V. F., BASHKOV, B. I., GREVTSEV, A. M., KOMISSAROVA, L. N. (M. V. Lomonosov State Univ., Inorg. Chem. Dept., Moscow, USSR): The composition and thermal stability of basic scandium sulfates of alunite type. *Zh. Neorg. Khim.* 19 (1974) 2327 (In Russian)
- SHEINDLIN, A. E., BELEVICH, I. S., KOZHEVNIKOV, I. G. (Acad. Sci. USSR, High

- Temp. Inst., Moscow, USSR): Enthalpy and heat capacity of some silicified graphites and silicon carbide. *Teplofiz. Vysok. Temp.* transl. *High Temp.* 12 (1974) 189
- SHELTON, J. R., DAVIS, K. E. (Case Western Reserve Univ., Dept. Chem., Cleveland, Ohio, 44106 USA): Decomposition of sulfides. I. Factors which influence the rate of thermolysis. *Int. J. Sulfur Chem.* 8 (1973) 197
- SHIMADA, S., FURUICHI, R., ISHII, T. (Hokkaido Univ., Fac. Engn. Dept. Appl. Chem., Sapporo 060, Japan): Effect of additive on solid state reaction. II. A thermoanalytical study of the effect of fluorides on the formation of $MgAl_2O_4$ in initial stage. *Bull. Chem. Soc. Jap.* 47 (1974) 2031
- SHIMIZU, N., NISHIDA, S. (Hokkaido Univ., Fac. Sci., Dept. Chem., Sapporo, Hokkaido, Japan): Distinctive thermal behaviour of geometrically isomeric oxetans. *J. Chem. Soc. Chem. Commun.* (1974) 734
- SHIROKOV, N. I.: Thermodynamic properties of chromous oxide. *Izv. Akad. Nauk SSSR Metall.* transl. *Russ. Met.* (1973) 73
- SHUBOCHKIN, L. K., GUSHCHIN, V. I., SHUBOCHKINA, E. F. (N. S. Kurnakov Gen. and Inorg. Chem. Inst., Moscow, USSR): Thermal stability of potassium monoaminetrichloroplatinate(II). *Zh. Neorg. Khim.* 19 (1974) 2230 (In Russian)
- SHUR, V. B., BERKOVITCH, E. G., VASILJEVA, L. B., KUDRYAVTSEV, R. V., VOL'PIN, M. E. (Acad. Sci. USSR, Organo Element Compounds Inst., Moscow, USSR): Amine formation in the thermodecomposition of diaryltitanocenes in the presence of dinitrogen. *J. Organometall. Chem.* 78 (1974) 127
- SICHEL, E. K., SERIN, B., REVELLI, J. F. (RCA Labs., Princeton, N. J., 08540 USA): Thermal conductance of layer structure dichalcogenides. *J. Low Temp. Phys.* 16 (1974) 229
- SINGH, M., VERMA, G. S. (Banaras Hindu Univ., Phys. Dept., Solid State Sect., Varanasi 221005, India): Lattice thermal conductivity of p-type III-V semiconductors and p-Si at low temperatures. *J. Phys.* 35 (1974) 571
- SIRTL, E., HUNT, L. P., SAWYER, D. H. (Consortium Electrochem. Ind. GmbH, Zielstatt Str. 20, 8 München 70, GFR): High temperature reactions in the silicon-hydrogen-chlorine system. *J. Electrochem. Soc.* 121 (1974) 919
- SKOROKHODOV, I. I., DITSENT, V. E., VOVSHIN, E. I.: Study of rearrangement of siloxane bonds during thermal transformations of methylphenylcyclotrisiloxanes. *Vysokomol. Soedin. B* 16 (1974) 716 (In Russian)
- SLUBY, H. (Sch. Med. Wrocław, Inst. Chem. and Chem. Technol. Med. Prod., Dept. Inorg. Chem., 50139 Wrocław, Poland): Thermodynamic investigation of molten salt solutions. System $CuCl-TiCl$. *Rocz. Chem.* 48 (1974) 915
- SLAVINA, N. G., PLETYUSHKIN, A. A. (A. A. Baikov Met. Inst., Moscow, USSR): Thermodynamic $AlCl_3 \cdot NH_3$ functions. *Zh. Fiz. Khim.* 48 (1974) 1530 (In Russian)
