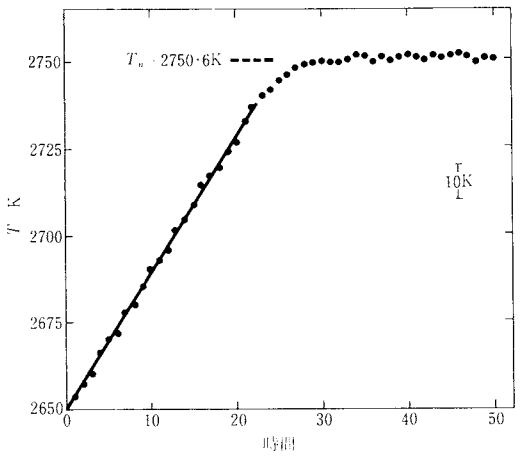

図4 Nbに電流を流し続けた時の融点付近の温度変化。時間の一目盛は0.833ms。

1) A. Cezairliyan, M. S. Morse, H.A. Berman and C.W. Beckett, J. Res. Nat. Bur. Stand. **74A**, 65 (1970).
2) A. Cezairliyan, J.L. McClure and C.W. Beckett, *ibid.* **75A**,1 (1971).
3) A. Cezairliyan and J. L. McClure, *ibid.* **75A**, 283 (1971).
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5) *Idem.*, High Temperatures High Pressures **4**, 541 (1972).
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8) *Idem.*, High Temperatures High Pressures **4**, 453 (1972).

（岸本耕二）

内外情報

★ 第4回化学熱力学国際会議

IUPACの主催で行なわれる上記の第4回会議は，明1975年8月26日～30日に南フランスのMontpellierで開催される予定である。今回の会議の主題は下記の通り。

1. Thermochemistry
2. Thermophysics (especially heat capacity)
3. High temperature thermodynamics
4. High pressure thermodynamics
5. Thermodynamics of systems of biochemical interest
6. Thermodynamics of fluid mixtures
7. Thermodynamics of surfaces
8. Basic thermodynamics of energy production, storage and conversion
9. Significant (novel) developments of experimental techniques and apparatus in chemical thermodynamics
10. Teaching of chemical thermodynamics

上記主題の，未発表の理論・実験・応用に関する論文が募集されている。使用語は英，仏，独および露語。連絡先は，Prof. Marc LAFFITTE, c/o Secretariat 4éme CITC, 26, Rue du 141° R.I.A., France.

★ 学会・会議などの日程（9月～12月）

（ ）内は開催場所，連絡先

- 9月4日～6日 第4回高温における固体の熱的性質に関するヨーロッパ会議（Orléans，フランス；Dr. B. Piriou C.R.P.H.T. C.N.R.S., F-4505, Orléans Cédex , France）
- 9月23日～27日 第8回水及び水蒸気の性質国際会議（Giens，南フランス；Prof. S.R. Beitler, the Ohio State University, Columbus, Ohio 42210, U.S.A）
- 10月2日～4日 第2回国際窯業シンポジウム（Bologna，イタリー；FEDERCERAMICA, Via Privata Crescentio, 2, 20133, Milano, Italy）
- 10月21日～25日 IAEA シンポジウム・原子炉材料の熱力学（Vienna，オーストリア；Miss G. Seiler, Conference Service Section, IAEA, Kärntner Ring 11, P.O.Box 590, A-1011 Vienna, Austria）
- 11月25日～29日 第4回高圧力国際会議（京都；大杉治郎教授，京大化学教室）
- 11月28日～30日 第10回熱測定討論会（本誌84頁）

なお，First Circular はすでに関係方面に送られているが，関心のある方は，東大工学部高橋洋一（03-812-2111 内線 7474）まで連絡されればお送りする。

★ 第6回全ソビエト連邦熱測定学会プログラム（1973年9月17日～19日）

（グルジア共和国トビリシ）

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H1 N. V. Krivtsov, V. Ya. Rosolovskii, Zh. G. Sack, Thermochemical investigation of hydrazine complexes of some non-transition metal salts.

H2 E. V. Miroshnichenko, V. P. Vorob'eva, Enthalpies of formation of alkali and alkali earth pentaerythritylborates.

H3 N. V. Chelovskaya, A. N. Kornilov, V. I. Zhelankin, Heat of formation of hafnium carbide.

H4 V. Ya. Leonidov, V. S. Pervov, O. M. Gaisinskaya, L. I. Klyuev, New determination of Enthalpy of formation of sulfur hexafluoride.

H5 M. Kh. Karanet'yants, Yu. L. Suponitskii, S. B. Tsyrenova, V. G. Bodrov, Thermochemical Investigation of Chromates of the rare earth elements.

H6 V. S. Pervov, V. Ya. Leonidov, L. I. Klyuev, A. G. Muravina, Determination of enthalpy of formation of copper difluoride by fluorine calorimetry.

H7 E. J. Huber, C. E. Holley, The enthalpy of formation of hafnium dioxide.

H8 I. M. Ushakova, A. N. Kornilov, Thermochemical Investigation of the system Hf-O.

H9 Yu. G. Vlasov, B. L. Seleznev, Calorimetric determination of the heats of formation of alkali halide solid solutions with a miscibility gap.

H10 V. P. Nesterenko, G. F. Pinaev, Thermochemical Investigation of zirconoum diselenite.

