

Bibliography Section

- ABBOT, S. D., HALL, R. C., GIAM, C. S. (Texas A. and M. Univ., Dept., Chem., College St., Tex., 77843 USA): An inexpensive and efficient pyrolysis unit for the analysis of picloram and other herbicides by thermal decomposition. *J. Chromatogr.* 45 (1969) 317
- ACHESON, R. J., JACOBS, P. W. M. (Univ. Western Ontario, Dept. Chem., London, Ont., Canada): The thermal decomposition of magnesium perchlorate and of ammonium perchlorate and magnesium perchlorate mixtures. *J. Phys. Chem.* 74 (1970) 281
- ADAMS, G. P., CHARLU, T. V., MARGRAVE, J. L. (Rice Univ., Dept. Chem., Houston, Tex., 77001 USA): Enthalpy of formation of germanium tetrafluoride. *J. Chem. Eng. Data* 15 (1970) 42
- ADONYI, Z., GYARMATHY, G., KILIÁN, J., SZÉKELY, I. (Tech. Univ., Dept. Chem. Technol., Budapesti út 8, Budapest 11, Hungary): Investigations by thermogravimetry into the hydration processes in tricalcium aluminate and tricalcium aluminate-gypsum mixtures. *Per. Polytech. Chem. Eng.* 13 (1969) 131
- AKELLA, J., KENNEDY, G. C. (Univ. California, Inst. Geophys and Planetary Phys., Los Angeles, Calif., 90024 USA): Melting of three organic compounds at high pressures. *J. Chem. Phys.* 52 (1970) 970
- ALLAKHVERDOV, G. R., SEREBKRENNIKOVA, G. M., STEPIN, B. D.: Thermal stability of alkaline metal hexachlorotellurates. *Zh. Neorg. Khim.* 15 (1970) 77 (In Russian)
- AMIROVA, S. A., VOROBEV, N. I., RUPCHEVA, V. A.: Thermal decomposition of anhydrous ferric bromine and its crystal hydrate. *Zh. Prikl. Khim.* 42 (1969) 2683 (In Russian)
- ARBUZOV, B. A., FUZHENKOVA, A. V., ZAIDULLINA, G. K. (Butlerov Chem. Inst., Kazan, USSR): Thermography in studying diene synthesis reactions. IV. Tetracyclone reactions with dimethyl maleate, vinyl acetate and dimethylacetylenedicarboxylate. *Zh. Obshch. Khim.* 39 (1969) 2563 (In Russian)
- ASHCROFT, S. J., KEEN, E., MORTIMER, C. T. (Univ. Keele, Dept. Chem., Keele, Staffs., ST 5 5BG, England): Thermochemistry of formation of sodium polyphosphates from sodium orthophosphates. *Trans. Faraday Soc.*, 65 (1969) 2851
- AUGL, J. M., WRASIDLO, W. J. (US Naval Ordnance Lab., White Oak, Silver Spring, Md., 20910 USA): Synthesis of a spirobenzothiazole polymer and its thermal rearrangement to a polydihydrobenzothiazine. *J. Polymer Sci. A-1*, 8 (1970) 63
- BABCOCK, T. A. (Univ. Rochester, Dept. Chem., Rochester, N.Y., 14627 USA): Thermal decomposition of 1,1,3,3-tetramethylcyclobutane. *J. Am. Chem. Soc.* 91 (1969) 7622
- BALCERZYK, E., KOZLOWSKI, W., WŁODARSKI, G. (Inst. Włokien Sztucznych, Syntetycznych, Łódź, Poland): Thermokinetics and integral thermal effects on the action of various liquids on some protein fibres. *Aust. J. Chem.* 22 (1969) 2125
- BARANOVA, N. N. (Vernadskii Geochem. and Anal. Chem. Inst., Moscow, USSR): Lead carbonate complexes at 25 and 200°C. *Zh. Neorg. Khim.* 14 (1969) 3257 (In Russian)
- BARELKO, V. V., ABRAMOV, V. G., MERZHANOV, A. G. (Acad. Sci., Chem. Phys. Inst., Chernogolovsk, USSR): Thermography in studying gas-phase heterogeneous cat-

- alytic reaction kinetics. *Zh. Fiz. Khim.* 43 (1969) 2828 (In Russian)
- BARK, L. S., BARK, S. M.: Thermometric titrimetry. (Book Review by P. K. Agasian) *Zh. Anal. Khim.* 24 (1969) 1896 (In Russian)
- BARS, J. P., CAREL, C. (Fac. Sci., Lab. Chim. Gen. A, Ave General Leclerc, Rennes-35, France): Étude dilatométrique de la wüstite solide à l'intérieur de son domaine d'existence. *Compt. Rend. Ser. C* 269 (1969) 1152
- BECK, J. D., WOOD, R. H., GREENWOOD, N. N. (Univ. Delaware, Dept. Chem., Newark, Del., 19711 USA): Heat of formation of gallium(I), tetrachlorgallate(III) and the chloride-gallium trichloride bond energy. *Inorg. Chem.* 9 (1970) 86
- BEDEN, B., GUILLAUME, I. (Fac. Sci., Lab. Chim. I., 40 Ave Recteur-Pineau, Poitiers-86, France): Décomposition thermique à l'air ambiant du tétrachlorure de zirconium. *Compt. Rend. Ser. C* 270 (1970) 198
- BEDEN, B., GUILLAUME, I. (Fac. Sci., Lab. Chim. I., 40 Ave Recteur-Pineau, Poitiers-86, France): Décomposition thermique à l'air ambiant du chlorure de zirconyle octohydraté. *Compt. Rend. Ser. C* 269 (1969) 1629
- BEKJAROGLU, P., KOUKOUSSAS, I. (Univ. München, Physik. Chem. Inst., München, GFR): Kinetische Untersuchungen der Zersetzung von CdCO_3 durch die Differentialthermoanalyse unter Verwendung des Analogrechners. *Z. Phys. Chem. Frankfurt* 67 (1969) 258
- BELYAEV, I. N., DOROSHENKO, A. K. (State Univ., Rostov on Don, USSR): Reaction in potassium and cadmium fluoride and chloride melts. *Zh. Prikl. Khim.* 42 (1969) 2704 (In Russian)
- BERG, L. G., EGUNOV, V. P. (Lenin Univ., Kazan, USSR): Differential thermal analysis of principal bases in calculation of thermal effects. *Zh. Fiz. Khim.* 43 (1969) 2602 (In Russian)
- BERLIN, A. A., IVANOV, A. A., FIRSOV, A. P. (Acad. Sci., Chem. Phys. Inst., Moscow, USSR): Thermolyzed anthracene as high temperature inhibitor of thermooxidative degradation of polyolefines. *Vysokomolekul. Soedin. Ser. B* 12 (1970) 80 (In Russian)
- BERSHAK, V. I., SMIRNOVA, M. N.: Quantitative thermographic method for determining heats of reaction in melts. *Zh. Fiz. Khim.* 43 (1969) 3184 (In Russian)
- BIHARI-VARGA, M., SIMON, J., FEHÉR, J., GERÖ, S. (IIIrd Dept., Med. Univ., Budapest 8, Hungary): Thermal investigation on structural glycosaminoglycans and protein. 2. The influence of atherosclerosis on the thermal decomposition of aortic intima. *Acta Biochim. Biophys. Acad. Sci. Hung.* 4 (1969) 279
- BISHOP, D. P., SMITH, D. A. (Coll. Aeronaut., Dept. Mat., Cranfield, Beds., England): Combined pyrolysis and radiochemical gas chromatography for studying the thermal degradation of epoxide resins and polyimides. II. Degradation of polyimides. *J. Appl. Polymer Sci.* 14 (1970) 345
- BISHOP, D. P., SMITH, D. A. (Coll. Aeronaut., Dept. Mat., Cranfield, Beds., England): Combined pyrolysis and radiochemical gas chromatography for studying the thermal degradation of epoxy resins in nitrogen between 400°C and 700°C. *J. Appl. Polymer Sci.* 14 (1970) 205
- BLUMENFELD, A. B., KOTTLEREV, M. V., KOVARSKAYA, B. M. (Res. Plast. Inst., Moscow, USSR): Thermal degradation of polyformaldehyde. *Vysokomolekul. Soedin. Ser. A* 12 (1970) 81 (In Russian)
- BONCHEVA-MLADENOVA, Z., PASHINKIN, A. S., TZETZOVA, M.: Über die Gewinnung und Thermostabilität von Chalkogenaten des Antimons und des Wismuts. II. Gewinnung und Thermostabilität des Wismuttellurits. *Monatsch. Chem.* 100 (1969) 1829
- BONCHEVA-MLADENOVA, Z., SHOPOVA, R.: Über die Gewinnung und Thermostabilität von Chalkogenaten des Antimons und Wismuts. III. Gewinnung und Thermostabilität des Antimontellurits. *Monatsch. Chem.* 100 (1969) 1834
- BONILLA, A., GARLAND, C. W., SCHUMAKER, N.E. (Massachusetts Inst. Technol., Ctr. Mat. Sci. and Eng., Cambridge, Mass., 02139 USA): Low temperature X-ray investigation of NH_4Br . *Acta Crystallogr. A* 26 (1970) 156
- BOURRELLY, P., BOURRELLY, V., TOURNADRE, M. (Fac. Sci. St. Jerome, UER Chim., Lab. Chim. Gen., Marseille 13°, France): Effet thermique accompagnant une me-

