

**NETZSCH-GEFTA-Award 1985 for
Prof. Dr. Eberhard Gmelin (right), Stuttgart,
presented in Bratislava/CCSR, August 19, 1985 (8th ICTA '85)**



The Nominating Committee of the Gesellschaft für Thermische Analyse e.V. (GEFTA) has selected Prof. Eberhard Gmelin, Stuttgart/Germany for the NETZSCH-GEFTA-Award 1985.

Dr. Eberhard Gmelin was born on July 26, 1937 in Mainz/FRG. He studied physics at the university of Mainz. In August 1962 he completed the diploma examination with the best possible grade.

From 1962 till 1968 he was employed both as teacher and scientist. Dr. Gmelin then studied for his doctorate with Professor L. Weil at the university of Grenoble/France in the "Centre National de Recherches Scientifiques sur les Très Basses Températures" as a scientific assistant. Until leaving the institute for low temperatures in Grenoble, Dr. Gmelin worked as a post doctoral fellow in the faculty of natural science of Grenoble University.

He then worked as a scientist at the Physics Institute of Würzburg University; in 1969 he was appointed lecturer and received the "venia legendi" for experimental physics.

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Dr. Gmelin became a scientist at the Max-Planck-Institute for solid-state physics in October 1971. He is head of both the service department "low temperature" and the low temperature laboratory of Max-Planck-Institute for solid-state research. In addition he has a private lectureship at the Würzburg University. Dr. Gmelin was appointed apl. professor at the University of Würzburg in November 1976.

His main fields of work since the time in Grenoble are calorimetry and cryogenics. During his work in Würzburg and later in Stuttgart Dr. Gmelin has tried to involve himself more intensively with semi-conductor physics. He admits himself that this change has never been total. After short breaks he always returns to calorimetry and cryogenics: measurements of specific heat, thermal conductivity, cryostate design, gas liquification, thermometry, adiabatic demagnetisation, magnetism and electronic transport phenomena. His scientific research is mainly specific heat of cubic alkaline earth oxides, particularly the behaviour of helium in BeO. Measuring the specific heat of irradiated and then tempered BeO-samples (λ -pont) at 1–4 K and by the use of gas chromatography and electron microscopy it was possible to produce a complete helium balance and diffusion behaviour for each phase in the sample.

He has also considerable success in simplifying calorimetric methods, improving the measuring systems and in the automation of time consuming measurements. A feature of this work is a reduction of the necessary sample masses required for the measurement. The aim is to produce a system similar to modern, commercial DSC-systems for extremely low temperature ranges (liquid helium) which will give also laymen the opportunity to carry out calorimetric measurements at the lowest temperatures.

The working group led by Dr. Gmelin has applied for several patents in cryogenics which has led to the development of instruments by different companies.

Currently Prof. Gmelin is studying the thermal anomalies of ferro-electrical materials at low temperatures. Further aims of the research are the determination of lattice energy and phase transitions of argyrodites and "plastic crystals".

Almost 90 published papers and innumerable lectures show the extent of the scientific and technological work of Professor Gmelin.

Professor Gmelin has been a member of the Gesellschaft für Thermische Analyse-GEFTA since 1980.

Dr. Gmelin is married and has two sons: Christian Ulrich and Jens-Eric.

Dr. Gmelin prefers to spend his remaining free time at home, working in his garden or reading modern literature; historical and art history books fill his shelves. Dr. Gmelin loves to travel and combines this with an intensive study of the history and culture of the country visited.



The ICTA Award founded for young scientist was presented to Dr. D. Brandová (Institute of Chemical Technology, Pardubice, Czechoslovakia), during 8th International conference on Thermal Analysis Bratislava, Czechoslovakia. Dr. Brandová receiving the Award from Prof. Yariv.

**21ST JAPANESE CONFERENCE ON CALORIMETRY
AND THERMAL ANALYSIS**

September 25–27, 1985, Faculty of Engineering,
Hokkaido Univ., Japan

The following papers were presented:

Dynamic Load TMA and the application for polymer materials.

N. Matsumori, M. Matsubara, N. Nakamura, Y. Teramoto, H. Tagawa* and K. Kurita*

(Seiko Instruments & Electronics Ltd. and *Nihon Univ.)

Thermal evaluation of polymers by TG method.

K. Nagata, F. Miyamoto, T. Watanabe and Y. Shibuya

(Manufacturing Development Lab. Mitsubishi Electric Corp.)

Investigations of aging behavior of polyvinyl chloride resin using thermoanalytical techniques.