H11 L. A. Marinova, V. P. Glybin, A. I. Volkov, Thermodynamic investigation of scandium, yttrium and lantanium phosphates.

H12 A. N. Volkov, V. H. Yaglov, Calorimetric Investigation of iron dihydrogen phosphate hydrate.

H13 P. K. Rud'ko, V. N. Yaglov, G. I. Novikov, Calorimetric investigation of acidic and neutral phosphates of the 1-st group elements.

H14 N. A. Batolin, Yu. S. Kozlov, Calorimetric Investigation of the liquid alloy systems, palladium-Cobalt, palladium-nickel at 1873 K.

H15 Yu. O. Esin, . B. Gel'd, V. M. Baev, V. K. Zav'yalov, M. S. Petrushevskii, Calorimetric investigation of the enthalpy of formation of the cobalt-germanium and nickel-boron liquid alloys.

H16 S. P. Yatsenko, K. A. Chuntonov, V. D. Bushmanov, Some thermochemical characteristic of the compounds of Ga and In with the alkali metalts.

H17 L. H. Larikov, Yu. F. Yurchenko, V. L. Kononenko, E. N. Bludilin, On the heat effects in the formation of the intermetallics of the system Fe-Al in the solid phase.

H18 Yu. D. Tret'yakov, Ya, A. Kesler, Microcalorimetric investigation of yttrium, europium and praseodymium orthoferrite.

H19 B. G. Dyubanov, A. Ya. Stomakhin, A. F. Fillipov, High Temperature calorimetric investigation of the dilute solutions of the 5-th group metals in iron and nickel.

H20 Yu. L. Suponitskii, V. A. Balashov, O. P. Proshina, A. A. Maier, Thermochemical properties of lithium polymolybdates.

H21 H. A. Bas'kov, A. I. Maier, M. Kh. Karapet'yants, Thermochemical investigation of the carbonates of the rare earth elements.

H22 V. I. Kober, V. A. Levedev, The heats of solution of lantanium in molten aluminium.

H23 K. A. Sharifov, T. Kh. Azuzov, I. Ya. Aliev, A. S. Abbasov,, The Standard enthalpies of formation of some gallium chalcogenides.

H24 E. K. Zavadovskaya, V. G. Vakhromeev, The energy stored in glasses on electron irradiation.

H25 N. M. Volkova, N. V. Germanyuk, Determination of the heat of formation of vanadium oxycarbide.

H26 Dzh. A. Gyodakyan, The heat of formation of the liquid copper oxide Cu_5O_3.

H27 Yu. D. Tret'yakov, Ya. A. Kesler, I. V. Gordeev, V. A. Alferev, Thermochemical investigation of the some chalcogen chromites.

H28 O. P. Mchedlov-Petrosyan, V. Yu. Lyubnitskii, E. B. Zhamkochyan, V. L. Chernyavskii, Estimation of the results of thermochemical analysis of silicate materials by successive pattern identification method.

H29 G. N. Zviadadze, M. V. Kereselidze, L. A. Chkhikvadze, I. S. Omiadze, The thermodynamic properties of alloys of lantanium and cerium with aluminium.

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O2 M. P. Kozina, L. P. Timofeeva, S. M. Pimenova, G. L. Galchenko, Determination of the enthalpy of formation of some bicyclo-and tricycloheptanes.

O3 V. P. Kolesov, G. M. Slavutskaya, T. S. Papina, Determination of the standard enthalpies of formation of fluoro-o rganic compounds.

O4 G. L. Galchenko, V. K. Pavlovich, V. I. Stanko, The heats of formation of carboranes $B_{10}C_2H_{12}$ and their derivatives.

O5 A. K. Bonetskaya, M. A. Kravchenko, Ts. M. Frenkel',V. A. Pankratov, Investigation of polycyclotrimerization of arylcyanides by a twin calorimeter.

O6 R. M. Aizatullova, V. G. Genchel',The enthalpies of formation of some cyclosiloxanes.

O7 G. O. Shmyreva, R. M. Golosova, Thermodynamic and thermochemical properties of some diethylaluminium alcoxides.

O8 N. D. Lebedeva, N. M. Gutner, The enthalpies of Combustion of som bi-and trisubstituted alkanes.

O9 A. I. Sachek, A. D. Peshchenko, D. N. Andreevskii, Some regularities in the heats of formation of the secondary alcohols C_5-C_6.

O10 G. Ya. Kabo, G. E. Esipyonok, G. N. Roganov, The thermodynamics of isomerization reaction of methylchloroalkanes and the inter series increments.

O11 S. N. Gadzhiev, G. . Nurullaev, A. G. Kuznetsova, K. A. Karasharli, Thermodynamic effect of cis-trans isomerization in the organosilicon compound-trimethyl tripheny-cyclotrisiloxane.

O12 I. D. Zaikin, Yu. Ya. Wan-Chin-Syan, S. K. Chuchmarev, On the problem of the energy of the peroxy bond in the dialkylperoxides.

O13 V. D. Kiselev, A. I. Konovalov, Thermodynamic study of the Diels-Alder reaction.

O14 A. M. Rozhnov, R. I. Cherkasova, T. N. Nesterova, Some regularities in the thermal isomerization reactions of the dihalogeno alkanes.