- sure conductométrique. Mesures simultanées microcalorimétrique et conductométrique. *J. Chim. Phys.* 66 (1969) 1840
- BOUSQUET, J., BLANCHARD, J. M., REMY, J. C., PERACHON, G. (INSA Lab. Chim. Minérale, CNRS, 69-Villeurbanne, France): Étude thermodynamique de la dissociation thermique de la variété quadratique du dioxyde de plomb en présence d'oxygène et de vapeur d'eau. *J. Chim. Phys.* 66 (1969) 1726
- BÜRGER, H., NEESE, H. J. (Tech. Univ., Inst. Anorg. Chem., Braunschweig 33, GFR): Titan-Stickstoff-Verbindungen. VIII. Thermolyse von Tris(dialkylamino)titan-Alkylen. *J. Organometal. Chem.* 21 (1970) 381
- BURNETT, L. J., MULLER, B. H. (Univ. Wyoming, Dept. Phys., Laramie, Wyo., 82070 USA): Melting points of ethane and three of its deuterated modifications. *J. Chem. Eng. Data* 15 (1970) 154
- BURYLEV, B. P., SRYVALIN, I. T., KORPA-CHEV, V. G. (Met. Inst., Novokuznetsk, USSR): Thermodynamic properties of iron, nickel and copper sulfides. *Zh. Fiz. Khim.* 43 (1969) 3156 (In Russian)
- BUU-HOI, N. P., SAINT-RUF, G. (CNRS Inst. Chim. Subst. Nat., Gif-sur-Yvette 91, France): Thermolyse et électrolyse de la benzophénone-azine. *Bull. Soc. Chim. Fr.* (1970) 343
- CALVERT, P., BROWN, T. J., UHLMANN, D. R. (Massachusetts Inst. Technol., Ctr. Mat. Sci. and Eng., Cambridge, Mass., 02139 USA): Thermal effects of shear in opposed-anvil high-pressure devices. *Am. Mineralogist* 54 (1969) 1732
- CASCaval, C. N., VASILE, C., SCHNEIDER, I. A. (Acad. RSR, Inst. Makromol. Chem., Jassy, Roumania): Über die Kinetik des thermischen Abbaues von Polystyrolen. *Makromol. Chem.* 131 (1970) 55
- CATON, C. S. (255 Dolly Varden blvd. 38, Scarborough 722, Ont., Canada): The thermal decomposition of 6-methyl-3,4-dihydro-2H-pyran. *J. Am. Chem. Soc.* 91 (1969) 7569
- CHATILLON-COLINET, C., PERCHERON, A., MATHIEU, J. C., ACHARD, J. C. (ENSEEG Lab. Thermodynam., CNRS, Bellevue 92, France): Mesures calorimétriques de la chaleur de dissolution de l'ytterbium dans l'étain. Détermination de l'enthalpie de formation du composé défini YbSn_3 . *Compt. Rend. Ser. C* 270 (1970) 473
- CHEADLE, B. A., ALDRIDGE, S. A., ELLS, C. E. (Atomic Energy Canada Ltd., Chalk River Nucl. Labs., Chalk River, Ont., Canada): The effect of temperature during deformation on the development of texture in zirconium alloy rolled sheet. *J. Nucl. Mater.* 34 (1970) 119
- CHYO, T.: Thermobalance. *Jap. Anal.* 19 (1970) 256 (In Japanese)
- CLEGHORN, H. P., DAVIES, M. B. (Univ. W. Indies, Chem. Dept., Kingston 7, Jamaica): Thermal decomposition of oxysulphur salts and the infrared spectra of their products. *J. Chem. Soc. A* (1970) 137
- COCKS, A. T., FREY, H. M. (Univ. Reading, Dept. Chem., Reading, Berksh, England): The thermal unimolecular decomposition of chlorocyclobutane. *J. Am. Chem. Soc.* 91 (1969) 7583
- DAUBEN, W. G., BUZZOLINI, M. G., SCHALLHORN, C. H., WHALEN, D. L., PALMER, K. J. (Univ. California, Dept. Chem., Berkeley, Calif., 94720 USA): Thermal and silver ion catalyzed isomerization of the 1,1'-bis-homocubane system: Preparation of a new $\text{C}_{10}\text{H}_{10}$ isomer. *Tetrahedron Lett.* (1970) 787
- DÁVID, P. (Forschungsinst. Elektroind., Budapest 15, Ungarn): Thermoanalytische Untersuchungsmethode in der Isolierstoffforschung. XIII. *Intern. Wiss. Koll. Techn. Hochsch., Ilmenau, DDR* (1968) 69
- DÁVID, P. K. (Res. Inst. Electrical Industry, Budapest 15, Hungary): Thermoanalytical study of human bone remains. *Year Book of the Museum "Móra Ferenc", Szeged, Hungary* (1969/2) 211
- DECHAMPS, M., LEHR, P. (Ctr. Études Chim., Met., 15 rue Georges Urbain, 94-Vitry-Seine, France): Étude thermogravimétrique de l'oxydation du zirconium sous pression réduite d'oxygène. *Compt. Rend. Ser. C* 270 (1970) 169
- DECKER, D. L., LAQUER, H. L. (Brigham Young Univ., Dept. Phys. and Astron., Provo, Utah, 84601 USA): Magnetoresistance of carbon and germanium thermometers to 60 kG. *Cryogenics* 9 (1969) 481

- DELMAN, A. D., KELLY, J. J., SIMMS, B. B. (Wool Bur. Inc., Woodbury, N. J., 11797 USA): Thermal stability of structurally related polymers containing carborane and phthalocyanine groups. *J. Polymer Sci. A-1*, 8 (1970) 111
- DENIELOU, L., FOURNIER, Y., PETIET, J. P., TEQUI, C. (Fac. Sci., Lab. Phys. Gen., 9 Quai St. Bernard, 75-Paris 5^e, France): Étude calorimétrique des sulfates de sodium et de rubidium entre 400 et 1523°K. *Compt. Rend. Ser. C* 269 (1969) 1577
- DESAGER, S., YU, L. T., BUVET, R. (École Super Phys. and Chim., Fac. Sci., Paris 5^e, France): Étude thermogravimétrique de la composition du pentoxyde de vanadium fondu en fonction de la température et de la pression d'oxygène. *Compt. Rend. Ser. C* 270 (1970) 465
- DESCOTES, G., BAHUREL, Y., BOURILLOT, M., PINGEON, G., ROSTAING, R. (ESCIL, Dept. Chim. Org. II, 69-Villeurbanne, France): Nitrooléfines. II. — Réactions d'isomérisation thermique et photochimique des nitrooléfines. *Bull. Soc. Chim. Fr.* (1970) 290
- DESCOTES, G., BAHUREL, Y., BOURILLOT, M., PINGEON, G., ROSTAING, R. (ESCIL Dept. Chim. Org. II, 69-Villeurbanne, France): Nitrooléfines. III. — Condensation thermique et photochimique des nitrooléfines avec les aldéhydes α - β éthyléniques. *Bull. Soc. Chim. Fr.* (1970) 295
- DORKO, E. A., HUGHES, R. S., DOWNS, C. R. (Wright-Patterson Air Force Base, AF Inst. Technol., Dayton, Ohio, 45433 USA): Solid state reaction kinetics. Differential scanning calorimetric determination of the solid state decomposition kinetics and activation parameters of N-aryl-N'-tosyloxydi-imide N-oxides. *Anal. Chem.* 42 (1970) 253
- DROBOT, N. M., KHAZANOV, E. I. (Zhdanov Univ., Inst. Petro. and Coal Chem. Synth., Irkutsk, USSR): Thermal aluminium nitrate nonahydrate decomposition. *Zh. Prikl. Khim.* 42 (1969) 2668 (In Russian)
- DUBOIS, J., MILLET, J. (Electricité France, Direction Études et Rech., Clamart 92, France): Tension de vapeur de l'hydroxyde de potassium fondu à haute température. *Compt. Rend. Ser. C* 269 (1969) 1336
- DUNN, P., ENNIS, B. C. (Def. Standards Labs., Dept. Supply, Def. Sci. Serv., Melbourne, Australia): Thermal analysis of compounded poly(vinylchloride). *J. Appl. Polymer Sci.* 14 (1970) 355
- DYMOVA, T. N., BAKUM, S. I.: Thermal decomposition of potassium and sodium hydridoaluminates. *Zh. Neorg. Khim.* 14 (1969) 3190 (In Russian)
- ÉLÉGANT, L., GAL, J. F., AZZARO, M. (Fac. Sci., Lab. Chim. Phys. Org., Nice 06, France): Enthalpies d'isomérisation du triméthylthiophosphate et du triméthylsélénophosphate en présence de BF₃. *Bull. Soc. Chim. Fr.* (1969) 4273
- ÉLÉGANT, L., WOLF, R., AZZARO, M. (Fac. Sci., Lab. Chim. Phys. Org., Nice 06, France): Étude calorimétrique et de résonance magnétique nucléaire de complexes dialcoyl phosphate trifluorure de bore. *Bull. Soc. Chim. Fr.* (1969) 4269
- ELLIS, R., WEIL, T. A., ORCHIN, M. (Univ. Cincinnati, Dept. Chem., Cincinnati, Ohio, 45221 USA): Thermal trans to cis rearrangement of (CO)PtCl₂(NH₂R_M). *J. Am. Chem. Soc.* 92 (1970) 1078
- ENOKIDO, H., SHINODA, T., MASHIKO, Y. (Tokyo Kasei Kogyo Co. Ltd., 6-Chōme, Toshima, Kita-ku, Tokyo, Japan): Thermodynamic properties of carbon tetrafluoride from 4°K to its melting point. *Bull. Chem. Soc. Jap.* 42 (1969) 3415
- FEDOROV, V. A., SAMSONOVA, N. P., MIRONOV, V. E. (Tech. Inst., Krasnoyarsk, USSR): Temperature effect on formation of lead(II) thiocyanate complexes. *Zh. Neorg. Khim.* 14 (1969) 3264 (In Russian)
- FEDOTOVA, O. Y., CHIBISOVA, E. I., KOLESNIKOV, H. S., GOROKHOV, V. I., KOVARSKAYA, B. M. (Mendeleev Chem. Tech. Inst., Moscow, USSR): Thermal and thermo-oxidative degradation of aromatic and arylaliphatic polyamides and polycarbamides. *Vysokomolekul. Soedin. Ser. A* 12 (1970) 26 (In Russian)
- FENDLER, E. J., FENDLER, J. H., GRIFFIN, C. E., LARSEN, J. W. (Univ. Pittsburgh, Dept. Chem., Pittsburgh, Pa., 15213 USA): Intermediates in nucleophilic aromatic substitution. VII. Kinetic, calorimetric, and proton magnetic resonance studies of the formation of Meisenheimer complexes of the isomeric 2,4,6-dicyano-

