

## Events

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### 9TH JAPANESE CALORIMETRY CONFERENCE, 1973

The 9th Japanese Calorimetry Conference was held in Osaka Kagaku Gijutsu Center, on November 14–16, 1973. The following lectures were read:

*Heats of dilution of polymer solutions*

R. FUJISHIRO

(Dept. of Chemistry, Faculty of Science, Osaka City Univ., Sumiyoshi-ku, Osaka)

*Methods and instruments for studies in chemical thermodynamics at the Thermochemistry Laboratory*

S. SUNNER

(Lund University, Sweden)

*Mass spectral analysis of thermally desorbed gases from diamond surfaces*

S. MATSUMOTO, Y. SATO and N. SETAKA

(National Institute for Researches in Inorganic Materials, Sakura-mura, Niihari-gun Ibaragi)

*Thermoluminescence of precipitated calcium carbonates*

S. ABE, K. ENDO and Y. UEMURA

(Dept. of Industrial Chemistry, Tokyo Univ. of Agriculture and technology, 2–24–16 Nakamachi, Koganeishi, Tokyo)

*Thermal analysis of stilbite, with special reference to an exothermic reaction around 500°C*

R. OTSUKA, \*S. TSUTSUMI and T. SAKAMOTO

(Dept. of Mineral Industry, Sch. Sci. Eng'ng and \*Inst. of Earth Sci., Sch. Education, Waseda Univ. Nishiokubo, Shinjuku-ku, Tokyo)

*A thermal analysis for magnesium chloride hexahydrate under pressure*

T. HOMA

(Kitami Institute of Technology, Koen-cho, Kitami-shi)

*Thermal racemization of aquocobalt (III) complexes*

M. OMOTE, E. KYUNO and R. TSUCHIYA

(Dept. of Chemistry, Faculty of Science, Kanazawa Univ. 1–1 Marunouchi Kanazawa, 920)

*DTA studies on the thermal deauration reactions of cis- and trans-[Co(en)<sub>2</sub>(NH<sub>3</sub>)<sub>2</sub>(OH<sub>2</sub>)]Br<sub>3</sub>·H<sub>2</sub>O in solid-phase (Supplement).*

C. SATO, M. OHSAWA and H. TANAKA

(Dept. of Chemistry, Faculty of Science, Hirosaki Univ. Hirosaki)

*Consideration on thermal conductivity of solid under reaction by TDA method*

S. SUGYAMA, M. HASATANI, H. MATSUDA and T. KAGAWA

(Dept. of Chem. Eng., Nagoya Univ., Nagoya)

*Thermal behavior of melt spinning copper fiber*

T. GOTO, H. TAKAI, T. ODA, Y. YUKI and M. NAGANO

(Dept. of Fiber and Polymer, Nagoya Institute of Technology, Gokiso, Showa-ku, Nagoya 466)

*The heat capacities of ferroelectric  $\text{NH}_4\text{HSO}_4$  and  $\text{RbHSO}_4$* 

Y. HIGASHIGAKI and H. CHIHARA

(Faculty of Science, Osaka Univ., Toyonaka, Osaka 560)

*Heat capacity of  $\text{NH}_4\text{H}(\text{ClCH}_2\text{COO})_2$  and  $\text{ND}_4\text{D}(\text{ClCH}_2\text{COO})_2$  and their ferroelectric phase transition*

A. INABA and H. CHIHARA

(Faculty of Science, Osaka Univ. Toyonaka, Osaka, 560)

*A thermal study of an irreversible phase transition from the metastable to stable modification of potassium ferrocyanide trihydrate*

M. OGUNI, T. MATSUO and H. SUGA

(Dept. of Chemistry, Faculty of Science, Osaka Univ., Toyonaka, Osaka 560)

*An investigation of the phase transition in  $\text{SnCl}_2 \cdot 2 \text{H}_2\text{O}$  crystal by high resolution heat capacity measurement*

M. TATSUMI, T. MATSUO and H. SUGA

(Dept. of Chemistry, Faculty of Science, Osaka Univ., Toyonaka, Osaka 560)

*A newly designed laser flash calorimeter for precise heat capacity measurement (at 80–700 K)*

Y. TAKAHASHI, H. YOKOKAWA, M. KAMIMOTO

(Dept. of Nuclear Engineering, Univ. of Tokyo, 7-3-1, Hongo, Bunkyo-ku, Tokyo)

*Heat capacity measurement of UP by laser flash method*

H. YOKOKAWA, Y. TAKAHASHI and T. MUKAIKO

(Dept. of Nuclear Engineering, Faculty of Engineering, Univ. of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo)

*Heat capacity of crystalline, nematic and isotropic liquid phases of *n-p*-ethoxybenzylidene-*p*'-butylaniline*