O15 I. B. Rabinovich, V. G. Tsvetkov, N. V. Novosyolova, B. G. Gribov, E. N. Zorina, The enthalpy of mixing of some alkyl gallium compounds with the ethyl compounds of nitrogen arsenic, antimony and oxygen.
O16 O. B. Salamatina, B. G. Richmond, M. A. Markevich, A. K. Bonetskaya, N. S. Enikolopyan , The enthalpy Change of the epoxide ring scission reaction.
O17 V. P. Lebedev, Yu. A. Lebedev, Thermochemical investigation of the nitrogen bases of the nucleic acid and the related compounds.
O18 I. V. Sochava, O. I. Smirnova, O. N. Trapeznikova, The melting behavior of polymer crystallites with different morphologies.
O19 N. M. Gutner, N. D. Lebedva,The heats of combustion and formation of some substituted ethylenes.
O20 T. F. Vasil'ev, G. A. Timofeev, 4,4-dimethyl-dioxane-1,3: the enthalpy of combustion and the thermochemistry of its decomposition.
O21 S. V. Levanova, R. M. Rodova, L. A. Shevtsova, A. M. Rozhnov, Some peculiarities of the thermal isomerization reactions of chlorobutenes.
O22 N. V. Karyakin, V. N. Sapozhnikov, A. N. Mochalov, S. G. Kunyavskaya, G. L. Berestneva A. L. Rusanov, Study of cyclization of polyhydrazides by temperature dependence of their heat capacity.
O23 L. I. Pavlinov, L. V. Papulova, V. V. Korshak, Ts. G. Iremashvili, L. Kh. Plieva, S. N. Leont'eva, A. L. Rusanov, Thermochemical and stereochemical properties of the compounds modeling the structure of the elementary components of some polyheteroarylenes.
O23 Rodica Vilcu, B. Coman, Heat capacities of some organic in vapour phase.
O24 Rodica Vilcu, I. Ciocazanu, The reaction of benzoyl chloride with sodium methoxide and ethoxide and ethoxide.
O25 A. Hopfner, N. Parekh, Ch. Horner, Heats of vaporization of some deuterated neopentanes.

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H1 V. E. Ostrovskii, A. A. Adyatlov, N. N. Dobrovol'skii, Calorimetric and kinetic investigation of the interaction of hydrogen and oxigen with the surface layers of copper oxide.
H2 T. R. Brueva, A. L. Klyachko-Gurvich, The heat and kinetics of adsorption of ammonia on zeolites.
H3 E. L. Apotekar', The differential heats of interaction of oxigen with the surface of molybdenum oxide catalysts.
H4 O. M. Dzhigit, K. N. Mikos, T. A. Rakhmanova, On isothermal calorimeter and investigation of heats of adsorption of n-alkanes, ether and water on zeolites.
H5 G. I. Berezin, A. A. Kozlov, Phase transformations in the polymolecular adsorption layers.
H6 L. V. Mineeva, G. G. Muttuk, V. K. Chuikina, Investigation of the influence of the temperature on the heat of adsorption of water on zeolite by a twin isothermal calorimeter.
H7 A. A. Isirikyan, G. U. Rakhmatkariev, The differential quantities of the enthalpy, free energy and entropy of adsorption of water on the synthetic zeolite NaX.
H8 L. V. Novitskaya, Z. I. Sosinovich, V. S. Soldatov, L.V. Yurevich, The heats of sorption of water and heats of exchange on the strongly basic aninonite.
H9 A. M. Shishko, V. E. Kaputskii, F. N. Kapuskii, A. I. Skrigan, T. B. Adamovich, S. M. Volkovich, Integral heats of wetting of monocarboxy cellulose and its salts.
H10 E. B. Baskina, I. G. Zubilin, The heats of wetting of the coke prepared from Donets basin coal.
H11 A. A. Rakhumov, S. Z. Muminov, E. A. Aripov, The heats of adsorption and the phase state of benzene on montmorillonite and it derivatives.
H12 L. D. Glazunova, V. E. Ostrovskii, L. I. Panina, K. I. Sakodynskii, M. I. Temkin, Calorimetric Investigation of adsorption of hydrocarbons on polydivinyl benzene.
H13 N. N. Avgul', L. D. Belyakova, L. D. Vorob'eva, E. C. Dobrova, Calorimetric investigations of the heats adsorption of carbon dioxide on adsorvents of different nature.
H14 V. A. Sinitsyn, The heat capacity of water adsorbed on the zeolite KNaX.
H15 R. ZetterbergMicrocalorimetric technique for studies of adsorption phenomena on solid surfaces.