- nitroanisoles. *J. Org. Chem.* 35 (1970) 287
- FICALORA, P. J., THOMPSON, J. C., MAR-
GRAVE, J. L. (Rice Univ., Dept. Chem.,
Houston, Tex., 77001 USA): Mass spec-
trometric studies at high temperatures.
XXVI. The sublimation of SeO_2 and
 SeO_3 . *J. Inorg. Nucl. Chem.* 31 (1969)
3771
- FINE, D. H., WESTMORE, J. B. (Massachu-
setts Inst. Technol., Chem. Eng. Dept.,
Cambridge, Mass., 02139 USA): Heats of
formation of some alkylthio radicals.
Can. J. Chem. 48 (1970) 395
- FIRTH, I. M., LIVINGSTONE, A. W. (Univ.
St. Andrews, Sch. Phys. Sci., Fife, Scot-
land): Silicon resistance thermometers
for low temperatures. *Cryogenics* 9 (1969)
479
- FLEISCHER, R. L., HAINES, E. L., HANNE-
MAN, R. E., HART, H. R., KASPER, J. S.,
LIFSHIN, E., WOODS, R. T., PRICE, P. B.
(Gen. Elect. Co., Res. and Dev. Ctr.,
Schenectady, N. Y., 12301 USA): Par-
ticle track, X-ray, thermal and mass spec-
trometric studies of lunar material. *Science*
167 (1970) 568
- FLEMING, D. M. (Battelle Mem. Inst., Pacific
NW Lab., Richland, Wash., 99352 USA):
A calorimeter for absorbed dose measure-
ments at low dose rates. *Health Phys.*
18 (1970) 135
- FLEMING, G. J. (Fiberite Corp., Minona,
Minn., 55987 USA): Thermal analysis
of nitro-substituted epoxide polymers.
J. Appl. Polymer Sci. 13 (1969) 2579
- FLOWERS, M. C., PARKER, R. M., VOISEY,
M. A. (Univ. Southampton, Dept. Chem.,
Southampton, Hants., England): Kinetics
of the thermal decomposition of 2,3-
-epoxy-2,3-dimethylbutane. *J. Chem. Soc.
B* (1970) 239
- GADZHIEV, S. N., KERIMOV, K. K. (Acad.
Sci. Phys. Inst., Baku, AzSSR): Calori-
meter of a new type. *Zh. Fiz. Khim.* 43
(1969) 2683 (In Russian)
- GAL'CHENKO, G. L., KULAKOVA, L. V.,
SIRYATSKAYA, V. N., ZHIGACH, A. F.
(State Univ., Phys. Chem. Dept., Moscow,
USSR): The determination of the heat
of combustion for neocarborane $\text{B}_{10}\text{H}_{12}\text{C}_2$
(cryst.). *Vestn. Mosk. Univ. Khim.* (1969)
3 (In Russian)
- GALFAYAN, G. T., SAYADIAN, A. G., VAH-
RAMIAN, N. T. (Agric. Inst., Yerevan,
ArSSR): Study on Hazma Rock backing
process. *Arm. Khim. Zh.* 22 (1969) 1024
(In Russian)
- GALIMOV, M. D., OKUNEV, A. I. (Acad.
Sci., Met. Inst., Sverdlovsk, USSR):
Carbon, silicon and phosphorus inter-
phase distribution in the FeO reduction
from silicate melts. *Zh. Fiz. Khim.* 43
(1969) 3165 (In Russian)
- GALLAGHER, P. K., SCHREY, F., PRESCOTT, B.
(Bell Tel. Labs., Inc., Murray Hill, N. J.,
07974 USA): A study of the thermal
decomposition of europium(III) oxalate
using the Mössbauer effect. *Inorg. Chem.*
9 (1970) 215
- GAUNE-ESCARD, M., BROS, J. P., DOUCET, Y.
(Fac. Sci. St. Jerome, CNRS, Marseille
13, France): Enthalpie de formation des
mélanges fondus, nitrate de sodium-nit-
rate de strontium. *Compt. Rend. Ser. C*
270 (1970) 509
- GLASNER, A., PELLY, I., STEINBERG, M. (Heb-
rew Univ., Dept. Inorg. and Anal. Chem.,
Jerusalem, Israel): Thermal decomposi-
tion of nitrosyl and nitryl perchlorate.
II. Reactions with metal oxides. *J. Inorg.
Nucl. Chem.* 32 (1970) 33
- GOLDSHTEIN, I. P., GURYANOVA, E. N.,
SHCHERBAKOVA, E. S.: Thermodynamics
of the formation in molecular compounds
of $\text{A} + \text{D} \rightleftharpoons \text{A} \cdot \text{D}$ type. *Zh. Obshch.
Khim.* 40 (1970) 183 (In Russian)
- GOOD, W. D., MOORE, R. T. (US Dept.
Interior, Bur. Mines, Petr. Res. Ctr.,
Bartlesville, Okla., 74003 USA): Enthalpies
of formation of ethylenediamine 1,2-
-propane-diamine, 1,2-butanediamine, 2-
-methyl-1,2-propanediamine, and isobutyl-
amine. C—N and N—F thermochemical
bond energies. *J. Chem. Eng. Data*
15 (1970) 150
- GOOD, W. D., SMITH, N. K. (US Dept. In-
terior, Bur. Mines, Petr. Res. Ctr., Bar-
tlesville, Okla., 74003 USA): Enthalpies
of combustion and formation of 1,1-bis
(difluoroamino)heptane. N—F thermo-
chemical bond energy. *J. Chem. Eng.
Data* 15 (1970) 147
- GRAVELLE, P. C., EL SHOBAKY, G., TEICHNER,
S. J. (CNRS, Inst. Rech. Catalyse, Dept.
Chim. Phys. Lyon-Villeurbanne, France):
Détermination à l'aide du microcalori-