T. Horikawa and Y. Naoshima

(Engineering and Shipbuilding Research Center, Nippon Kokan K.K.)

Measurement of carbon black in PVC by TG.

M. Ohta and T. Okino

(Shimadzu Corporation.)

Study of cure and decomposition process of resins by TG–GCMS combined system.

N. Odagiri, T. Yamashita and K. Tobukuro

(Pioneering R&D Labs., Toray Industries, Inc.)

Freezing phenomena of the alcohol drinks.

K. Ehara and M. Maesono

(Dept. of Polymer Engineering, Tokyo Institute of Technology.)

Thermoanalytical investigations on the interaction between the amphiphilic compounds and water (21): Effect of the counterions on the thermodynamical stability of the phases composed of the octadecyltrimethylammonium halides and water.

M. Kodama, K. Shigeta, S. Miyagawa, S. Seki and K. Tsujii*

(Dept. of Chemistry, Faculty of Science, Kwansai Gakuin Univ. and *Kao Co. Ltd.)

Invited Paper 1

Thermodynamic studies of molecular inclusion phenomena by cyclodextrins in aqueous solution.

S. Takagi

(Dept. of Chem., Faculty of Sci. and Technol., Kinki Univ.)

Effect of pressure on the phase transition of coagel-gel-liquid crystal of azobenzene containing single-chain ammonium amphiphiles.

S. Okumura, Y. Taniguchi, M. Kodama* and S. Seki*

(Dept. of Chemistry, Faculty of Science and Engineering, Ritsumeikan Univ. and *Dept. of Chemistry, Faculty of Science, Kwansai Gakuin Univ.)

Thermal study on the role of water molecules for the subtransition phenomenon in the L-dipalmitoyl phosphatidyl choline (DPPC)-water system.

M. Kodama, T. Takenaka, K. Suzuki and S. Seki

(Dept. of Chemistry, Faculty of Science, Kwansai Gakuin Univ.)

Effect of water on phase transition of phosphatidylcholine having unsaturated bond.

H. Konishi, Y. Noguchi, T. Funada and T. Hatakeyama*

(Nippon OIL & Fats Co., Tsukuba Research Laboratory and *Research Institute for Polymer and Textiles.)

Glass transition and melting subtransition of poly(styrenesulfonate) sodium salt-water system.

K. Nakamura, T. Hatakeyama and H. Hatakeyama*

(Industrial Research Institute of Kanagawa Prefecture, *Research Institute for Polymers and Textiles, Industrial Products Research Institute.)

Enthalpy relaxation of cholesteric glassy liquid crystal.

K. Kasuga, H. Hatakeyama and T. Hatakeyama

(Industrial Products Research Institute and *Research Institute for Polymers and Textiles.)

Calorimetric analysis of biomembrane I: Hydrazine-treated rat liver subcellular fractions.

K. Yamashita, T. Wakabayashi, K. Gekko* and M. Momota**

(Nagoya City Univ. Med., *Nagoya Univ. Agr. and **Rigaku Co.)

A calorimetric study of precipitation process in Al—Li—Mg alloy.

Hyung-Ho Jo, T. Ohshima and K. Hirano

(Dept. of Materials Science, Faculty of Engineering, Tohoku Univ.)

Kinetic analysis of precipitation processes in Cu alloy.

T. Ohshima and K. Hirano

(Dept. of Materials Science, Faculty of Engineering, Tohoku Univ.)

Emanation thermal analysis for TiO_2 powders and TiO_2 — SrCO_3 reaction systems.

A. Yada, T. Ishii, R. Furuichi and A. Shimizu

(Dept. of Applied Chemistry, Faculty of Engineering, Hokkaido Univ.)

Characterization of highly dispersed copper catalysts by thermal analysis.

M. Shimokawabe, H. Kobayashi* and N. Takezawa

(Dept. of Chemical Process Engineering, Hokkaido Univ. and *Muroran Institute of Technology.)

Thermogravimetry in an atmosphere of corrosive gases—Corrosion of Fe, Co and Ni by chlorine gas—.

T. Okutani and Y. Nakata

(Government Industrial Development Laboratory, Hokkaido.)

Preparation of SiCl_4 from rice hulls—Comparison of chlorination of pyrolyzed products of rice hulls, SiO_2 —C and SiC by thermobalance—.

Y. Nakata and T. Okutani

(Government Industrial Development Laboratory, Hokkaido.)

Thermal analysis and kinetics of the oxidation of “ TiS_2 ” and “ Ti_2S_3 ”.