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P2 Yu. G. Frolov, K. K. Vlacenko, V. P. Nikolaev, C. G. Solovieva, A. A. Ageev, A. P. Lebedeva, Thermodynamic properties of the mixed solutions of the electrolytes containing cobalt, nickel and copper chlorides.
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P4 E. P. Kirpichev, Yu. I. Rubtsov, N. V. Krivtsov, T. V. Sorokina, G. B. Manelis, On the problem of the standard enthalpy of formation of perchlorate ion in the infinitely dilute water solution.
P5 M. L. Klyueva, N. P. Novoselov, K. P. Mishchenko, O. I. Ryabchenko, On the thermodynamic characteristic of the solutions of sodium and cesium iodides in dimethyl sulphoxide.
P6 V. A. Latysheva, I. N. Andreeva, N. Babakulov, Investigation of the heat capacity of the water solution of the chlorates of the elements which belong to the 2'nd and 3'rd groups of Mendeleev's periodic system.
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P8 E. I. Shcherbina, A. E. Tenenbaum, L. L. Gurarii, Themodynamic investigation of polar solvents.
P9 V. V. Aleksandrov, E. N. Glazkova, B. N. Beznalyi, Temperature dependence of the enthalpies of solvation of hydrogen chroride ions in the mixtures dimethylsulphoxide-water and ethyleneglycol-water.
P10 V. P. Vasil'ev, P. N. Vorob'ev, V. N. Vasil'eva, A. I. Lytkin, N. I. Kokurin, Heats of solution of titanium, tin, zirconium and hafnium chlorides in the mineral acid solutions.
P11 L. A. Kochergina, T. L. Yastrebova, E. V. Kozlovskii, L. L. Shekhanova, S. A. Aleksandrova, V. P. Vasil'ev, Thermochemistry of the proton association with anions of some acids in the water solution.
P12 G. P. Kotlyarova, The enthalpy change on solution of ionic potassium in glycerin at 25°C.
P13 V. G. Tsvetkov, N. V. Novoselova, B. V. Klimin, The enthalpy of mixing of a series of organic solvents with water.
P14 R. R. Zhemaitaitene, V. V. Brazauskas, D. I. Brazauskene, Thermochemical investigation of the water solutions of the metal complex salts of acid dye rose M.

P15 N. M. Privalova, A. F. Vorob'yov, The enthalpy of solution of KI in dimethylsulphamide in the low concentration region.
P16 V. A. Vasilyov, E. S. Sanaev, S. N. Novikov, Investigation of the heat capacities of two-and three-components water solusions of the 4-th period d-element chlorides.
P17 L. D. Deryabina, A. A. Polukhina, Some regularities in the change of heat of redistribution of water accompanying mixing of chloride solutions.
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P19 L. V. Puchkov, V. V. Kurochkina, I. S. Dankova, The integral free enthalpies, enthalpies and entropies of solution of electropytes in water at temperatures 25 300°C.
P20 G. M. Poltoratskii, L. A. Grishakova, G. V. Karpenko, L. M. Kim, K. P. Mishchenko, Calorimetric investigations of the solutions of tetraalkylammonium salts in water and organic mixed solvents.
P21 B. V. Gidaspov, S. S. Odokienko, V. F. Selivanov, L. K. Kravchenko, Thermochemical characteridtics of trinitromethane sodium salt in the water- acetone mixed solvent.
P22 A. D. Starostin, A. A. Natsina, Thermochemistry of crystallohydrates of lantanide perchlorates.
P23 I. G. Orlov, K. K. Koshelev, A. S. Vavilkin, Yu. K. Maksyutin, Microcalorimetri investigation of polymeric donner-acceptor complexes in solutions.

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K3 L. V. Gurvich, V. G. Ryabova, A. N. Khitrov, Spectorophotometric determination of dissociation energy of gaseous compounds of alkali earth metals with bromine.
K4 M. V. Varkov, Yu. M. Korenes, L. N. Sidorov, Mass-spectroscopic determination of activities in the melt system NaF-UF4.
K5 T. N. Rezukhina, T. F. Sysoeva, L. I. Kholokhonova, Thermodynamic properties of potassium, lantanium, yttrium, scandium and manganese fluorides. the EMF method with solid electrolyte.
K6 G. A. Semenov, L. A. Kuligina, K. E. Frantseva, Enthalpy of formation of gaseous rubidum and cesium chromates.
K7 A. Ya. Kipnis, N. F. Mikhailova, L. A. Pomerantseva, On the excess energy of small particles by equilibrium data on aerosols.
K8 M. M. Brazhnikov, D. N. Andreevskii, A. I. Sachek, Saturated vapor pressure of some fluoroalcohols and their heats of vaporization.
K9 T. A. Pribytkova, I. A. Rat'kovskii, G. I. Novikov, Mass spectroscopic investigation of the system $CsCl$-$CrCl_2$.
K10 N. L. Yarym-Agaev, Calculation of heats of the liquid-vapor phase transition in the presence of chemical interaction of the components in the vapor.
K11 V. A. Levitskii, V. N. Chentsov, Ya. I. Gerasimov, Thermodynamic properties of some tungstates of the rare earth elements at elevated temperatures.
K12 R. M. Varushchenko, A. I. Druzhinina, Semimicroebuliometer for precise determination of the temperature dependence of the vapor presure and calculations of the heats of vaporization.
K13 G. M. Dolidze, Yu. A. Kolvanovskii, O. V. Pavlenishvili, L. C. Polak, Method of caluculation of the kinetical parameters for mono- and bimolecular processes by using data from calorimetric measurments.