- mètre Calvet du mécanisme de l'oxydation catalytique de l'oxyde de carbone au contact de l'oxyde de nickel. VI. Oxyde de nickel contenant des ions gallium. *J. Chim. Phys.* 66 (1969) 1760
- GRAVELLE, P. C., EL SHOBAKY, G., TEICHNER, S. J. (CNRS, Inst., Rech. Catalyse, Dept. Chim. Phys., Lyon-Villeurbanne, France): Détermination à l'aide du microcalorimètre Calvet du mécanisme de l'oxydation catalytique de l'oxyde de carbone au contact de l'oxyde de nickel. VII. — Oxyde de nickel contenant des ions lithium. *J. Chim. Phys.* 66 (1969) 1953
- GREENBERG, J. H., ZHUKOV, E. G., KORJAZHKIN, V. A. (Kurnakov Gen. Inorg. Chem. Inst., Moscow B-71, USSR): Thermodynamics of vaporization of BS_2 . *Dokl. Akad. Nauk SSSR* 190 (1970) 589 (In Russian)
- GRIJKOVA, P. N., RODE, V. V., VYGODSKII, Y. S., VINOGRADOVA, S. V. KORSHAK, V. V. (Acad. Sci., Inst. Org. Elemental Cpd., Moscow, USSR): Degradation of aromatic polyimides at high temperatures. *Vysokomolekul. Soedin. Ser. A* 12 (1970) 220 (In Russian)
- GROSS, P., HAYMAN, C., MWROKA, S. (Fulmer Res. Inst. Ltd., Stoke Pages, Bucks., England): Heat of formation of silicon tetrachloride. *Trans. Faraday Soc.* 65 (1969) 2856
- GROSS, P., HAYMAN, C. (Fulmer Res. Inst. Ltd., Stoke Pages, Bucks., England): Enthalpy of formation of aluminium chloride. *Trans. Faraday Soc.* 66 (1970) 30
- GUPTA, V. P., PIERRE, L. E. Sr. (McGill Univ., Dept. Chem., Montreal, Que., Canada): Thermal degradation of poly(vinyl chloride). I. Structural effects in the initiation and decomposition chain lengths. *J. Polymer Sci. A-1*, 8 (1970) 37
- HABIB, M. J. A., PARK, J., WATIS, W. E. (Univ. Strathclyde, Dept. Pure and Appl. Chem., Glasgow, Scotland): The relative thermodynamic stabilities of ferrocenylvinyl and -styryl systems. *J. Organometal. Chem.* 21 (1970) 59
- HARGREAVES, M. K., DOSSOR, J. M., ISAAC, B. (W. Ham Coll. Technol., Chem. Dept., London E 15, England): Thermal decomposition of 1-bromo-2-methylbutane. *J. Appl. Chem.* 19 (1969) 305
- HARMELIN, M., DUVAL, C., XUONG, N. D. (ENSCP, Lab. Rech. Microanal., 11 Rue Pierre et Marie Curie, Paris 5^e, France): Étude cinétique des synthèses diéniques par analyse thermique différentielle et par thermogravimétrie. *Compt. Rend. Ser. C* 269 (1969) 1422
- HEUNISCH, G. W. (Continental Oil Co., Ponca City, Okla., 74601 USA): An analysis of thermal decomposition of tetraethoxysilane by gas chromatography. *Anal. Chim. Acta* 48 (1969) 405
- HILL, R. E. T., BOETTCHER, A. L. (Pennsylvania State Univ., Dept. Geochem. and Mineral., University Park, Pa., 16802 USA): Water in the earth's mantle. Melting curves of basalt-water and basalt-water-carbon dioxide. *Science* 167 (1970) 980
- HIRSCHBERG, A. (Univ. Frankfurt, Inst. Petrol., Frankfurt, GFR): The melting curve of gehlenite. *Naturwissenschaften* 57 (1970) 37
- HISATSUNE, I. C. (Pennsylvania State Univ., Dept. Chem., Whitmore Lab., University Park, Pa., 16802 USA): Chemical reactions in ionic matrices. *J. Chem. Soc. Japan* 89 (1968) 1143 (In Japanese)
- HISATSUNE, I. C., PASSERINI, R., PICHAI, R., SCHETTINO, V. (Pennsylvania State Univ., Dept. Chem., Whitmore Lab., University Park, Pa., 16802 USA): Thermal isomerization of the maleate ion in potassium halide matrices. *J. Phys. Chem.* 73 (1969) 3690
- HOCKING, M. B. (Dow Chem. Canada Ltd., Exploratory Res. Lab., Sarnia, Ont., Canada): Photochemical and thermal isomerization of cis- and trans-cinnamic acids, and their photostationary state. *Can. J. Chem.* 47 (1969) 4567
- HOGG, D. R., VIPOND, P. W. (Univ. Aberdeen, Dept. Chem., Aberdeen, AB 9 2UE, Scotland): Thermal decomposition of t-butyl-2-nitro-benzenesulphenate. *J. Chem. Soc. C* (1970) 60
- IMAMURA, M., NIHYA, I., MARUYAMA, T., MATSUMOTO, T. (Jap. Margarine and Shortening Makers Assoc. Found., 30 Nihonbashi Hamachō, 3-Chōme, Chūō-ku, Tokyo, Japan): Study on the Bömer number. X. Discrimination of foreign fat by heat-

- ing DTA. *Oil Chemistry* 18 (1969) 171 (In Japanese)
- IMAMURA, M., NIYA, I., MARUYAMA, T., MATSUMOTO, T. (Jap. Margarine and Shortening Makers Assoc. Found., 30 Nihonbashi Hama-dōō, 3-Chōme, Chūo-ku, Tokyo, Japan): Studies on the Bömer number. XI. Cooling DTA for discrimination of foreign fat in lard. *Oil Chemistry* 18 (1969) 292 (In Japanese)
- JACOBSON, H., REIER, G. (Squibb Inst. Medical Res., New Brunswick, N. J., 08903 USA): Application of differential thermal analysis to compatibility and stability problems in penicillin-stearic acid mixtures. *J. Pharm. Sci.* 58 (1969) 631
- JAKUBOWSKI, B., ŁAZ'NIEWSKI, M., ROHLEDER, J. W. (Polytech. Inst., Chem. Fac. Cent. Lab., Wrocław, Poland): Microcalorimetric investigations on the phase transition in pentachlorophenol. *Roczn. Chem.* 43 (1969) 1987
- KAMO, M., OHASHI, S.: Thermal decomposition of uranyl dihydrogen orthophosphate trihydrate. *Bull. Chem. Soc. Jap.* 43 (1970) 84
- KAMON, T., SAITO, K., MIWA, Y., SAEKI, K. (Kyoto Municipal Res. Inst. Ind., Minamidacho, Nishikujo, Minami-ku, Kyoto, Japan): Apparent activation energy of the curing of epoxy resin by DTA. *J. Chem. Soc. Jap. Ind.* 72 (1969) 2677 (In Japanese)
- KAPUSCINSKI, J. (Coop. Org., Lodz 6, Poland): Thermal isomerization of α -piene. Part II. *Roczn. Chem.* 43 (1969) 2085 (In Polish)
- KÁSA, I., BUZÁGH-GERE, É., TÖRÖK, I. (Techn. Univ., Inst. Appl. Chem., Budapest 11, Egri József u. 20–22, Hungary): Investigation of LiF—CaF₂ based lumino-phors activated with manganese. *Acta Chim. Acad. Sci. Hung.* 62 (1969) 323
- KELLY, B. T. (Atomic Energy Authority, Warrington, Lancs., England): Thermal annealing of pyrolytic graphite irradiated with fast neutrons at 40°C. *Carbon* 7 (1969) 699
- KESSIS, J. J. (Lab. Chim. Minerale Sels, 11 Quai St. Bernard, Paris 5^e, France): Sur la théorie de l'analyse thermique différentielle. *Compt. Rend. Ser. C* 270 (1970) 1
- KESSIS, J. J. (Lab. Chim. Minerale Sels, 11 Quai St. Bernard, Paris 5^e, France): Sur la théorie de l'analyse thermique différentielle. Cas du phénomène invariant. *Compt. Rend. Ser. C* 270 (1970) 120
- KESSIS, J. J. (Lab. Chim. Minerale Sels, 11 Quai St. Bernard, Paris 5^e, France): Sur la théorie de l'analyse thermique différentielle. Cas du changement de ligne de base. *Compt. Rend. Ser. C* 270 (1970) 265
- KICE, J. L., FAUVTRITSKY, N. A. (Oregon State Univ., Dept. Chem., Corvallis, Oreg., 97331 USA): Ease of homolytic dissociation of sulfur-sulfur bonds. II. The thermal decomposition of aryl α -disulfones. *J. Org. Chem.* 35 (1970) 114
- KISZELY, I. (Archaeological Inst. Hung. Acad. Sci., Uri utca 49. Budapest 1, Hungary): Derivatographic research of subfossile bones. *Year Book of the Museum "Móra Ferenc", Szeged, Hungary* (1969/2), 217
- KITCHENS, J., BEAR, J. L. (Univ. Houston, Dept. Chem., Houston, Tex., 77004 USA): The thermal decomposition of dimethylsulfoxide and diethylsulfide adducts of rhodium(II)acetate. *J. Inorg. Nucl. Chem.* 32 (1970) 49
- KLEMM, L. H., MCCOY, D. R., SHABTAI, J., KIANG, W. K. T. (Univ. Oregon, Dept. Chem., Eugene, Oreg., 97403 USA): Chemistry of thienopyridines. VII. Mechanistic studies on the synthesis of thiено[2,3-c]pyridine by thermolytic cyclization. *J. Heterocycl. Chem.* 6 (1969) 813
- KNACKE, O., LOSSMANN, G., MÜLLER, F. (Techn. Hsch., Inst. Met., Aachen, GFR): Zur thermischen Dissoziation und Sublimation von UO₂F₂. *Z. Anorg. Allg. Chem.* 371 (1969) 32
- KNECHT, M. K. (Natl. Res. Coun. Canada, Div. Chem., Ottawa 7, Ont., Canada): Thermal isomerization of 1-methylcyclobutane at low pressures. *J. Am. Chem. Soc.* 91 (1969) 7667
- KOKAROVTEVA, I. G., BELYAEV, I. N. (State Univ., Rostov, USSR): Thermal decomposition kinetics of barium metaferrate (IV). *Zh. Fiz. Khim.* 43 (1969) 2645 (In Russian)
- KORSHAK, V. V., DANILOV, V. G., VINOGRADOVA, O. V., SUCHKOVA, M. D. (Acad. Sci. Inst. Org. Elemental Compds., Moscow, USSR): On the thermal destruction of