T. NAKAMURA, M. SORAI and S. SEKI

(Dept. of Chemistry, Faculty of Science, Osaka Univ., Toyonaka, Osaka 560)

*Relaxation phenomena around glass transition region in heavy ice*

O. HAIDA, H. SUGA and S. SEKI

(Dept. of Chemistry, Faculty of Science, Osaka Univ., Toyonaka, Osaka 560)

*Measurement of temperature dispersion of dielectric loss by means of DTA*

H. MATSUURA and R. KANEKO

(Dept. of Industrial Chemistry, Tokyo Univ. of Agriculture and Technology, 2-24-16 Nakamachi Koganei, Tokyo)

*Measurement of temperature dispersion of dielectric loss by means of DTA*

Y. KOMATSU and R. KANEKO

(Dept. of Industrial Chemistry, Tokyo Univ. of Agriculture and Technology, 2-24-16 Nakamachi Koganei, Tokyo)

*A study of thermally stimulated depolarization in crystalline 1,4-cyclohexanedione in relation to the phase transition*

C. KITAZAWA and A. AIHARA

(Dept. of Materials Science, Denki-Tsushin Univ. Chofu, Tokyo)

*Thermal properties of the mixed D and L of poly- $\gamma$ -benzyl-glutamate*

T. UJIIE, K. INOUE, Y. BABA and A. KAGEMOTO

(Osaka Institute of Technology, Dept. of General Education, Omiya, Asahi-ku. Osaka 535)

*The effect on the metal ion of the helix-coil transition of Poly A*

S. TANAKA, Y. BABA and A. KAGEMOTO

(Osaka Institute of Technology, Dept. of General Education Omiya, Asahi-ku. Isaka 535)

*Thermal behavior of isopropenyl-s-triazines*

T. OOUCHI and Y. YUKI

(Dept. of Fiber and Polymer, Nagoya Institute of Technology, Gokisho, Showa-ku. Nagoya, 466)

*Heat-exchange type of calorimetry and the application to chemical analysis*

M. NAKANISHI

(Dept. of Chemistry, Ochanomizu Univ., Bunkyo-ku. Tokyo)

*Study of liquid phase equilibria by conduction calorimetry*

H. TACHOIRE

(Laboratoire de Thermochimie, Université de Provence, France)

*Studies on the phase transition of long-chain vinyl compounds by differential thermal analysis*

Y. SHIBASAKI, H. NAKAHARA and K. FUKUDA

(Dept. of Chemistry, Faculty of Science and Engineering, Saitama Univ., 255 Shimo-Okubo, Urawa)

*Thermal analysis on isothermal crystallization kinetics of Nylon-6*

K. KAMIDE and A. IMANAKA

(Textile Research Laboratories, Asahi Chemical Industry Co., Ltd. 11-7 Hachchonawate, Takatsuki-City Osaka)

*Thickening of crystal during heating at high rate*

K. SAKURAI, K. MIYASAKA and K. ISHIKAWA

(Tokyo Institute of Technology, Laboratory of Textile Physics., Ookayama, Meguro-ku. Tokyo)

*Thermal analysis of drawn polyester (1)*

E. ITO<sup>1</sup> and T. HATAKEYAMA<sup>2</sup>

(<sup>1</sup>Tokyo Metropolitan Univ., Fukasawa, Setagaly, Tokyo, <sup>2</sup>Research Institute for Polymers and Textiles Sawatari, Kanagawa, Yokohama)

*Thermomechanical analysis (TMA) of the thermal shrinkage of cold-stretched polycarbonate, near its TG*

T. KATO and H. KAMBE

(Institute of Space and Aeronautical Science, Tokyo Univ. Komaba 4-6-1, Meguro-ku Tokyo)

*Design of flash point tester*

T. OKINO<sup>1</sup> and K. ISHII<sup>2</sup>

(<sup>1</sup>Shimazu Seisakusho Ltd., Scientific & Industrial Instrument Division, Analytical Instrument Plant, Sanjo Works, Nishioji Sanjo, Nakagyo-ku. Kyoto, <sup>2</sup>Takatsuki Research Center, Toyobo Co. Ltd., Takatsuki City, Osaka)

*Design of micro-thermobalance for the temperature range of 1500°C***M. MARUTA**

(Shimazu Seisakusho Ltd., Scientific &amp; Industrial Instrument Division, Analytical Instrument Plant, Sanjo Works, Nishioji Sanjo, Nakagyo-ku, Kyoto)

*Design of high sensitivity thermobalance***K. ITO**

(Shimazu Seisakusho Ltd., Scientific &amp; Industrial Instrument Division, Analytical Instrument Plant, Sanjo Works, Nishioji Sanjo, Nakagyo-ku, Kyoto)