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T2 V. N. Vorob'ev, V. P. Kolesov, E. A. Sarzhina, Heat capacity and phse transformation at low temperatures of tetrachloropropane, pentafluorochloropropane and tetrachlorodifluoroethane.
T3 L. S. Barkhatov, D. H. Kagan, E. E. Shpil'rain, Enthalpy, heat of fusion and heat capacity of beryllium oxide in the liquid and solid phases.
T4 V. A. Palkin, G. A. Sharpataya, V. E. Gorbunov, N. N. Kuz'mina, V. A. Sokolov, On the heat capacity of the tetrammine complexes of the divalent platinum.
T5 G. A. Sharpataya, Z. P. Ozerova, V. A. Sokolov, Contribution in the heat capacity of tetrammine palladium and tetrammine platinum chloride hydrates coming from the motion of zeolitic water molecules.
T6 Yu. A. Bozhko, V. A. Ratobyl'skaya, V. A. Turdkin, The zero point energy and the stiffness of inorganic glasses.
T7 Yu. A. Dedikov, M. P. Orlova, Isobaric heat capacity and other calorimetric properties of neon at low temperatures and presures to 12 MPa.
T8 N. P. Rybkin, M. P. Orlova, A. K. Baranyuk, N.G. Nurullaev, L. N. Rozhnovskaya, Standardization of the dependence of C_p of solid substances at low temperatures.
T9 Yu. A. Dushechkin, B. Ya. Sukharevskaya, A.V. Alapina, A. M. Gurevich, Investigation of the character of the phase transition in magnetite by low temperature calorimetric method.
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T11 N. K. Moroz, I. E. Paukov, Thermodynamic and NMR investigation of the phase transitions in monosubstituted hexafluorobenzenes.
T12 A. A. Varchenko, Ya. A. Kraftmaker, Non adiabatic regime in modulation calorimetry.
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T14 A. S. Borukhovich, V. G. Bamburov, The Magnetic phase transition and heat capacity of Eu_2O.
T15 G. V. Bazuev, A. S. Borukhovich, G. P. Shveikin, Calorimetric investigation of the phase transformation in lantanium orthovanadide.
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T18 V. I. Dushchenko, G. Ya. Zemlyanoi, V. S. Tytyuchenko, N. V. Klimenko, Yu. I. Gannichenko, Calorimetric investigations of high polymer compound in electrostatic field.
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T20 N. A. Landiya, G. D. Chachanidze, M. G. Khundadze, V. S. Varazashvili, N. G. Lezhava, Thermophysical properties of lithium ferroalminospinel with the composition $Li_{0.5}Fe_{(2.5-X)}Al_XO_4$.
T21 V. N. Kostrykov, F. A. Kostylev, O. P. Samorukov, N. Kh. Samorukova, V. A. Tambakov Comparative investigation of the heat capacity of pure and hydrogenated nickel specimens at temperatures 13-300 K
T22 L. A. Reznitskii, Heat capacity of manganese ferrite and copper chromate at high temperatures.
T23 B. Ya. Berezin, V. Ya. Chekhovskoi, Results of investigation of the heat of fusion for reractory metals.
T24 V. E. Danilenko, G. N. Danilenko, A. F. Demidenko, A. S. Semykin, Heat capacity, entropy and enthalpy of 8-Naphthol and 2,3-dioxynaphthalene.
T25 I. A. Vasil'ev, A. D. Korkhov, D. M. Minkin, Thermodynamic properties of dimethylacetamide.
T26 V. P. Bondarenko, E. N. Fomichev, A. D. Krivorotenko, A. A. Kalashnik, Experimental investigation of enthalpy of the transition metal disilicides at high temperatures.
T27 E. B. Amitin, Yu A. Kovalevskaya, E. G. Lebedeva, Heat capacity of ammonium chloride in the interval 18-330 K. The anomaly at the disordering point.
T28 F. A. Sidorenko, N. N. Serebrennikov, V. D. Budozhapov, S. N. Trushevskii, V. D. Korabanova, Thermophysical properties of iron and cobalt monoborides.
T29 M. F. Nagiev, K. A. Karasharli, O. I. Dzhafarov, S. A. Mekhtiev, Z. A. Guseinov, Investigation of the true heat capacities of a series of cyclic organosilicon compounds at low temperatures (12-380 K).
T30 G. A. Berezovskii, V. A. Koval', Thermodynamic properties and phase transitions in titanium and vanadium oxides.
T31 B. V. Lebedev, L. Ya. Tsvetkov, V. I. Milov, Heat capacity of diphenyldiethynyl silane and diphenydiethynyl germane in the temperature range 15-300 K.
T32 M. S. Sheiman, G. V. Burchalova, V. I. Chernova, V. G. Syrkin, V. I. Tel'noi, Heat capacity and entropy of dissociation of the Me-CO bond in a series of metal carbonils.
T33 M. A. Anisimov, V. G. Gorbunova, T. M. Ovodova, N. G. Shmakov, Calorimetric investigations near the critical points of binary solutions.
T34 E. F. Westrum, Jr., Irwin J. Brink, Thermophysics and molecular freedom of azulene from 5 to 400 K.