- SLOTFELDT-ELLINGSEN, D., PEDERSEN, B. (Cent. Inst. Ind. Res., Blindern, Oslo, Norway): X-ray, NMR, and DTA study of the TaD_x system and a critical evaluation of the TaH_x phase diagram. *Phys. Status Solidi A* 25 (1974) 115
- SMETKIN, V. A., OKOLESNOVA, L. N., KUZNETSOV, Y. I., PETRAKOV, L. A., BARSKAYA, I. O. (All Union Pellicular Mat. and Synth. Leather Inst., Moscow, USSR): Device for automatic recording of thermomechanical properties of polymers. *Zavod. Lab.* 40 (1974) 472 (In Russian)
- SMIŠEK, M., KŘEŠŤANOVÁ, V. (Czechosl. Acad. Sci., Ustav Anorg. Chem., Prague, Czechoslovakia): Reaction calorimeter. *Chem. Listy* 68 (1974) 738 (In Czech)
- SNOW, M. R., THOMAS, R. J. (Univ. Adelaide, Dept. Phys. and Inorg. Chem., POB 4980, Adelaide 5001, S. Australia): The solid state isomerization and thermal decomposition of pentamminethiocyanatocobalt(III)salts, $[Co(NH_3)_5SCN]X_2$ ($X = Cl, SCN$). *Aust. J. Chem.* 27 (1974) 1391
- ŠOLC, M. (Czechosl. Acad. Sci., Inst. Inorg. Chem., 16000 Prague 6, Czechoslovakia): Information entropy of unimolecular chemical reaction. *Z. Phys. Chem. Frankfurt* 91 (1974) 219
- SOLOV'YEV, V. A.: The relationship between the latent heat of melting of elements and the heat content at the melting point. *Izv. Akad. Nauk SSSR Metall.* transl. *Russ. Met.* (1973) 66

- SORAI, M., NAKAMURA, T., SEKI, S. (Osaka Univ., Fac. Sci., Dept. Chem., Toyonaka Osaka, 560, Japan): Heat capacity of nematogenic N-p-ethoxybenzylidene-p'-butylaniline between 14 and 375 K. *Bull. Chem. Soc. Jap.* 47 (1974) 2192
- SORIA, J. (Consejo Super Invest. Cient., Dept. Catalisis, Serrano 119, Madrid, Spain): Thermal decomposition of pentaerythritol treatment. *An. Fiz.* 70 (1974) 113
- SOUMA, I., KOTSUKA, K. (Govt. Ind. Res. Inst., Midorigaoka, Ikeda 563, Japan): Pyrolysis of iron phtalocyanine. *J. Chem. Soc. Jap. Chem. Ind. Chem.* (1974) 1811 (In Japanese)
- SPEAR, W. E., LOVELAND, R. J., AL-SHARBATY, A. (Univ. Dundee, Carnegie Lab. Phys., Dundee, England): The temperature dependence of photoconductivity in α -Si. *J. Non-Cryst. Solids* 15 (1974) 410
- SRINIVASAN, S. (Indian Inst. Technol., Dept. Phys., Madras 600036, India): The thermal transformations in solid ammonium nitrate containing potassium and caesium ions. *Acta Crystallogr. A* 30 (1974) 678
- STANLEY, D. J. (Univ. Toronto, Dept. Phys., Toronto, Ont., Canada): Low-temperature magnetothermopower of silver. *Proc. Roy. Soc. London A* 339 (1974) 97
- STEARNS, C. A., KOHL, F. J., FRYBURG, G. C. (NASA, Lewis Res. Ctr., Cleveland, Ohio, 44135 USA): Oxidative vaporization kinetics of Cr_2O_3 in oxygen from 1000° to 1300°C. *J. Electrochem. Soc.* 121 (1974) 945
- STELMAKH, S. I., ZIMMERSGAKL, V. A., SHEKA, I. A. (Acad. Sci. UKSSR, Gen. and Inorg. Chem. Inst., Kiev, UKSSR): Thermal analysis of the system In—Pb—Bi. *Ukr. Khim. Zh.* 40 (1974) 762 (In Russian)
- ŠTOKR, J., RUŽIČKA, Z., EKVAL, S. R. (Czechosl. Acad. Sci., Inst. Macromolek. Chem., 16206 Prague 6, Czechoslovakia): A variable temperature cell for the measurement of infrared spectra. *Appl. Spectrosc.* 28 (1974) 479