- coordination polymers with the main inorganic chain. *Izv. Akad. Nauk SSSR Ser. Khim.* (1969) 2586 (In Russian)
- KOZHIN, V. M., MIRASKAYA, K. V. (Acad. Sci. Inst. Org. Elemental Cpd., Moscow, USSR): An investigation of thermal expansion of molecular crystals. 3. Determination of the parameters of the unit cell of diphenyl and its thermal expansion anisotropy at low temperature. *Kristallografiya* 14 (1969) 1077 (In Russian)
- KOZINA, L. N., REVIAKIN, A. V., SAMARIN, A. M. (Baikov Met. Inst., Moscow, USSR): Thermodynamic analysis of liquid molybdenum deoxidation. *Dokl. Akad. Nauk SSSR* 190 (1970) 909 (In Russian)
- KRESTOV, G. A., KURAKINA, G. I.: Derivatographic method for determining coordination numbers of three-charge ions of rare-earth elements. *Zh. Neorg. Khim.* 15 (1970) 73 (In Russian)
- KRÜGER, J. E., SMIT, M. S. (Natl. Building Res. Inst., CSIR, Pretoria, South Africa): Endothermal DTA peak preceding exothermal devitrification peak for vitreous blast-furnace slag. *Cement and Lime Manufact.* (1969) May
- KUKUSHKIN, Y. N., POSTNIKOVA, E. S. (Lensovet Tech. Inst., Leningrad, USSR): Thermal decomposition of platinum(II) pyridine complexes. *Zh. Prikl. Khim.* 42 (1969) 2845 (In Russian)
- KUMPANENKO, E. N., KOVTUN, T. S., VARSHAVSKAYA, A. I., KARMILOVA, L. V., ENIKOLOPYAN, N. S. (Acad. Sci., Chem. Phys. Inst., Moscow, USSR): Some features of thermal and chemical (acidic) degradation of poly-1,3-dioxolane. *Vysokomolekul. Soedin. Ser. A* 12 (1970) 229 (In Russian)
- LAGIER, J. C., BUSSIÈRE, P., PRETTRE, M. (CNRS, Inst. Rech. Catalyse, Villeurbanne, France): Étude cinétique de la décomposition thermique de l'oxyde d'argent entre 330 et 390°C. *Bull. Soc. Chim. Fr.* (1969) 4289
- LAPTEV, D. M. (Ordzhonikidze Met. Inst., Stalinsk, USSR): Thermodynamics of wiistite. *Zh. Fiz. Khim.* 43 (1969) 3129 (In Russian)
- LARSEN, J. W., EWINGS, S., WYNN, M. (Univ. Tennessee, Dept. Chem., Knoxville, Tenn., 37916 USA): Relative stabilities of mono and dioxolenium ions. *Tetrahedron Let.* (1970) 539
- LEE, R. Y., HAMBRIGHT, P. (Howard Univ., Dept. Chem., Washington, D. C., 20001 USA): Thermal analysis of metalloporphyrin pyridine complexes. *J. Inorg. Nucl. Chem.* 32 (1970) 477
- LEE, T. C. P., WRAGG, R. T. (Dunlop Co. Ltd., Res. Ctr., Birmingham 24, Warwick., England): The thermal stabilization of polyethylene sulfide. *J. Appl. Polymer Sci.* 14 (1970) 115
- LENNON, B. S., STIMSON, V. R. (Univ. New England, Dept. Phys. and Inorg. Chem., Armidale 2351, Australia): Thermal decomposition of trimethylacetyl-chloride. *J. Am. Chem. Soc.* 91 (1969) 7562
- LENOIR, J. M., ROBINSON, D. R., HIPKIN, H. G. (Univ. Southern California, Los Angeles, Calif., 90007 USA): Flow calorimeter and measurement of the enthalpy of n-pentane. *J. Chem. Eng. Data* 15 (1970) 23
- LETTER, J. E., BAUMAN, J. E. (Univ. Missouri, Dept. Chem., Columbia, Miss., 65201 USA): A thermodynamic study of the complexation reactions for a series of amino acids related to serine with copper(II) and nickel(II). *J. Am. Chem. Soc.* 92 (1970) 437
- LETTER, J. E., BAUMAN, J. E. (Univ. Missouri, Dept. Chem., Columbia, Miss., 65201 USA): A thermodynamic study of the complexation and coordinated ligand deprotonation reactions for a series of tyrosine isomers with copper(II). *J. Am. Chem. Soc.* 92 (1970) 443
- LICHANOT, A., GROMB, S. (Fac. Sci., Lab. Chim. Struct., Grp. Chim. Phys., CNRS, Pau 64, France): Variations thermiques du coefficient de Hall d'échantillons frittés de sulfure d'étain et de sulfure de plomb. *Compt. Rend. Ser. C* 270 (1970) 131
- LIPTAY, G. (Műszaki Egyetem, Alkalmazott Kémia Tanszék, Egri József u. 20–22, Budapest 11, Hungary): Thermal investigation of mixed complexes. *Kém. Közlem.* 32 (1969) 389 (In Hungarian).
- LURE, B. A., SVETLOV, B. S. (Mendeleev Chem. Tech. Inst., Moscow, USSR): Thermal decomposition of 1,4-butylene-glycoldinitrate in condensed phase. *Zh. Fiz. Khim.* 43 (1969) 2737 (In Russian)

- LYKASOV, A. A., KUZNETSOV, Y. S., PILKO, E. I., SHISHKOV, V. I., KOZHEUROV, V. A. (Polytech. Inst. Chelyabinsk, USSR): Thermodynamics of wiistite. *Zh. Fiz. Khim.* 43 (1969) 3124 (In Russian)
- MAHONEY, L. R., DA ROOGE, M. A. (Ford Motor Co., Dept. Chem., Dearborn, Mich., 48121 USA): Kinetic and thermochemical study of the reaction of 2,4,6-tri-t-butylphenoxy radical with substituted phenols. *J. Am. Chem. Soc.* 92 (1970) 890
- MAJER, J. R., SMITH, M. (Univ. Birmingham, Chem. Dept., Birmingham 15, Warwick., England): Gas phase thermal decomposition of ammonium perchlorate. *Combust. Flame* 13 (1969) 635
- MAMYKIN, P. S., DROZDOVA, T. A. (Kirov Polytech. Inst., Sverdlovsk, USSR): Vaporizability of boron-containing substances at high temperatures *Zh. Prikl. Khim.* 42 (1969) 2829 (In Russian)
- MARCHIDAN, D. I., TELEA, C. (Acad. RSR, Inst. Phys. Chem., Str. Galati 31, Bucharest, Roumania): The heat of melting in the binary mixtures: $\text{RbNO}_3 + \text{KNO}_3$ and $\text{RbNO}_3 + \text{CsNO}_3$. *Rev. Roum. Chim.* 14 (1969) 1361
- MARCON, J. P., POITREAU, J. (CEN, Serv. Plutonium, Fontenay-Rose, France): Vaporisation du nononitrure de plutonium. *J. Inorg. Nucl. Chem.* 32 (1970) 463
- MARGAS, E. (Acad. Sci. Inst. Phys. Chem., Warsaw, Poland): A method of determination of changes in the calorimeter temperature resulting from its operation in a system composed on inertial elements. *Bull. Acad. Pol. Sci. Chim.* 17 (1969) 557
- MARINCHIK, V. K., BELOUS, V. M., BUGRI-YENKO, V. I. (Polytech. Inst., Odessa, UkrSSR): The influence of temperature on the luminescence and photoelectric state of silver halogenides. *Kristallografiya* 14 (1969) 1016 (In Russian)
- MASLENNIKOV, V. P., GERBERT, G. P., KHODALEV, G. F.: Synthesis and thermal decomposition of di(n-butoxy)sunarylperoxyboron in n-nonane. *Zh. Obshch. Khim.* 40 (1970) 245 (In Russian)
- MAURER, J. J. (Enjay Polymer. Labs., Linden, N.J. USA): Thermal analysis of elastomers. *Rubber Age* 102 (1970) 47
- MCCULLOCH, R., RYE, A. R., WEGE, D. (Univ. Western Austr., Dept. Org. Chem., Nedlands, W.A. 6009 Australia): Steric acceleration in the thermal decarbonylation of highly compressed norbornen-7-ones. *Tetrahedron Lett.* (1969) 5231
- MEITES, T., MEITES, L. (Clarkson Coll. Technol., Dept. Chem., Potsdam, N. Y., 13676 USA): Differential thermometric measurements of the rates of moderately fast chemical reactions in dilute solutions. *J. Am. Chem. Soc.* 92 (1970) 37
- MITOMO, H., TONAMI, H. (Tokyo Inst. Techn., Ookayama, Meguro-ku, Tokyo, Japan): Studies on Nylon 6—Nylon 66 blends. I. Structures of blend polymers prepared by precipitation from solutions. *Chem. High Polymers* 27 (1970) 134 (In Japanese)
- MORGAN, P. E. D., SCOTT, H. (Franklin Inst. Res. Lab., 20th and Race Str., Philadelphia, Pa., 19103 USA): Strong, dense, thermally stable polymers by reactive hot pressing of solid organic monomers. *Polymer Letters* 7 (1969) 437
- MUNN, R. W. (Natl. Res. Coun. Canada, Div. Pure Chem., Ottawa 2, Ont., Canada): On the thermal expansion of indium. *Acta Crystallogr. A* 26 (1970) 161
- MURAT, M., MANGE, M., THOMAS, J. L., EYRAUD, C. (Fac. Sci. Lyon, Lab. Chim. Appl. BP No. 6—010, Villeurbanne, France): Étude des tamis moléculaires 4A et 5A par analyse thermique différentielle. *Chim. Anal. Paris* 52 (1970) 57
- MURAYAMA, H., KYOGOKU, K., IGUCHI, T., KOYANAGI, S. (Lab. Div., Taisho Pharm. Co., Ltd., Japan): Studies on pyrethroid insecticide. Part III. Temperature distribution in burning coil and thermal analysis of allethrin and phthalthrin. *J. Agr. Chem. Soc. Japan* 44 (1970) 77 (In Japanese)
- NATARAJAN, M., DAS, A. R., RAO, C. N. R. (Indian Inst. Technol., Dept. Chem., Kanpur, India): Particle size effects and thermal hysteresis in crystal structure transformations. *Trans. Faraday Soc.* 65 (1969) 3081
- NATARAJAN, M., SARMA, T. S., AHLUWALIA, J. C., RAO, C. N. R. (Indian Inst. Technol., Dept. Chem., Kanpur, India): Thermal