Section VII. Thermochemistry of biological objects (Index B)

B1 M. A. Rozenfel'd, L. S. Khavkina, L. A. Piruzyan, Microcalorimetry as a fundamentally new method of investigating the state of normal and pathological coagulating blood system.
B2 M. A. Rozenfel'd, K. L. Erzinkyan, L. A. Piruzyan, Investigation of thermodynamic parameters of complex formation reaction between fibrinogen and heparin by calorimetric titration method.
B3 G. I. Tsereteli, Calorimetric manifestation of perfection of isotactic polystyrene crystallites in the melting interval.
B4 I. V. Socheva, A. Buka, On the structure of the melting curve of polyurethane crystallites.
B5 A. I. Gasan, V. Ya. Maleev, Investigation of the thermal stability of RNA in the concetrated solutions.
B6 L. N. Bell, N. P. Shuvalova, T. V. Volkova Method of the temperature curve in photocalorimetry for determination of the effectivity and intensity of photosynthesis.
B7 E. L. Andronikashvili, G. M. Mrevlishvili, G. Sh. Dzhaparidze, T. A. Simonishvili, Investigation of biological objects at low temperatures by an absolute adiabatic calorimeter.
B8 E. L. Andrenikashvili, G. N. Mgeladze, D. R. Monaselidze, Microcalorimetric investigation of the dilute and concentrated solutions and membranes of DNA.
B9 D. R. Monaselidze, Z. I. Chanchelashvili, D. I. Dzhokhadze, G. M. Mrevleshvili, Thermal properties of the intact cell nuclei.
B10 N. G. Bakradze, Microcalorimetric investigation of solution of t-RNA.
B11 F. O. Shraibman, G. R. Getashvili, V. V. Gerasimov, N. Sh. Nadirashvili, M. M. Zaalishvili, Investigation of thermal denaturation of miosin A modified with 1-fluoro-2.4-dinitrobenzene.
B12 T. V. Sanaya, Calorimetric investigations of the effect of ionizing radiation on an isolated frog skin.
B13 V. S. Mikhailov, V. Ya. Furman, V. V. Gerasimov, M. M. Zaalishvili, Calorimetric investigation of α-actinin solutions treated with ultrasound.
B14 P. L. Privalov, N. N. Khechinashvili, Thermodynamic characteristics of the native state of globular proteins.

Section VIII. Methods of calorimetric investigation (Index M)

M1 A. A. Velikov, A. A. Vichutinskii, A. K. Liepin'sh, Yu. Ya. Mikeel'son, G. A. Padzin'sh, High-sensitivity differential rotating reaction microcalorimeter for biological investigations.
M2 L. M. Vidavskii, Utilization of the optical quantum generators in calorimetry.
M3 L. N. Gal'perin, Yu. R. Kolesov, L. V. Mashkimov, Yu. E. Gerner, Differential automatic calorimeters (DAC) for various purposes.
M4 L. N. Galperin, Yu. R. Kolesov, A. E. Liberman, B. I. Nevol'nichenko, Yu. I. Rubtsov, E. P. Kirpichev, A system of automatic devices for precise calorimetry.
M5 V. M. Malyshev, Influence of the inhomogeneous temperature field on accuracy of the calorimetric experiments.
M6 V. A. Medvedev, V. K. Yaruntsev, Yu. A. Dedikov, A precise flow calorimeter for the "hydrogen-cold" region.
M7 B. N. Oleinik, Yu. I. Aleksandrov, V. D. Mikina, O. A. Sergeev, Yu. L. Gotlib, O. D. Kiguradze, B. I. Kovshov, T. R. Usvyatseva, I. M. Frenkel', Activities in the Mendeleev All-Union Scientific Research Institute of Metrology in the field of calorimetry.
M8 M. B. Mints, A. N. Tkachenko, The present status of production and perspectives of development of the galvanometric devices.
M9 V. V. Kandyba, E. N. Fomichev, On the problem of establishing a national system for distribution of the heat capacity and enthalpy units at high temperature.

M10 N. G. Bakradze, T. G. Vardosanidze, Some problems of the theory of the scanning differential calorimetric method.
M11 O. P. Mchedlow-Petrosyan, A. V. Usherov-Marshak, V. P. Slipushenko, A. M. Urezhenko, Differential microcalorimeter for investigation of dispersion systems.
M12 A. A. Vichutinskii, I. M. Andreev, A. A. Velikov, A. G. Golikov, Differential flow microcalorimeter.
M13 N. G. Shmakov, Methodological features of heat capacity measurement on the systems with anomalous susceptibility toward external disturbances.
M14 E. L. Sorkin, A scanning adiabetic calorimeter in the temperature region 300-700 K.
M15 I. G. Korshunov, V. E. Zinov'ev, L. P. Gel'd Apparatus for heat capacity measurement on metals and alloys in the temperature range from 700 to 3000 °C.
M16 D. A. Taits, V. G. Karpov, On the possibility of constructing accurate differential diathermic microcalorimeters.
M17 E. B. Amitin, Yu. A. Kovalevskaya, E. G. Lebedeva, I. E. Paukov, Method of heat capacity measurement at high pressures.
M18 K. S. Sukhovei, V. F. Anishin, Vacuum adiabatic microcalorimeter with capacity of 0.4 cm^3.
M19 I. D. Zenkov, V. H. Lushnikov, Calorimeter apparatus for determination of true heat capacities and heats of phase transitions in the temperature interval 2-300 K.
M20 George T. Armstrong, The catalog of thermochemistry prosses.