- STOROZHENKO, V. N. (F. E. Dzerzhinskii Chem. Technol. Inst., Dnepropetrovsk, UKSSR): Thermodynamics of aluminium chloride reaction with sodium chloride in a melt of equimolecular composition. *Zh. Fiz. Khim.* 48 (1974) 1709 (In Russian)
- STRØMME, K. O. (Univ. Oslo, Dept. Chem., Blindern Oslo, 3, Norway): The crystal structure of the high-temperature phases of ammonium and potassium tetrafluoroborate. *Acta Chem. Scand. A* 28 (1974) 546
- STRUPLER, N., HOFFELT, J. (Fac. Sci. Pharm. and Biol., Paris, 4 Ave Observ., Paris 6, France): Étude de la déshydratation d'alu-
luns de vanadium. I. Analyse thermogravimétrique et analyse thermique différentielle. Étude aux rayons X. *Bull. Soc. Chim. Fr. I.* (1974) 1827
- STULOVA, M. I., MARTYNOVA, N. S., SUSAREV, M. P.: Determining enthalpies of formation of $2\text{KCl} \cdot \text{ZnCl}_2$ and $\text{KCl} \cdot 2\text{ZnCl}_2$ compounds. *Zh. Neorg. Khim.* 19 (1974) 2271 (In Russian)
- SUKHOVEI, K. S., ANISHIN, V. F., PAUKOV, I. E. (Acad. Sci. USSR, Inorg. Chem. Inst., Novosibirsk, USSR): Vakuüm adiabatic microcalorimeter of 0.3 cm³ volume for thermodynamic studies of substances in 12—320 K range. *Zh. Fiz. Khim.* 48 (1974) 1589 (In Russian)
- SUURKUUSH, J., WADSÖ, I. (Univ. Lund, Chem. Ctr., Thermochem. Lab., S-22007 Lund, Sweden): Design and testing of an improved precise drop calorimeter for the measurement of the heat capacity of small samples. *J. Chem. Thermodyn.* 6 (1974) 667
- SUZUKI, M. (Univ. Tokyo, Dept. Phys., Bunkyo, Tokyo, Japan): On the critical anomaly of thermal conductivity near the λ -transition. *Phys. Lett. A* 48 (1974) 315
- SWAMY, K. N. (Nagpur Univ., Dept. Chem., Nagpur, India): Excess entropy of mixing liquids. *Indian J. Pure Appl. Phys.* 12 (1974) 202
- SZEPESSY, L., ILLÉS, V., WELTHER, K., HORVÁTH, A., SIMON, J. (Magyar Ásványolaj és Földgáz Kísérleti Int., Budapest, Hungary): Production of olefins by thermal cracking of liquid hydrocarbons. *Magy. Kém. Lapja* 29 (1974) 336 (In Hungarian)
- SZUNIEWICZ, R., MANITIUS, A. (Automatic Control Chem. and Oil Ind., Res. and Dev. Ctr., 01.793 Warsaw, Poland): Estimation of parameters in differential equations of reaction kinetics in a solid based on thermogravimetric data. *Chem. Eng. Sci.* 29 (1974) 1701
- TAKAYANAGI, M. (Kyushu Univ., Fac. Engn., Dept. Appl. Chem., Fukuoka 812,

- Japan): Some morphological factors in thermomechanical analysis of crystalline polymers. *J. Macromol. Sci. Phys. B* 9 (1974) 391
- TANAKA, T., FUJIMOTO, T., SHIBAYAMA, K. (Mitsubishi Elect. Corp. Cent. Res. Lab., Amagasaki, Hyogo, Japan): Effects of thermal treatment on the structure and properties of soluble heat-resisting polymers. *Jap. Polymer Sci. Techn.* 31 (1974) 450
- TANEVSKA-OSINSKA, S., PEKARSKI, G. (Lodz Univ., Łódź, Poland): Calorimetry of NaI solutions in 2-propanol and its mixture with water. *Zh. Obshch. Khim.* 44 (1974) 1665 (In Russian)
- TAUB, H., WILLIAMSON, S. J., REED, W. A., HSU, F. S. L. (Brookhaven Natl. Lab., Dept. Phys., Upton, N. Y., 11973 USA): Specific heat and resistivity of GdSb and HoSb above the Néel temperature. *Solid State Commun.* 15 (1974) 185