- and particle size effects in magnesium oxide. *Trans. Faraday Soc.* 65 (1969) 3088
- NICOUUD, J. C., DELAPLACE, J. (CEN, Dept. Met., Grenoble, France): Étude des défauts créés dans le beryllium par écrouissage à basse température. *J. Nucl. Mater.* 34 (1970) 70
- NIIYA, I., MARUYAMA, T., IMAMURA, M., MATSHUMOTO, T. (Jap. Margarine and Shortening Makers Assoc. Found., 30 Nihonbashi Hamachō, 3-Chōme, Chūō-ku, Tokyo, Japan): Differential thermal analysis of edible fats and oils. II. Coconut oil and palm kernel oil. *Oil Chemistry* 18 (1969) 783 (In Japanese)
- OKAMOTO, H.: Thermal analysis of the effects of annealing on low-density polyethylene. *J. Polymer Sci. A-2*, 8 (1970) 311
- ORAZMURADOV, A. O., TARASEVICH, Y. I. (Acad. Sci., Colloid Chem. Inst., Kiev-30, USSR): Effect of thermal processing on heat of moistening of clay minerals. *Ukr. Khim. Zh.* 35 (1969) 1332 (In Russian)
- OSAWA, Z., SUZUKI, M., OGAWARA, Y., MATSUZAKI, K. (Gunma Univ., Fac. Eng., Tenjin, Kiryu, Japan): Cobalt(II, III)-acetylacetone catalysed thermal oxidative degradation of polypropylene. *J. Chem. Soc. Jap. Ind.* 73 (1970) 110 (In Japanese)
- OSBORNE, D. W., WEINSTOCK, B., BURNS, J. H. (Argonne Nat. Lab., Argonne, Ill., 60439 USA): Heat capacity, enthalpy of fusion, and thermodynamic properties of NpF_6 from 7 to 350°K. *J. Chem. Phys.* 52 (1970) 1803
- PACE, E. L., JEPSON, B. E. (Case Western Reserve Univ., Dept. Chem., Cleveland, Ohio, 44106 USA): Thermodynamic properties of phosphoryl fluoride from 12 to 240°K. The zero-point entropy of the solid. *J. Chem. Phys.* 52 (1970) 911
- PAPATHEODOROU, G. N., KLEPPA, O. J. (Univ. Chicago, Dept. Chem., Chicago, Ill., 60637 USA): The enthalpy of the solid decomposition reaction $\text{Cs}_3\text{NiCl}_5(s) = \text{CsNiCl}_3(s) + 2 \text{CsCl}(s)$. *Inorg. Chem.* 9 (1970) 406
- PASCAL, B., CAILLET, M., ALLIBERT, M. (ENSEEG, Lab. Thermodynam., Grenoble 38, France): Étude du système argent-calcium par analyse thermique différentielle dans la partie riche en calcium. *Compt. Rend. Ser. C* 270 (1970) 520
- PASHCHENKO, A. A., GAEVSKAYA, A. I., VORONOV, H. G., BASS, S. I. (Polytech. Inst., Kiev, UkrSSR): Thermo-oxidative destruction of hydrophobic organosilicon coatings. *Zh. Prikl. Khim.* 42 (1969) 2711 (In Russian)
- PAUKOV, I. E., KHRIPLOVICH, L. M. (Acad. Sci. Inorg. Chem. Inst., Novosibirsk-90, USSR): True heat capacity at low temperatures, absolute entropy and enthalpy in standard RbCl conditions. *Zh. Fiz. Khim.* 43 (1969) 2678 (In Russian)
- PAUKOV, I. E., LAVRENTEVA, M. N. (Acad. Sci., Inorg. Chem. Inst., Novosibirsk-90, USSR): Thermodynamics of pentafluorobenzene in a range of 12–300°K. *Zh. Fiz. Khim.* 43 (1969) 2938 (In Russian)
- PAUKOV, I. E., LAVRENTEVA, M. N., ANISIMOV, M. P. (Acad. Sci., Inorg. Chem. Inst., Novosibirsk-90, USSR): Heat capacity at low temperatures, phase conversions, entropy and enthalpy of pentafluoroaniline. *Zh. Fiz. Khim.* 43 (1969) 2941 (In Russian)
- PAUKOV, I. E., STRELKOV, P. G., PALITSYN, V. A., MOROZ, E. M. (Acad. Sci. Inorg. Chem. Inst., Novosibirsk-90, USSR): Heat capacity at low temperatures, absolute entropy and enthalpy in standard niobium nitride conditions. *Zh. Fiz. Khim.* 43 (1969) 2607 (In Russian)
- PETROVIČ, J. (Acad. Sci., Inst. Inorg. Chem., Bratislava 9, Czechoslovakia): The system $\text{MgO}-\text{SiO}_2-\text{H}_2\text{O}$ at temperatures of 150°–350°C under hydrothermal conditions. *Chem. Zvesti* 23 (1969) 515
- Philips edition: Modern methods of instrumental analysis. Some non optical methods. (A review of the principle characteristics and merits of DTA, gas chromatography, activation analysis and mass spectrometry.) *Philips in Science and Ind.* (Aust. and New Zealand Edition) 15 (1969) 5
- PIHLAJA, K., LAUNOSALO, T. (Univ. Turku, Dept. Chem., Turku, Finland): Heats of combustion. 2,4,6-trimethyl-3,5-dioxaheptane and 6-ethyl-5,7-dioxaundecane. *Acta Chem. Scand.* 23 (1969) 3264
- PRIME, R. B., WUNDERLICH, B., MELILLO, L. (IBM Corp., Syst. Dev. Div., Mat. Lab.,