★第6回実験熱力学会議プログラム（1974年4月3日～4日, Leeds 大学, イギリス）

WEDNESDAY, 3rd APRIL

CHAIRMAN……DR. L.A.K. STAVELEY

1. The thermodynamics and certain other aspects of plastically crystalline transitions in caged hydrocarbons. T. CLARK, H. MACKLE, M.A. McKERVEY and J.J. ROONEY
2. The heat capacity of tetramethylammonium chloride from 100 to 500 K. R.D. WORSWICK
3. Conformational preferences of alkyl substituents and the chair-boat energy difference in the 1,3-dithiane series. K. PIHLAJA
4. Final thoughts on G.L.C. as a tool for mixture thermodynamics. A.J.B. CRUICKSHANK, C.P. HICKS and R.W. MOODY
5. Thermodynamics of the nematic mesophase. J.T.S. ANDREWS
6. Can the LKB 8700 calorimeter be used as a continuous titration calorimeter? A. VACCA, P. PAOLETTI and A. SABATINI
7. The enthalpy of formation of beryllium fluoride. P. GROSS J.T. BINGHAM and C.HAYMAN
8. Computer analysis of thermochemical data. J.B. PEDLEY

Plenary lecture : Low temperature - high-pressure thermodynamics. W.B. STREETT

THURSDAY, 4th APRIL

SESSION A
CHAIRMAN……DR. F.H. HAYES

A.9. A very high temperature calorimeter operating to 1800 K. J. MERCIER
A.10. Direct measurement of enthalpies of mixing up to 1800 K. J.P. BROS and M. GAUNE-ESCARD
A.11. Enthalpies of mixing of some molten alkali halides. M. GAUNE-ESCARD
A.12. Heat capacity and thermodynamic properties of In_2O_3(c). K.C. MILLS
A.13. Enthalpy of eutectoid transformation and interfacial enthaloy in the Cu-Al system. F.R. SALE and D. CHEETHAM
A.14. Calorimetric investigation of solid solutions of the system $Li_2O/5Fe_2O_3$ - $Li_2O/5Al_2O_3$. N.A. LANDIYA, G.D. CHACHANIDZE, M.G. KHUNDASZE, V.S. VARASASHVILI and N.G. LAZHAVA

SESSION B
CHAIRMAN……PROFESSOR J.S. ROWLINSON

B.15. Isothermal Joule-Thomson measurements on vapours. P.G. FRANCIS
B.16. Excess enthalpies of binary fluid mixtures at high pressures and low temperatures. C.J. WORMALD, K.L. LEWIS and S. MOSEDALE
B.17. Excess enthalpies of the liquid mixtures N_2+O_2, $Ar+O_2$, CH_4+Ar. K.L. LEWIS
B.18. Enthalpies of mixing of water and the isomers of butanol and propanol from 10 to 50°C. D.M.T. NEWSHAM and M.A. MINTO
B.19. Mixtures of n-alkanes with linear dimethylsiloxanes. E. DICKINSON and I.A. McLURE
B.20. Specific interactions between hexafluorobenzene and some aliphatic n-donors. J.W.JAMES and I.A. McLURE

SESSION A
CHAIRMAN……DR. J.N. PRATT

A.21. Thermodynamic properties and compound cluster formation in liquid Zn-Sb alloys. K.L. KOMAREK
A.22. Thermodynamic properties of Fe-Mn alloys. F.H. HAYES and G. McHUGH
A.23. Knudsen effusion measurements on silicides and silicates. W. SLOUGH and T.G. CHART
A.24. Electrochemical study of molten salts of highly reductive metals. J.B. LESOURD
A.25. Phases equilibria in the Co-W-C system at 1150°C. B. UHRENIUS and T. JOHANSSON

SESSION B
CHAIRMAN……PROFESSOR F.L. SWINTON

B.26. Thermodynamic study of the liquid system, Xe-HBr. J.C.G. CALADO and V.A.M. SOARES
B.27. Calculations of thermodynamic properties from statistical mechanical models. R.M. GIBBONS
B.28. Lower critical solution temperatures in linear polyethylene/n-alkane mixtures. Y. KODAMA
B.29. Temperature dependence of dielectric constants and thermodynamic functions. M.T. RÄTZSCH

B.30. Enthalpies of mixing and heat capacities of organic mixtures measured using the Picker Dynamic flow microcalorimeter. J.P.E. GROLIER

B.31. Solute-solvent interactions in solvent mixtures from precise vapour pressure measurements. C. TREINER and P. TZIAS

SESSION A
CHAIRMAN·····DR. G. PILCHER

A.32. Enthalpies of formation of the normal primary alcohols in the liquid state. C. MOSSELMAN

A.33. Enthalpies of formation and entropies of some aliphatic ethers. A.J. HEAD and J.F. MARTIN

A.34. Bond energies in Group IV B organometallic compounds. H. MORRIS, A.S. CARSON and P.G. LAYE

A.35. Thermochemistry of some organocobalt compounds. P.J. GARDNER, B. ROBINSON, and A. CARTNER

A.36. Bond energies of Ni-PF_3, Cr-PF_3. H.A. SKINNER, D. LALAGE S. BROUWN and J.A. CONNOR

A.37. Topological analysis of thermochemical properties. J.E. DUBOIS

SESSION B
CHAIRMAN·····DR. D. STUBLEY

B.38. The vapour pressures of aliphatic alcohols. D. AMBROSE

B.39. Enthalpies of sublimation of metal acetonylacetonates. R.A. SCHULZ, R.J. IRVING and H. NAGHIBI