- TAYLOR, E. L., BERTRAND, G. L. (c/o G. L. Bertrand, Univ. Missouri, Dept. Chem., Rolla, Mo., 65401 USA): Thermochemical investigations of nearly ideal binary solvents. I. Standard heats and volume changes of solution in methanol-isopropanol mixtures at 25°C. *J. Solut. Chem.* 3 (1974) 479
- THINH, T. P., RAMALHO, R. S., KALIAGUINE, S. C. (c/o R. S. Ramalho, Minist. Transports, Complex Sci. Quebec, Lab. Cent., 555 Blvd. Henri IV, Montreal G1V 4C7 Quebec, Canada): Direct determination of enthalpy data for n-heptane by flow calorimetry. *J. Chem. Eng. Data* 19 (1974) 193
- THOMPSON, H. W. (Rutgers State Univ., Dept. Chem., Carl A. Olson Mem. Labs., Newark, N. J., 07102 USA): Reports from the commission on analytical nomenclature of the analytical chemistry division. Recommendations for nomenclature of thermal analysis. *Pure Appl. Chem.* 37 (1974) 439
- TODOKI, M., KAWAGUCHI, T. (Toray Ind. Inc., Pioneering Res. and Dev. Labs. Sonoyama 3-Chome, Otsu, 520 Shiga, Japan): Melting behaviour of drawn nylon 6 yarns annealed without tension. *Jap. Polymer Sci. Technol.* 31 (1974) 427 (In Japanese)
- TOMLINS, R. P., ADAMSON, M. (Univ. New England, Dept. Phys. and Inorg. Chem., Armidale 2351, New S. Wales, Australia): Excess enthalpies of tetrakis-(2-ethylbutoxy)-silane + cyclohexane, + benzene, and + carbon tetrachloride at 298.15, 308.15 and 318.15 K. *J. Chem. Thermodyn.* 6 (1974) 757
- TONG, H. C., WAYMAN, C. M. (IBM Corp., Gen. Prod. Div., San Jose, Calif., 95114 USA): A simplified calorimeter for determining latent heats of martensitic transformations at low temperatures. *Met. Trans.* 5 (1974) 1945
- TOSSON, S., EL-MAHDY, O. R., SAAD, N. A. (Alexandria Univ., Geol. Dept., Alexandria, UAR): Differential thermal and thermogravimetric analyses of the Bahariya iron ore deposits. *Egypt. Bull. Soc. Fr. Mineral. Crist.* 97 (1974) 27
- TREFILOV, V. I.: On formation of high-temperature 2-MoC_{1-x} carbide in low-alloyed molybdenum alloys. *Fiz. Metal. Metalloved.* 37 (1974) 1312 (In Russian)
- TROITSKAYA, A. D., BURMISTROVA, N. P., LEVSHINA, G. A., GOGOLYUKHINA, L. F. (S. M. Kirov Chem. Technol. Inst., Kazan, USSR): Thermal decomposition of platinum(II) and palladium(II) complexes. *Zh. Obshch. Khim.* 44 (1974) 1836 (In Russian)
- TSAGAREISHVILI, D. SH., GVELESIANI, G. G. (Acad. Sci. GeSSR, Met. Inst., Tbilisi, GeSSR): Enthalpy and heat capacity of magnesium oxide at high temperatures. *Teplofiz. Vysok. Temp.* transl. *High Temp. USSR* 12 (1974) 183
- TSUCHIDA, T., KONDO, M., FURUICHI, R., ISHII, T. (Hokkaido Univ., Fac. Engn., Dept. Appl. Chem., Sapporo 060, Japan): Transformation of η -Al₂O₃ prepared by thermal decomposition of Al₂(SO₄)₃·18H₂O and Al(NO₃)₃·9H₂O to α -Al₂O₃ and ZnAl₂O₄ formation. *J. Chem. Soc. Jap. Chem. Ind. Chem.* (1974) 1443 (In Japanese)
- TSUR, Y., FREILICH, Y. L., LEVY, M. (Weizmann Inst. Sci., Dept. Plast. Res., Rehovot, Israel): TGA-MS degradation studies of some new aliphatic-aromatic polybenzimidazoles. *J. Polym. Sci.* 12 (1974) 1531
- TSURUTA, H., KUMAGAI, T., MUKAI, T. (Tohoku Univ., Fac. Sci., Dept. Chem., Aramaki Sendai, 980, Japan): Thermal and photochemical reactions of C₉H₁₀ hydrocarbons. *J. Syn. Org. Chem. Jap.* 32 (1974) 496 (In Japanese)