- Endicott, N.Y., 13760 USA): Extended-chain crystals. V. Thermal analysis and electron microscopy of the melting process in polyethylene. *J. Polymer Sci. A-2*, 7 (1969) 2091
- RAMDAS, B. S., PATIL, K. C., RAO, C. N. R. (Indian Inst. Technol., Dept. Chem., Kanpur, India): Thermodynamics and kinetics of oxidation of Pr_2O_3 and Tb_2O_3 to non-stoichiometric oxides. *J. Chem. Soc. A* (1970) 64
- RANDIN, J. P., HINTERMANN, H. E. (Case Western Reserve Univ., Dept. Chem., Cleveland, Ohio, 44106 USA): A calorimetric study of the electroless deposition of nickel. *J. Electrochem. Soc.* 117 (1970) 160
- RAO, U. B., MATHUR, H. B. (Natl. Chem. Lab., Poona 8, India): Thermochemical studies: The effect of substitution on the heat of ionization of β -diketones. *Indian J. Chem.* 7 (1969) 1234
- RAZUVAEV, G. A., PETUKHOV, G. G., ARTEMOV, A. N. (Lobachevskii Univ., Gorki, USSR): Thermal decomposition of alkyl-substituted bisarene chromium and molybdenum π -complexes. *Zh. Obshch. Khim.* 39 (1969) 2494 (In Russian)
- REESE, W. (US Naval Postgrad. Sch., Dept. Phys. Monterey, Calif., 93940 USA): Thermal properties of polymers at low temperatures. *J. Macromol. Sci. Chem. A* 3 (1969) 1257
- RONIS, M., D'YVOIRE, F. (Fac. Sci. Lab. Chim. Gaz., Batiment 417, Orsay 91, France): Mise en évidence du polymorphisme de AlAsO_4 au cours de la thermolyse de mansfieldite stoechiométrique, $\text{AlAsO}_4 \cdot 2 \text{H}_2\text{O}$ et non stoechiométrique, $\text{Al}_{1-x}\text{H}_{3x}\text{AsO}_4 \cdot 2 \text{H}_2\text{O}$. *Compt. Rend. Ser. C* 269 (1969) 1388
- ROYER, A., GANTOIS, M. (ENSMIM, Lab. Met. and Chim. Solide, CNRS, Nancy 54, France): Transformation au cours d'un recuit prolongé à 700°C, du premier précipité de durcissement structural d'alliages nickel-chrome-niobium et nickel-chrome-tantale. *Compt. Rend. Ser. C* 270 (1970) 162
- RUBIN, L. G. (Massachusetts Inst. Technol., Cambridge, Mass., 02139 USA): Cryogenic thermometry: a review of recent progress. *Cryogenics* 10 (1970) 14
- SATO, T., TAKAHASHI, M. (Nippon Oil Co., Cent. Tech. Res. Lab., Yoko Kawasaki, Japan): Study of polyethylene blends by differential scanning calorimetry. *J. Appl. Polymer Sci.* 13 (1969) 2655
- SCHOEPP, R., PATIN, J. (Fac. Sci. Lab. Chim. Phys., BP 812, Yaoundé, Cameroun): Cinétique d'une réaction gaz-solide par thermogravimétrie. *Compt. Rend. Ser. C* 270 (1970) 5
- SCHÜRENKÄMPFER, A. (Euratom CCR, Met. and Ceramics Div., Ispra, Italy): Kinetic studies of the hydrolysis of uranium monocarbide in the temperature range 30°C—90°C. *J. Inorg. Nucl. Chem.* 32 (1970) 417
- SEIDNER, R. T., NAKATSUKA, N., MASAMUNE, S. (Univ. Alberta, Dept. Chem., Edmonton, Alb., Canada): Thermolysis of bicyclo[4.2.2]deca-2,4,7,9-tetraene. *Can. J. Chem.* 48 (1970) 187
- SEMENOVA, G. E., DMITREVSKII, G. E.: Thermal stability and solubility of $\text{Al}_2(\text{SiF}_6)_3 \cdot 3 \text{H}_2\text{O}$. *Zh. Neorg. Khim.* 15 (1969) 57 (In Russian)
- SERES, L., MÁRTA, F., KISS, Á. (Attila József Univ., Inst. Gen. and Phys. Chem., Szeged, Hungary): Thermal decomposition of iso-butane. I. Rate-pressure relations and the products of the reaction. *Acta Phys. Chem.* 15 (1969) 115
- SERES, L., MÁRTA, F., KISS, Á. (Attila József Univ., Inst. Gen. and Phys. Chem., Szeged, Hungary): Thermal decomposition of iso-butane. II. Effect of some products and other parameters on the reaction. *Acta Phys. Chem.* 15 (1969) 123
- SHABANOVA, A. G., KHRENKOVA, T. M., CHUBAROVA, M. A., SLADKOV, A. M., KORSAK, V. V. (Acad. Sci. Inst. Org. Elemental Compds., Moscow, USSR): Study of thermal transformations in the structure and properties of polyamines with acetylenic groups in the chain. *Izv. Akad. Nauk SSSR, Ser. Khim.* (1969) 2444 (In Russian)
- SHEVCHUK, P. P., MALINOVSKY, V. V., VELICANOV, A. A. (Shevchenko Univ., Kiev, UkrSSR): Investigation of thermo-e.m.f. melts of the system In-Te. *Ukr. Khim. Zh.* 36 (1970) 58 (In Russian)
- SHIDLOVSKI, A. A. (Chem. Machine Const. Inst., Moscow, USSR): Relation between thermal and irreversible hydrolysis of

- chlorides of elements. *Zh. Fiz. Khim.* 43 (1969) 2655 (In Russian)
- SIDOROV, L. N. (Lomonosov Univ., Moscow, B-234, USSR): Determination of melting heats of compounds of AnBm type during mass-spectrometric study of two-component systems. *Zh. Fiz. Khim.* 43 (1969) 2593 (In Russian)
- SIMON, J., BIHARI-VARGA, M., ERDEY, L., GERŐ, S. (Inst. Gen. and Anal. Chem., Techn. Univ., Budapest 11, Gellért tér 4, Hungary): Thermal investigations on structural glycosaminoglycans and protein. 1. The influence of age on the thermal decomposition of aortic intima. *Acta Biochim. Biophys. Acad. Sci. Hung.* 4 (1969) 273
- SMOLYANINOV, N. P., MOROZOVA, A. P., BOCHKAREVA, O. B. (Agric. Mechanization Inst., Zernovoi, USSR): Thermo-graphy of the $\text{Bi}_4\text{Ti}_3\text{O}_{12}$ reaction with vanadium pentoxide and molybdenum and tungsten trioxides. *Zh. Neorg. Khim.* 15 (1970) 258 (In Russian)
- SOBOL, L. G., SELIVANOVA, N. M. (Mendeleev Chem. Tech. Inst., Moscow, USSR): Heats of formation of acid sodium sulfate NaHSO_4 and $\text{NaHSO}_4 \cdot \text{H}_2\text{O}$. *Zh. Fiz. Khim.* 43 (1969) 2937 (In Russian)
- SOLYMOSI, F., BÁNSÁGI, T. (Acad. Sci., Gas Kinetics Res. Group, Szeged, Hungary): Stability of ammonium halates in the solid state. Kinetics and mechanism of the thermal decomposition of ammonium bromate. *J. Phys. Chem.* 74 (1970) 15
- SOLYMOSI, F., RASKÓ, J. (Attila József Univ. Gas Kinetics Res. Group, Szeged, Hungary): Thermal decomposition and ignition of ammonium perchlorate in the presence of zinc perchlorate. *Z. Phys. Chem. Frankfurt* 67 (1969) 76
- SPENCER, H., MO Y. K. (Imperial Chem. Ind. Ltd., Macclesfield, Cheshire, SK 10 4TG, England): The heat of formation of the norbornyl cation. *Can. J. Chem.* 48 (1970) 384
- SRINIVASAN, R. (IBM Corp., Thomas J. Watson Res. Ctr., Yorktown Heights, N. Y., 10598 USA): Thermal and photo-chemical isomerization of cis-3,4-dimethylcyclobutene. *J. Am. Chem. Soc.* 91 (1969) 7557
- STEPIN, B. D., ALLAKHVERDOV, G. R., SEREBRENNIKOVA, G. M. (All Union Inst., Res. Chem. Reactions, Moscow, USSR): Determination of the heat of thermal dissociation of solid mixtures according to thermogravimetric data. *Zh. Fiz. Khim.* 43 (1969) 2452 (In Russian)
- STILL, R. H., JONES, P. B. (Dept. Chem. Sci., Hatfield Polytechn., Hatfield, Herts., England): Thermal degradation of polymers. Part IV. Vacuum pyrolysis of poly(m-aminostyrene). The residue and the fraction volatile at pyrolysis temperature involatile at room temperature. *J. Appl. Polymer Sci.* 13 (1969) 1555
- SUBRAMANIAN, M. S., SINGH, R. N., SHARMA, H. D. (Bhabha Atom. Res. Ctr., Radio-chem. Div., Trombay, Bombay-74, India): Reaction kinetics of some actinide oxalates by differential thermal analysis. *J. Inorg. Nucl. Chem.* 31 (1969) 3789
- STULL, D. R., HILDENBRAND, D. I., OETTING, F. L., SINKE, G. C. (Dow Chem. Co., Thermal Res. Lab., Midland, Mich., 48640 USA): Low temperature heat capacities of 15 inorganic compounds. *J. Chem. Eng. Data* 15 (1970) 52
- SUKHAREVSKII, B. Y.: Thermodynamics of structural vacancies in oxides. I. Structural vacancies specified by monovalent substitution. *Zh. Fiz. Khim.* 43 (1969) 3103 (In Russian)
- SUKHAREVSKII, B. Y., ALAPIN, B. G., VISHNEVSKII, I. I.: Thermodynamics of structural vacancies in oxides. III. Structural vacancies in ferrites-spinels. *Zh. Fiz. Khim.* 43 (1969) 3113 (In Russian)
- SUKHAREVSKII, B. Y., VISHNEVSKII, I. I.: Thermodynamics of structural vacancies in oxides. II. Structural vacancies in crystals with changeable valency atoms. *Zh. Fiz. Khim.* 43 (1969) 3108 (In Russian)
- SUKHAREVSKII, B. Y., VISHNEVSKII, I. I., ALAPIN, B. G., AKSELROD, E. I.: Thermodynamics of structural vacancies in oxides. IV. Experimental study of solutions between nonstoichiometric ferrites-spinels. *Zh. Fiz. Khim.* 43 (1969) 3118 (In Russian)
- SYRKIN, V. G., UELSKII, A. A.: Thermodynamic analysis in preparation of high-melting carbonyl materials from tungsten. *Zh. Fiz. Khim.* 43 (1969) 2766 (In Russian)
- SWAINE, D. J. (CSIRO, Div. Mineral Chem., Delhi Road, North Ryde, N.S.W., Australia): Highlights of second I. C. T. A. (Int. Confederation for Thermal Analysis)