B.40. Enthalpies of vaporisation of some β-diketones. M.A.V. RIBEIRO DA SILVA and R.J. IRVING

B.41. Heat flow calorimetry for studying kinetics of adsorption or catalysed reactions. P.C. GRAVELLE

B.42 Change of state of the adsorbed phase, (N_2,Ar) on graphitized carbon black : calorimetric evidence. J. ROUQUEROL, S. PARTYKA and F. ROUQUEROL

B.43. Determination of equilibrium curves in gas-solid reactions. M. SOUSTELLE, G. THOMAS and R. BARDEL

SESSION A
CHAIRMAN·····DR. A.S. CARSON

A.44. Thermodynamic properties for the ionisation of water. G. OLOFSSON, and L.G. HEPLER

A.45. Partial molal heat capacities of some aminoacids in aqueous solution. C.H. SPINK and I. WADSÖ

A.46. Partial molar heat capacities of some 1-1 electrolytes in several solvents. C. DE VISSER and G. SOMSEN

A.47. Themodynamic study of solid-liquid equilibria in the systems, alkali hydroxide - water. R. COHEN ADAD, M-T. SAUGIER, J.J. COUNIOUX and J. SAID

A.48. Studies on water - alkali halide - halogen acid ternary systems. R.D. JOLY, G.PERACHON and J. THOUREY

SESSION B
CHAIRMAN·····DR. H.A. SKINNER

B.49. A special method for determination of heats of solution of slightly solube liquids, application to benzene in water. N.F. MICHOLS, S.J. GILI and I. WADSO

B.50. Biochemical applications of flow microcalorimetry. A.E. BEEZER, T.I. STEENSON and H.J.V. TYRRELL

B.51. Interaction of glucose with human erythrocyte membranes. C. ZALA and M.N. JONES

B.52. Interactions with bipyridylium and pyridinium cations with expanding lattice clay minerals. M.H.B. HAYES, M.E. PICK and B.A. TOMS

B.53. The use of continuous concentration gradients in a flow-microcalarimeter. R.L. BILTONEN, D. MOUNTCASTLE and R. JOHNSON

B.54. Experimental thermodynamics of living systems. ZH. V. STOJANOV and R.J. FLOROV

「熱測定」編集方針

1. 形　　式

1.1　1年1巻，4分冊とし，一貫ページをつける。年号には西暦年号を用いる。

1.2　英文名は，Calorimetry and Thermal Analysis とする。

1.3　略称をNETSUとする。

2　内　　容

2.1　本誌の構成を，巻頭言，総説，講座，ノート，資料，論文紹介，各種記事，報告，会告などとする。原著学術論文は扱わない。

2.2　巻頭言の内容は随意とし，年1回，その巻の最初の号にのせる。

2.3　総説は，熱測定および関連領域における種々の課題について，参考文献などをつけて総括的に解説するもので，しかも著者の観点が明確に出ているものが望ましい。

2.4　講座は，重要な基礎的知識についての講義または解説である。

2.5　ノートは，研究ノート，実験ノート，技術ノートなど，著者の行なった研究，実験，技術開発で，一般読者に参考となるような事柄を具体的に紹介する。

2.6　資料は，貴重なデータや技術資料，入手しがたい論文の紹介とする。

2.7　論文紹介は，主として外国の論文の抄録的紹介とする。

2.8　各種記事は，内外の研究室の紹介，訪問記，著名外人学者のプロフィル，内外の新しい研究や技術を短く紹介するトピックス，研究の苦心談など，読み物的な性格のものとする。

2.9　報告は，本学会の行事，委員会などの報告のほか，海外の行事などについてもできるだけ取入れる。

3.　原稿の取扱い

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3.2　原稿は下記の「執筆要領」に従って執筆するよう依頼する。

3.3　依頼原稿に対しては規定の原稿料を支払う。

4.　この方針は，1974年2月1日より実施する。

「熱測定」執筆要領

1.　形　　式

1.1　原稿は，本会所定の原稿用紙を用いる。

1.2　原稿の1枚目には，題目，著者名を記し，脚注で著者の所属機関およびその所在地を記す。また題目，著者名，所属機関の公式英訳名を入れる。

1.3　見出し，小見出しには，章，節，項などとせず，2·1，2·2·1のごとくPoint systemとする。

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2.1　原則として漢字は当用漢字，かなはひらがな，文章は新かなづかいによる口語とする。

2.2　量記号，単位記号などは，原則としてIUPACの勧告（熱測定研究会刊「熱力学データの発表手続に関する指針」または，関：「熱的データ発表のための国際規準について」"熱・温度測定と熱分析，1971"を参照）に従う。単位系も同様であり，したがってSI単位を原則とする。本誌が熱測定学会の会誌であることを考え，とくにcalでなく，J，°KでなくKである点などに注意を払われたい。

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1）L.Reich, S.S.Stivala, Thermochimica Acta 1, 65（1970）

2）山田太郎；熱測定1，18（1974）

3）L.G.Berg, "Differential Thermal Analysis" Vol.I, Ed. by R.C.Mackenzie, Academic Press, N.Y.（1970）. p.346.

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3.1　図は，原則として掲載寸法の2倍程度の大きさに，黒インクを用いて鮮明に書く。図は通常，横が7cm以下に縮尺されるので，あまり複雑とならないことが望ましい。

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