- TSYPIN, M. I., OSTROVSKAYA, L. M., DANIE-

- LIYA, G. V. (Moscow Non-ferrous Met. Reproc., Res. and Design Inst., Moscow, USSR): Application of a method of simple lattices for graphing of composition-heat conductivity diagrams of lead telluride systems. *Zavod. Lab.* 40 (1974) 848 (In Russian)
- TSYRENOVA, S. B., SUPONITSKII, Y. L., KARAPETYANTS, M. K. (D. I. Mendeleev Chem. Technol. Inst., Moscow, USSR): Comparative study of thermal properties of oxygen-containing compounds of rare earth elements, scandium and yttrium. 3. Thermochemical properties of praseodymium chromates. *Zh. Fiz. Khim.* 48 (1974) 1560 (In Russian)
- USOVA, L. G., SOKOLOV, N. A., ALEKSANDROV, I. A. (N. I. Lobachevskii State Univ., Chem. Inst., Gorki, USSR): Kinetics and mechanism of alkaline organometallic peroxide thermal decomposition. *Dokl. Akad. Nauk SSSR* 217 (1974) 1337 (In Russian)
- VALIEV, K. A., MAKEROV, V. G., GOLIEV, G. B.: Anomaly of temperature dependence of optical properties of vanadium dioxide near the semiconductor — metal phase transition. *Fiz. Tverd. Tela* 16 (1974) 2361 (In Russian)
- VAN DIEMEN, A. J. G., HOUTEPEN, C. J. M., STEIN, H. N. (Technol. Univ. Eindhoven, Lab. Gen. Chem., Eindhoven, Netherlands): Thermodynamic properties of 2-propanol + 2-bromopropane mixtures. *J. Chem. Thermodyn.* 6 (1974) 805
- VAN HOODYDONK, G. (Rijks Univ. Gent, Cent. Bibliotheek, Gent, Belgium): On the thermochemical and electrochemical series of elements. *Z. Naturforsch. A* 29 (1974) 969
- VARMA, I. K., GROVER, S. S. (Indian Inst. Technol., Dept. Chem., New Delhi 29, India): Thermal degradation of some model compounds of PVC. *Makromol. Chem.* 175 (1974) 2515
- VARMA, I. K., GROVER, S. S. (Indian Inst. Technol., Dept. Chem., New Delhi 29, India): Thermal degradation of polyvinylchloride in phenolic solvents. III. Changes in absorption spectra. *Angew. Macromol. Chem.* 38 (1974) 1
- VASILEV, V. P., KALININA, V. E., LYTIN, A. I. (Ivanovo Chem. Technol. Inst., Ivanovo, USSR): Standard enthalpy of metavanadate-ion formation in aqueous solution. *Zh. Neorg. Khim.* 19 (1974) 1815 (In Russian)
- VASILEV, V. P., KOZLOVSKII, E. V. (Ivanovo Chem. Technol. Inst., Ivanovo, USSR): Temperature effect on thermodynamics of the formation reactions of indium(III) fluoride complexes in aqueous solution. *Zh. Neorg. Khim.* 19 (1974) 1781 (In Russian)
- VASILEV, V. P., KOZLOVSKII, E. V. (Ivanovo Chem. Technol. Inst., Ivanovo, USSR): Thermodynamics of the formation of indium(III)fluoride complexes in aqueous solutions. *Zh. Neorg. Khim.* 19 (1974) 1481 (In Russian)
- VASILEV, V. P., RASKOVA, D. G., BELONOGOVA, A. K., VASILEVA, V. V. (Ivanovo Chem. Technol. Inst., Ivanovo, USSR): Standard enthalpy of formation of aqueous Co^{2+} -ion at 25°C. *Zh. Neorg. Khim.* 19 (1974) 2435 (In Russian)
- VASILEVA, I. A., GRANOVSKAYA, Z. V. (M. V. Lomonosov State Univ., Moscow, USSR): Thermodynamics of zirconium oxides. *Zh. Fiz. Khim.* 48 (1974) 1536 (In Russian)
- VASILEVA, I. A., GRANOVSKAYA, Z. V., SUKHUSHINA, I. S. (M. V. Lomonosov State Univ., Moscow, USSR): Thermodynamics of lower vanadium oxides at 1173–1373 K. *Zh. Fiz. Khim.* 48 (1974) 1539 (In Russian)