S. K. Basu, Y. Nonobe, M. Wakihara and M. Taniguchi

(Faculty of Engineering, Tokyo Institute of Technology.)

Thermochemical characterization of powder-calcined piezoelectric crystals, BaZnGeO_4 .

T. Atake, A. Hamano and Y. Saito

(Research Laboratory of Engineering Materials, Tokyo Institute of Technology.)

A low-temperature calorimetrist's view of the high temperature calorimetry.

T. Matsuo

(Dept. of Chemistry and Chemical Thermodynamics Laboratory, Faculty of Science, Osaka Univ.)

Spectral emissivity of Al_2O_3 , Y_2O_3 and HfO_2 on solidification point at 0.65, 0.70, 0.75 and 0.80 μm .

T. Yamada, M. Yoshimura* and S. Somiya

(Government Industrial Research Institute, Nagoya and *Research Laboratory of Engineering Materials, Tokyo Institute of Technology.)

Temperature measurement by the data processing of thermal radiation.

S. Kobayashi and M. Tokuda

(Research Institute of Mineral Dressing and Metallurgy, Tohoku Univ.)

Ion intensity thermal analysis with knudsen cell mass spectrometer.

E. Ichise

(Dept. of Metallurgy, Faculty of Engineering, Kyoto Univ.)

Phase diagrams at high temperature by hot-thermocouple method.

K. Morinaga

(Dept. Materials Sci. & Tech., Graduate School of Engineering Sciences, Kyushu Univ.)

Recent progress in high temperature heat capacity measurement.

H. Inaba

(Dept. of Nuclear Engineering, Faculty of Engineering, Nagoya Univ.)

Thermochemistry of ZrO_2 fine-particles.

T. Mitsuhashi

(National Institute for Research in Inorganic Materials.)

Combustion calorimetry for non-stoichiometric titanium sulfide.

N. Kuwata, M. Nishio, H. Hinode, M. Wakihara and M. Tanigushi

(Tokyo Institute of Technology.)

Trial manufacture of high temperature and high pressure DTA, TG apparatus.

K. Makino

(High Pressure Chemical Engineering Laboratory.)

High temperature thermochemistry of the oxides.

T. Yokokawa

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

Phase relations of PrO_x in $1.50 \leq X < 1.71$.

Y. Watanabe*, T. Maruyama and Y. Saito

(Research Laboratory of Engineering Materials, Tokyo Institute of Technology and *Dept. of Chemistry, National Defense Academy.)

Phase relation of the La—Co—O system by coulometric titration.

T. Maruyama and Y. Saito

(Research Laboratory of Engineering Materials, Tokyo Institute of Technology.)

Activity measurements of liquid Ga—Sb, Ga—In and Ga—Bi alloys by EMF method with zirconia solid electrolyte.

I. Katayama, J. Nakayama and Z. Kozuka

(Metallurgical Engineering, Faculty of Engineering, Osaka Univ.)

Advances in vapor pressure measurement by high temperature mass spectrometry.

M. Yamawaki

(Faculty of Engineering, Univ. of Tokyo.)

Interaction parameters of solute elements in both solid and liquid phases coexisted in Fe—C base ternary alloys.

T. Tanaka, A. Kiyose and Z. Morita

(Dept. of Metallurgical Engineering, Faculty of Engineering, Osaka Univ.)

Thermodynamics of effects of solute-interaction on the equilibrium distribution of solute between solid and liquid phases in iron base multi-component system.

Z. Morita and T. Tanaka

(Dept. of Metallurgical Engineering, Faculty of Engineering, Osaka Univ.)

Computer use of thermochemical data in materials science.

H. Yokokawa

(National Chemical Laboratory for Industry.)

Thermal decomposition of aluminium hydroxides.

T. Sato, F. Ozawa, S. Ikoma, K. Ishikawa and K. Sato

(Faculty of Engineering, Shizuoka Univ.)

Thermal decomposition of yttrium hydroxides.

T. Sato, S. Ikoma, F. Ozawa, S. Imaeda and K. Sato

(Faculty of Engineering, Shizuoka Univ.)

Thermal decomposition of lutetium(III) acetate tetrahydrate.

K. Manabe and M. Ogawa

(Tokyo Institute of Polytechnics.)

Thermal analyses of $\text{Rb}_2\text{C}_2\text{O}_4$ and $\text{Cs}_2\text{C}_2\text{O}_4$ part 1.