*Evolved gas analysis by TG-MS***A. FUJISAWA, M. MARUTA and K. YAMADA**

(Shimazu Seisakusho Ltd., Sanjo, Works, 1, Nishinokyo Kuwabara-cho, Nakagyo-ku, Kyoto)

*Evolved gas analysis by flame ionization detector (FID)***K. YAMADA, T. SATO, S. OHURA and A. TSUYAMA**

(Shimazu Seisakusho Ltd., Scientific &amp; Industrial Instrument Div. Analytical Instrument Plant, Sanjo Works, Nishioji Sanjo Nakagyo-ku, Kyoto)

*Specific heat measurement by image furnace***N. YOSHIDA, M. YAMAKAWA and S. NAGASAKI**

(AGNE Research Center of Technology, Kitamura Bldg., 5-1-25, Minamiaoyama, Minato-ku, Tokyo)

*Drop calorimeter for continuous measurement***M. ICHIHASHI, A. KISHI and A. MAEZONO**

(Shinku Riko Co. Ltd., 300 Hakusan-cho, Midori-ku, Yokohama City)

*A newer adiabatic calorimeter system***A. MAESONO, M. ISHIHASHI and R. KATO**

(Shinku Riko Co., Ltd., 300, Hakusan-cho, Mirodi-ku, Yokohama)

*The heat capacity of tetramethylsilane; a new crystalline modification***M. HARADA, T. ATAKE and H. CHIHARA**

(Faculty of Science, Osaka Univ., Toyonaka, Osaka, 560)

*The heat capacity, vapor pressure and related thermodynamic properties of tetramethylstannane***T. ATAKE and H. CHIHARA J**

(Faculty of Science, Osaka Univ., Toyonaka, Osaka 560)

*Heat capacities and phase transitions KSCN and NH<sub>4</sub>SCN crystals***Y. KINSHO, M. SAKIYAMA and S. SEKI**

(Faculty of Science, Osaka Univ., Toyonaka, Osaka 560)

*Heat capacity and relaxation phenomena of isopropylbenzene***K. KISHIMOTO, H. SUGA and S. SEKI**

(Dept. of Chemistry, Faculty of Science, Osaka Univ., Toyonaka, Osaka 560)

*Study of helix-coil transition in poly- $\epsilon$ -carbo-benzoxy-L-lysine by heat capacity measurement***K. NAKAMOTO, H. SUGA, S. SEKI, T. NORISUYE, A. TERAMOTO and H. FUJITA**

(Dept. of Chemistry, Faculty of Science, Osaka Univ., Toyonaka, Osaka 560)

*The heats of helix-coil transition of poly- $\gamma$ -methyl-L-glutamate solution by means of the heats of solution***H. KATAYAMA, Y. BABA and A. KAGEMOTO**

(Osaka Institute of Technology, Dept. of General Education, Omiya, Asahi-ku, Osaka 535)

*Heat-leakage type thermal detector with short time constants*

Y. TERAMOTO, N. NAGASAKA, S. HAGIWARA  
(Daini Seikosha Co. Ltd., Tokyo Riko Co. Ltd.)

*The development of the heat-leakage scanning calorimeter*

Y. TERAMOTO, N. NAGASAKA and S. HAGIWARA  
(Daini Seikosha Co. Ltd., Tokyo Riko Co. Ltd.)

*Design of an analogue computer for calculating the hypothetical adiabatic change of slow reaction by on-line system*

K. TAKAHASHI  
(Laboratory of Biophysical Chemistry, College of Agriculture, Univ. of Osaka Prefecture, Sakai Osaka)

*The automatization of water-flow type gas calorimeter*

M. SASAKI\*, K. HAISHIMA\*, L. FUJIWARA\*\* and M. SHIGENO\*\*\*  
(\* National Research Institute for Pollution and Resources, 188 Kotobuki-cho, Kawaguchi, Saitama Pref; \*\* The Fuel Society of Japan, 6-5-4 Sotokanda Chiyoda-ku, Tokyo;  
\*\*\* Chino Works Ltd., 1-22-8 Nishiikebukuro Toshima-ku, Tokyo)

*Temperature distribution in the sample in an adiabatic scanning calorimeter*

K. NAITO, H. INABA and M. ISHIDA  
(Dept. of Nuclear Engineering, Faculty of Engineering, Nagoya Univ., Furo-cho, Chikusa-ku, Nagoya)

*Measurements of thermal diffusivity of glasses by periodic heat-source*

M. HATTORI and T. FUKUMOTO  
(Faculty of Engineering, Hiroshima Univ., Sendamachi-3, Hiroshima)

*Investigation of thermomechanical analysis in regard to the measurement of thermomechanical properties of polymers*