- VASILIEV, N. G., OVCHARENKO, F. D., GOLOVKO, L. V. (Acad. Sci. UkSSR, Colloidal Chem. and Water Chem. Inst., Kiev, UkSSR): Surface hydroxyl groups of laminated silicates and their thermal stability. *Dokl. Akad. Nauk SSSR* 217 (1974) 830 (In Russian)
- VATOLIN, N. A., PASTUKHOV, E. A., KERN, E. M. (Acad. Sci. USSR, Ural Sci. Ctr., Met. Inst., Sverdlovsk, USSR): The effect of temperature on the structure of melted iron, nickel, palladium and silicon. *Dokl. Akad. Nauk SSSR* 217 (1974) 127 (In Russian)
- VEPŘEKO, O., RYKL, D., ŠATAVA, V. (Joint Lab. Silicate Chem. Czech. Acad. Sci. and Chem. Univ., Prague, Czechoslovakia): The study of hydrothermal processes by the differential thermal analysis method. *Thermochim. Acta* 10 (1974) 7

- VIJH, A. K. (Hydro Quebec Inst. Res., Varennes, Quebec, Canada): Relationship between activation energies for the thermal oxidation of metals and the semiconductivity of the oxides. *J. Mater. Sci.* 9 (1974) 985
- VISHNEVETSKAYA, L. P., SARYCHEVA, L. P. (Lensovet Technol. Inst., Leningrad, USSR): Heat-resistance of methyl methacrylate and acrylate copolymers. *Zh. Prikl. Khim.* 47 (1974) 1164 (In Russian)
- VITINS, P., EGGER, K. W. (Swiss Fed. Inst. Reactor Res., CH-5303 Würenlingen, Switzerland): The thermochemical kinetics of the retro-'ene' reactions of molecules with the general structure (allyl)-XYH in the gas phase. IX. Unimolecular thermal decomposition of allylmethylamine. *J. Chem. Soc. Perkin Trans. II.* (1974) 1289
- VITINS, P., EGGER, K. W. (Swiss Fed. Inst. Reactor Res., CH-5303 Würenlingen, Switzerland): The thermochemical kinetics of the retro-'ene' reactions of molecules with the general structure (allyl)XYH in the gas phase. X. Unimolecular thermal decomposition of diallyl ether. *J. Chem. Soc. Perkin Trans. II.* (1974) 1292
- VORLIČEK, V. (Czechoslov. Acad. Sci. Ustav Fyz. Pevných Latek, Prague, Czechoslovakia): A new way of using superconductors for thermal insulation. *Česk. Čas. Fys.* A 24 (1974) 280 (In Czech)
- VOROB'EV, A. F., MONAENKOVA, A. S., PADUNOVA, I. D. (Moscow State Univ., Phys. Chem. Dept., Moscow, USSR): The enthalpies of solution of potassium iodide in dimethyl sulfoxide - water mixtures. *Vestn. Mosk. Univ. Khim.* (1974) 148 (In Russian)
- VUSEVKER, J. A., KRAMAROV, O. P., NESTERNKO, P. S., SOKALLO, A. I. (Rostov Don. Univ., Rostov, Don, USSR): Some semiconductive and thermoelectric properties of a Bi-modified PZT ferroelectric ceramic. *Ferroelectrics* 6 (1974) 107
- WAFF, H. S. (Harvard Univ., Hoffman Lab., Cambridge, Mass., 02138 USA): Theoretical considerations of electrical conductivity in a partially molten mantle and implications for geothermometry. *J. Geophys. Res.* 79 (1974) 4003
- WAKI, K., HARAGUCHI, M., YAMASHITA, T. (Toyo Univ., Fac. Engr., Dept. Appl. Chem., Kawagoe 350, Japan): The thermal decomposition of hydrazodicarbonamide. *J. Chem. Soc. Jap. Chem. Ind. Chem.* (1974) 1668 (In Japanese)