R. Ito, Y. Ito and Y. Masuda*

(Dept. of Chemistry, Faculty of Science, Niigata Univ. and *General Education Dept. Niigata Univ.)

Kinetics of thermal dehydration of $\text{MgC}_2\text{O}_4 \cdot 2\text{H}_2\text{O}$ (3).

K. Iwata, Y. Ito and Y. Masuda*

(Dept. of Chemistry, Faculty of Science, Niigata Univ. and *General Education Dept. Niigata Univ.)

Dynamic analysis of TG for intercalated compounds of clay mineral and anti-oxidant.

Y. Fukushima and S. Inagaki

(Toyota Central R&D Laboratories, Inc.)

Invited Paper 2

Emanation thermal analysis and its application to the inorganic materials.

T. Ishi

(Dept. of Applied Chemistry, Faculty of Engineering, Hokkaido Univ.)

Thermodynamics of buffer ionization.

H. Fukada, S. Murosaki, M. Goto, T. Ishino and K. Takahashi

(Laboratory of Ciophysical Chemistry, College of Agriculture, Univ. of Osaka Prefecture.)

- Calorimetric study of antimicrobial action of some antibiotics.
A. Katarao and K. Takahashi
(Laboratory of Biophysical Chemistry, College of Agriculture, Univ. of Osaka Prefecture.)
- Calorimetric studies of glycolysis of *E. coli* under nongrowing condition.
H. Wada, N. Murase and K. Gonda
(Laboratory of Chemistry, Faculty of Science and Engineering, Tokyo Denki Univ.)
- Calorimetric study on the state of water in powdered milk.
T. Fujita and K. S. Kim
(Institute of Applied Microbiology, The Univ. of Tokyo.)
- Thermodynamics of phycocyanin.
H. Uedaira*, T. Saito, N. Iso and H. Mizuno
(*Res. Inst. for Polymers and Textiles and Tokyo Univ. of Fisheries.)
- A calorimetric study of the unfolding transition of cross-linked lysozyme-solvent dependence.
S. Segawa, M. Kodama and S. Seki
(School of Science, Kwansai Gakuin Univ.)
- Differential scanning calorimetry of plasmid Col EI DNA.
Y. Maeda and E. Ohtsubo
(The Institute of Applied Microbiology, Univ. of Tokyo.)
- Verification of the molecular anvil model of enzyme by measuring heats of reaction.
K. Amaya
(National Chemical Laboratory for Industry.)
- Some considerations and study on the thermodynamic functions of binding and association for proteins.
S. Morimoto
(Research Institute for Polymers and Textiles.)
- Determination of thermodynamic functions from scanning calorimetry data.
S. Kidokoro and A. Wada
(Dept. of Physics, Faculty of Science, Univ. of Tokyo.)
- Use of thermochemical data in preparation of ceramics by CVD method.
A. Kato
(Dept. of Applied Chemistry, Faculty of Engineering, Kyushu Univ.)
- Preparation of ultrafine metal powders using H₂ plasma-arc in refractory metal bath.
M. Nanjo and K. Mimura
(Research Institute of Mineral Dressing and Metallurgy, Tohoku Univ.)

Development of latent thermal storage materials for high temperature use.

T. Ozawa, Y. Takahashi, M. Kamimoto, R. Sakamoto, Y. Abe and K. Kanari
(Electrotechnical Laboratory.)

Analysis of high temperature processes and energy conservation.

S. Yamauchi
(Univ. of Tokyo.)

Assessment of thermodynamic data required in a new aluminium smelting method.

H. Yokokawa, M. Fujishige, S. Ujiie and M. Dokiya
(National Chemical Laboratory for Industry.)

Vaporization study on the vanadium-oxygen system by mass spectrometric method. III. Two-phase mixture of vanadium metal and vanadium monoxide.

W. Banchorndhevakul, T. Matsui and K. Naito
(Dept. of Nuclear Engineering, Faculty of Engineering, Nagoya Univ.)

Reaction of strontium carbonate with anatase and rutile.

H. Tagawa and K. Igarashi
(Institute of Environmental Science and Technology, Yokohama National Univ.)

Kinetic aspects on heat capacity of $\text{Ge}_{20}\text{Te}_{80}$ glass.

Q. Xu and K. Ichikawa
(Dept. of Chemistry, Hokkaido Univ.)

Relationship between bond dissociation energies and mechanisms of the rapid thermal degradation of polymers at high temperatures.