K. TAKAHASHI  
(Research Dept. II, Rigaku Denki Co. Ltd., 3-9-12, Matsubara-cho, Akishima-shi, Tokyo 196)

*Degree of swelling measurement with a thermomechanical analyzer*

K. YAMADA, M. MARUTA, Y. KUNIMATSU  
(Shimazu Seisakusho Ltd., Scientific & Industrial Instrument Div., Analytical Instrument Plant, Sanjo Works, Nishioji Sanjo, Nakagyo-ku, Kyoto)

*Improvement of thermomechanical analyzer and its application*

I. OJIMA  
(Research Dept. II, Rigaku Denki Co. Ltd., 3-9-12, Matsubara-cho, Akishima-shi, Tokyo 196)

*Standard reference materials for torsional braid analysis*

Y. TAKAHASHI and T. OZAWA  
(Electrotechnical Laboratory, Tanashi, Tokyo)

*Temperature standardization of thermogravimetry by Curie points of ferromagnetic alloys*

R. YOKOTA and H. KAMBE  
(4-6-1, Komaba Meguro-ku, Tokyo, Institute of Space and Aeronautical Science, Univ. of Tokyo)

*On use of WO<sub>3</sub> for sensitivity check of DTA*

S. OZAKI  
(Government Industrial Research Institute of Nagoya, 1-1 Hiratemachi, Kita-ku, Nagoya)

*Recent developments in dynamic thermal analysis*

J. CHIU  
(Du Pont., USA)

*Effects of atmosphere on thermal analysis*

Y. FURUYA  
(Research Dept. II, Rigaku Denki Co. Ltd., 3-9-10, Matsubara-cho, Akishima-shi,  
Tokyo 196)

*Kinetic analysis of the thermal decompositions by rapid heating thermal balance*

R. KATO, Y. MURAKAMI and A. MAESONO  
(Shinku Riko Co. Ltd., 300, Hakusan-cho, Midori-ku, Yokohama City)

*The effect of heating rates on the kinetic analysis of thermoanalytical data*

T. OZAWA  
(Electrotechnical Laboratory, Tanashi, Tokyo)

*Enthalpy of combustion of optically active amino acids*

M. SAKIYAMA and S. SEKI  
(Faculty of Science, Osaka Univ., Toyonaka 560)

*Heat of combustion of the cellulose treated with flame retardants*

T. OKINO and K. ITO  
(Shimazu Seisakusho Ltd., Scientific & Industrial Instrument Div., Analytical Instrument  
Plant, Sanjo Works, Nishioji Sanjo Nakagyo-ku, Kyoto)

*Enthalpies of vaporization of organic compounds at 25.0°C*

Y. SAITO and K. KUSANO  
(Faculty of Engineering, Miyazaki Univ.)

*Calorimetry of starch-water system — Thermochemical properties during swelling process of  
starch granules*

H. FUKADA and K. TAKAHASHI  
(Laboratory of Biophysical Chemistry, College of Agriculture, Univ. of Osaka Pref. Sakai,  
Osaka)

*Heats of dilution of o-terphenyl solutions in benzene II*

T. KIMURA and S. TAKAGI  
(Dept., of Chemistry, Faculty of Science and Technology, Kinki Univ., Kowakae 321,  
Higashi-Osaka)

*Enthalpies of transfer of 1-methyl-2-pyrrolidinone from water to aqueous alcohols*

F. KIMURA, S. MURAKAMI and R. FUJISHIRO  
(Dept. of Chemistry, Faculty of Science, Osaka City Univ., Osaka)

*Measurement of the vapor pressure of acetylacetone-organic solvents mixtures (I)*

M. INOUE and N. SUZUKI  
(Dept. of Chemistry, Faculty of Science, Tohoku Univ., Sendak)

*New development of an apparatus for thermal conductivity measurement by hot wire method*

K. HAYASHI, M. FUKUI and I. UEI  
(Dept. of Chemistry, Junior College of Kyoto Technical Univ., Matsugasaki, Sakyo-ku,  
Kyoto 606)

*Comments on measurement of thermophysical properties by laser flash method at 1500—2200°C*

A. KISHI and A. MAEZONO

(Shinku Riko Co. Ltd., 300, Hakusan-cho, Midori-ku, Yokohama City)

*Discussion on the problems of the thermal diffusivity measurement by laser flash method*

M. KAMIMOTO, Y. TAKAHASHI and T. MUKAIKO

(Dept. of Nuclear Engineering, Faculty of Engineering, Univ. of Tokyo, 7-3-1 Hongo  
Bunkyo-ku, Tokyo)

*Effective thermal conductivity of powder bed-measurement at high temperature by hot wire  
method*

S. KOIKE, K. ITO, M. HASATANI and S. SUGIYAMA

(Dept. of Chem. Eng., Nagoya Univ., Nagoya)

*Enthalpic study of the reactivity of olefines with boron trifluoride*

L. ELEGANT and M. AZZARO

(Laboratory of Physical Organic Chemistry, Nice Univ., 06034 Nice Cedex, France)