- WARREN, M. D., WILSON, W. S. (Australian Defence Sci. Service, Dept. Supply, Defence Standards Labs., POB 50, Ascot Vale, Victoria, 3032 Australia): The thermodynamic properties of the esters of 2,4,6-trinitro-benzoic acid. *Thermochim. Acta* 10 (1974) 33
- WASEDA, Y., YOKOYAMA, K., SUZUKI, K. (Tohoku Univ., Res. Inst. Mineral Dressing and Met., Sendai 980, Japan): Temperature dependence of the structure of liquid mercury up to 250°C. *Phil. Mag.* 29 (1974) 1427
- WATANABE, M. (Chubu Inst. Technol., Dept. Ind. Chem., Matsumoto Kasugai, 487, Japan): Thermal products in the systems of $\text{NaPO}_3\text{-WO}_3$ and $\text{NaPO}_3\text{-Na}_2\text{WO}_4$. *J. Chem. Soc. Jap. Chem. Ind. Chem.* (1974) 1412 (In Japanese)
- WATANABE, M. (Chubu Inst. Technol., Dept. Ind. Chem., Matsumoto Kasugai, 487, Japan): Thermal products in the system of NaPO_3 glass - MoO_3 . *J. Chem. Soc. Jap. Chem. Ind. Chem.* (1974) 1407 (In Japanese)
- WENDLANDT, W. W. (Univ. Houston, Dept. Chem., Houston, Tex., 77004 USA): The thermal properties of inorganic compounds. I. Some mercury(I) and (II) compounds. *Thermochim. Acta* 10 (1974) 101
- WENDLANDT, W. W. (Univ. Houston, Dept. Chem., Houston, Tex., 77004 USA): The thermal analysis of some non-prescription antacids. *Thermochim. Acta* 10 (1974) 93
- WENDLANDT, W. W., COLLINS, L. W. (Univ. Houston, Dept. Chem., Houston, Tex., 77004 USA): The identification of non-prescription internal analgetics by thermal analysis. *Anal. Chim. Acta* 71 (1974) 411
- WENTORF, R. H., HANNEMAN, R. E. (G. E. Corp. Res. and Dev. Ctr., Inorg. and Struct. Branch, P.O.B. 43 Schenectady, N. Y., 12301 USA): Thermochemical hydrogen generation. *Science* 185 (1974) 311
- WILHELM, E., ZETTLER, M., SACKMANN, H. (Univ. Vienna, Inst. Phys. Chem., Währinger Str. 42, A-1090 Vienna, Austria): Molwärmen binärer Systeme aus Cyclo-

- hexan, Kohlenstofftetrachlorid, Siliziumtetrachlorid und Zinntetrachlorid. *Ber. Bunsen Ges. Phys. Chem.* 78 (1974) 795
- WOODFORD, D. A., MOWBRAY, D. F. (G. E. Corp. Res. and Dev. Ctr., Schenectady, N. Y., 12345 USA): Effect of material characteristics and test variables on thermal fatigue of cast superalloys. *Mat. Sci. Engn.* 16 (1974) 5
- WORSWICK, R. D., COWELL, J. C., STAVELEY, L. A. K. (c/o L. A. K. Staveley, Univ. Oxford, Inorg. Chem. Lab., S. Parks Rd., Oxford OX1 3QR, England): Thermodynamic study of disorder in hexa-amminenickel(II)iodide and diamminenickel(II)iodide. *J. Chem. Soc. Faraday Trans. I.* 70 (1974) 1590
- WRÓBEL, A. M., KRYSZEWSKI, M. (Polish Acad. Sci. Molec. and Macromolec. Res. Ctr., Przedzialnana 72, 90338 Łódź, Poland): The structure and thermal stability of glow discharge polysilazane. *Bull. Acad. Pol. Sci. Chim.* 22 (1974) 471
- YAGIHARA, M., KITAHARA, Y., ASAO, T. (Tohoku Univ., Fac. Sci., Dept. Chem., Aramaki Aoba, Sendai 980, Japan): Photolytic and thermal decompositions of 2-diazophenol. Formation of fulvene derivatives. *Chem. Lett.* (1974) 1015
- YAGLOV, V. N., MARINOVA, L. A., NOZIKOV, G. I. (S. M. Kirov Technol. Inst., Minsk, BeSSR): Thermodynamic peculiarities of cobalt and nickel phosphate crystal hydrate dehydration. *Dokl. Akad. Nauk BeSSR* 18 (1974) 624 (In Russian)