- held in August 1968 at Worcester, Mass. *Aust. Chem. Process. Eng.* 22 (1969) 37
- TABRIZI, D., PANNETIER, G. (Fac. Sci. Lab. Cinétique Chim., CNRS No. 24, Paris 5^e, France): Étude diffractométrique de l'évolution thermique du sulfate de césum de la température ordinaire jusqu'à 700°C. *Bull. Soc. Chim. Fr.* (1969) 4280
- TAMURA, H., HOZUMI, K. (Kyoto Univ., Fac. Pharmaceut. Sci., Sakyo-ku, Kyoto-shi Japan): Effects of flow rate and temperature in differential thermal conductometry. *Jap. Anal.* 19 (1970) 60 (In Japanese)
- TANAKA, M., SAWATA, T., (Railway Technical Research Institute, J. N. R. Japan): A study on deterioration and stability of BR and IR. (Report 1 — Thermal analysis of BR and IR.) *J. Soc. Rubber Ind. Japan* 41 (1968) 675 (In Japanese)
- TANAKA, M., SAWATA, T., TAKANASHI, T. (Railway Technical Research Institute, J. N. R. Japan): A study on deterioration and stabilization of BR and IR. (Report 2 — Thermal oxidation and thermal analysis.) *J. Soc. Rubber Ind. Japan* 42 (1969) 841 (In Japanese)
- TANAKA, M., SAWATA, T., MORISHITA, M. (Railway Technical Research Institute, J. N. R. Japan): A study on deterioration and stabilization of BR and IR. (Report 3 — Thermal oxidation and thermal analysis of antioxidant-containing BR, IR.) *J. Soc. Rubber Ind. Japan* 42 (1969) 847 (In Japanese)
- TANAKA, M., SAWATA, T. (Railway Technical Research Institute, J. N. R. Japan): A study on deterioration and stability of BR and IR. (Report 4 — Thermal analysis of BR and IR vulcanizates added mainly with antioxidant of amine.) *J. Soc. Rubber Ind. Japan* 43 (1970) 39 (In Japanese)
- TANIDA, H., TERATAKE, S., HATA, Y., WATANABE, M. (Shionogi and Co. Ltd., Res. Lab., Fukushima-ku, Osaka, Japan): Photochemical and thermal decompositions of anti-6,7-diazatricyclo[3.2.2.0^{2,14}]non-6-ene. Evidence for mechanistic difference between the reactions. *Tetrahedron Lett.* (1969) 5345
- TAYLOR, L. J., WATSON, S. W. (Owens-Illinois Inc., Okemos Res. Lab., Okemos, Mich., 48864 USA): Determination of relative rates by differential thermal analysis. *Anal. Chem.* 42 (1970) 297
- TONKOV, E. I. (Acad. Sci., Solid State Phys. Inst., Chernogolovka, USSR): Thermal effects in liquid sulphur under pressure. *Dokl. Akad. Nauk SSSR* 190 (1970) 912 (In Russian)
- TORIKAI, E., MAEDA, H., KAWAMI, Y. (Govt. Ind. Res. Inst., Midorigaoka, Osaka, Japan): Thermal decomposition of silver oxide salts. *J. Chem. Soc. Jap. Pure* 91 (1970) 87 (In Japanese)
- TSINTSIUS, V. M., SMIRNOVA, E. K.: Enthalpies of formation of alkali metal hexachlorotantales. IV. *Zh. Neorg. Khim.* 14 (1969) 3280 (In Russian)
- TSUCHIYA, Y., SUMI, K. (Nat. Res. Council Canada, Div. Bldg. Res., Ottawa, Ont., Canada): Thermal decomposition products of polypropylene. *J. Polymer Sci. A-1*, 7 (1969) 1599
- TURNER, N. H. (Univ. Rochester, Dept. Chem., Rochester, N. Y., 14627 USA): Kinetics of the thermal decomposition of 1-methylcyclopentene. *J. Am. Chem. Soc.* 91 (1969) 7678
- VAISBURD, S. E., REMEN, T. F., SHEININ, A. B.: Thermodynamics of iron in iron-nickel-sulfur system at 1300°C. *Zh. Fiz. Khim.* 43 (1969) 3172 (In Russian)
- VAN EFFENTERRE, P., CIZERON, G. (CEN Saclay, Inst. N. Lab. Met., BPN 6, Gif-sur-Yvette 91, France): Étude par analyse thermique de trempe des transformations structurales développées dans l'alliage à 2.4% poids de cuivre et mise en évidence d'une température de transformation Co₅. *Compt. Rend. Ser. C* 269 (1969) 1614
- VEZZOLI, G. C., DACHILLE, F., ROY, R. (Pennsylvania State Univ., Mat. Res. Lab., University Park, Pa., 16802 USA): Sulfur melting and polymorphism under pressure: Outlines of fields for crystalline phases. *Science* 166 (1969) 218
- VEZZOLI, G. C., DACHILLE, F., ROY, R. (Pennsylvania State Univ., Mat. Res. Lab., University Park, Pa., 16802 USA): High-pressure studies of polymerization in sulfur. *J. Polymer Sci. A-1*, 7 (1969) 1557
- VILLERS, J. (Fac. Pharm. Lab. Phys., 4 Ave l'Observatoire, Paris 6^e, France): Comportement du verre, avant et après siliconage, vis-à-vis de certains composés gazeux

- adsorbables. *Compt. Rend. Ser. C* 269 (1969) 1155
- VINNIK, M. A., SELEZNEVA, L. N.: Structural transformations of fluorides above and below the Néel temperature. *Kristallografiya* 14 (1969) 1068 (In Russian)
- WAGSTAFF, F. E. (Wagstaff Machine Works Ind., Spokane, Wash., 99211 USA): Crystallization and melting kinetics of cristobalite. *J. Am. Ceram. Soc.* 52 (1969) 650
- WALKER, R. F. (Picatinny ARSL, Feltman Res. Labs., Dover, N.J., 07801 USA): Thermal decomposition of thallous azide. Crystal size effects and topochemistry. *Trans. Faraday Soc.* 65 (1969) 3324
- WEIDENBRUCH, M., BÖKE, S. (Techn. Hsch., Inst. Anorg. Chem., Aachen, GFR): Darstellung und thermisches Verhalten von Pentachlorbenzoësäure-Derivaten. *Chem. Ber.* 103 (1970) 510
- WESTGAARD, L., RUDSTAM, G., JONSSON, O. C. (CERN, Geneva, Switzerland): Thermographic separation of chemical compounds. *J. Inorg. Nucl. Chem.* 31 (1969) 3747
- WILEY, R. H., JIN, J. I., AHN, T. O. (City Univ. New York, Hunter Coll., Dept. Chem., New York, N. Y., 10021 USA): Dilatometric study of the kinetics of the polymerization of pure meta- and pure para-divinylbenzenes. *J. Macromol. Sci. Chem.* A3 (1969) 1543
- WYDEVEN, T. (NASA, Ames. Res. Ctr., Moffet Field, Calif., 94035 USA): Thermal decomposition of gadolinium-doped silver carbonate. *J. Catal.* 16 (1970) 82
- ZAIKIN, I. D., NAZARUK, L. N. (Polytech. Inst., Lvov, UkrSSR): Accuracy in measurement of bridged scheme parallel arm by utilization of a resistance thermometer in combustion calorimetry. *Zh. Fiz. Khim.* 43 (1969) 2681 (In Russian)
- ZHDANOV, V. M. (Mendelev Chem. Tech. Inst., Moscow, USSR): Low-temperature heat capacity, enthalpy and entropy of germanium monoselenide. *Zh. Fiz. Khim.* 43 (1969) 2618 (In Russian)
- ZOBEL, D., BA, N. (VEB Stickstoffwerk Piesteritz, Phosphorlab., Lutherstadt-W, GDR): Zur thermischen Umsetzung von NaH_2PO_3 mit NaH_2PO_4 . *Z. Anorg. Allg. Chem.* 371 (1969) 48
- YAMADA, K., AKIYAMA, J., OKINO, T. (Shimadzu Seisakusho Ltd., Nakagyo-ku, Kyoto-shi, Japan): Phase diagram and micro boiling point determination by micro DTA. *Jap. Analyst* 19 (1970) 87 (In Japanese)
- YUDIN, B. F., MARKHOLIYA, T. P.: Heats of formation of silicon carbide and tungsten monocarbide. *Zh. Prikl. Khim.* 42 (1969) 2587 (In Russian)