- YAMAKAWA, S., STANNETT, V. (Nippon Teleg. and Tel. Publ. Corp., Ibaraki Elect. Comm. Lab., Tokai, Ibaraki, Japan): The thermal stability of radiation grafted poly(vinyl chlorides). *J. Appl. Polym. Sci.* 18 (1974) 2177
- YAMSHCHIKOV, L. F.: Thermodynamic properties of aluminium-rich Ce—Al alloys. *Izv. Akad. Nauk SSSR Metall.* transl. *Russ. Met.* (1973) 163
- YOSHIDA, I., KOBAYASHI, H., UENO, K. (Kyushu Univ., Fac. Engn., Dept. Org. Synth., Hakozaki, Higashi Fukuoka, 812, Japan): Differential thermal analysis of some trivalent metal chelates of 1,5-dialkylpentane-2,4-dionates. *Bull. Chem. Soc. Jap.* 47 (1974) 2203
- YOUNGLOVE, B. A. (NBS, Cryogenics Div., Boulder, Colo., 80302 USA): The specific heats C_p , C_v , of compressed and liquefied methane. *J. Res. Nat. Bur. Stand. A* 78 (1974) 401
- YUNUSOV, B. K. (Tashkent Text. and Light Ind. Inst., Tashkent, UzSSR): Device for measuring isometric and thermomechanical properties of fibers and films. *Zavod. Lab.* 40 (1974) 470 (In Russian)
- YUREV, Y. N., RAZUMOVSKII, S. D.: Effect of polarity of a reaction medium on thermal decomposition rate of 1-hexene ozonide. *Zh. Org. Khim.* 10 (1974) 1145 (In Russian)
- ZAITLIN, M. P., ANDERSON, A. C. (Univ. Illinois, Dept. Phys., Urbana, Ill., 61801 USA): Thermal conductivity of deformed germanium below 1 K. *Phys. Rev. B* 10 (1974) 580
- ZHDANOV, A. A., ANDRIANOV, K. A., MALYKHIN, A. P. (Acad. Sci. USSR, Inst. Organoelement. Cpd., Moscow USSR): Synthesis and investigation of the thermal-oxidative stability of cross-linked polyorganocyclocarbosiloxanes of regular structure. *Vysokomol. Soedin. A* 16 (1974) 1765 (In Russian)
- ZHEREBIN, Y. L., IVANCHEV, S. S., KUZNETSOV, V. I., GALIBEI, N. A. (Plastpolimer Sci. Ind. Assoc., Leningrad, USSR): Thermal destruction kinetics of polyfunctional peroxides with non-equivalent O—O bonds of various heat resistance in solution. *Zh. Obshch. Khim.* 44 (1974) 1630 (In Russian)
- ZIELKE, H., J., LUECKE, W. (c/o W. Luecke, Univ. Karlsruhe, Inst. Petrog. Geochem. Lab., Kaiser Str. 12, D-7500 Karlsruhe, GFR): Thermische Stabilität von Iridium-Komplexen mit unterschiedlichen Liganden bei der AAS-Bestimmung. *Fresenius Z. Anal. Chem.* 271 (1974) 29
- ZIMINA, N. K. (Moscow Transport Engn. Inst., Moscow, USSR): Effect of thermal accommodation on heat conductivity of carbon dioxide at high temperatures. *Zh. Fiz. Khim.* 48 (1974) 1265 (In Russian)
- ZISLINA, S. S., TERMAN, L. M., SEMCHIKOV, YU., D., TIKHONOVA, Z. N., KHVILIVITSKII, R. YA. (Acad. Sci. USSR, Chem. Inst., Gorki, USSR): Thermal degradation of random and alternate copolymers of butyl

- acrylate with styrene. *Vysokomol. Soedin. A* 16 (1974) 1797 (In Russian)
- ZOZULYA, P. V., VEKHTLER, K. Y. (Lensovet Technol. Inst., Leningrad, USSR): Device of high sensitivity for quantitative differential thermal analysis at high temperatures. *Zh. Fiz. Khim.* 48 (1974) 1292 (In Russian)
- ŻYRNICKI, W. (Polytech. Univ. Wrocław, Inst. Inorg. Chem. and Rare Elements Met., 50370 Wrocław, Poland): Thermodynamic functions of zirconium Zr(I) and Zr(II) over the temperature range 3000--15000 K. *Rocz. Chem.* 48 (1974) 1159