Y. Shibasaki
(Dept. of Chemistry; Faculty of Science, Saitama Univ.)

Thermal diffusivity measurement of thin films by means of ac calorimetric method

1. Theoretical analysis.

I. Hatta, R. Kato* and A. Maesono*
(Dept. of Applied Physics, Nagoya Univ. and *Sinku-Rico Inc.)

Thermal diffusivity measurement of thin films by means of ac calorimetric method

2. Experiment.

R. Kato, A. Maesono and I. Hatta*
(Sinku-Rico Inc. and Dept. of Applied Physics, Nagoya Univ.)

Thermal diffusivity of Ge—Te glass.

Q. Xu and K. Ichikawa
(Dept. of Chemistry, Hokkaido Univ.)

Measurement of thermal diffusivity by differential flash method.

T. Azumi
(Sinku-Rico Inc.)

MALT: Materials-oriented little thermodynamic data base.

S. Yamauchi, H. Yokokawa* and S. Fujieda**

(Univ. of Tokyo, *National Chemical Laboratory for Industry and **Ochanomizu Univ.)

Vapor pressure measurement of non-stoichiometric thorium monocarbide.

T. Koyama, M. Yasumoto* and M. Yamawaki

(Dept. of Nuclear Engineering, Univ. of Tokyo and *Research Center of Nuclear Science and Technology, Univ. of Tokyo.)

Thermodynamic study of liquid Sb—S and FeS—Sb₂S₃ systems by using drop calorimeter.

Y. H. Lee and K. Itagaki*

(Dept. of Metallurgy, Faculty of Engineering, Junbuk Univ., Korea and *Research Institute of Mineral Dressing and Metallurgy, Tohoku Univ.)

Microcomputer aided control of water bath temperature for heat exchange calorimetry.

S. Fujieda, K. Mineo, J. Kawahito and M. Naka

(Dept. of Chemistry, Ochanomizu Univ.)

Micro bomb combustion calorimetry. 1 Apparatus.

T. Yamane and M. Sakiyama

(Chemical Thermodynamics Laboratory, Faculty of Science, Osaka Univ.)

Thermochemical study on cobalt(II) Schiff base complex, [Co(salen)]-Dioxygen system.

N. Kuriyama and M. Sakiyama

(Chemical Thermodynamics Laboratory, Faculty of Science, Osaka Univ.)

Mo studies on thermochemical stabilization energies of molecules with alternatively adjacent C=O groups and N atoms.

M. Sakiyama, N. Kuriyama, A. Imamura and K. Ebuchi

(Chemical Thermodynamics Laboratory, Faculty of Science, Osaka Univ.)

Phase transitions in the hydroquinone hydrogen chloride clathrate compound.

H. Ukegawa, T. Matsuo and H. Suga

(Dept. of Chemistry and Chemical Thermodynamics Laboratory, Faculty of Science, Osaka Univ.)

Heat capacities and spin cross over phenomena of the solid solutions; [Fe_xZn_{1-x}(2-pic)₃]Cl₂ · C₂H₅OH (0 ≤ x ≤ 1).

K. Kaji and M. Sorai

(Chemical Thermodynamics Laboratory, Faculty of Science, Osaka Univ.)

Phase transition and glass transition in RbCN.

T. Shimada, T. Matsuo, H. Suga and F. Luty*

(Dept. of Chemistry and Chemical Thermodynamics Laboratory, Faculty of Science, Osaka Univ. and *Dept. of Physics, Univ. of Utah.)

Heat capacities and phase transitions of $(\text{NH}_4)_2[\text{MF}_6]$.

K. Kobayashi, T. Matsuo, H. Suga and A. Tressaud*

(Dept. of Chemistry and Chemical Thermodynamics Laboratory, Faculty of Science, Osaka Univ. and *Laboratoire de Chimie du Solide du CNRS, Universite de Bordeaux, France.)

Heat capacity and phase transition of $(\text{CD}_3\text{ND}_3)_2[\text{SnCl}_6]$.

T. Matsuo, H. K. Yan* and H. Suga

(Dept. of Chemistry and Chemical Thermodynamics Laboratory, Faculty of Science, Osaka Univ. and *Institute of Chemistry, Academia Sinica, China.)

The heat capacity anomalies of the trinuclear complex, $[\text{Cr}_3\text{O}(\text{CH}_3\text{COO})_6(\text{H}_2\text{O})_3]\text{Cl}\cdot 6\text{H}_2\text{O}$.

M. Nakano, T. Wakamatsu, M. Sorai and H. Suga

(Chemical Thermodynamics Laboratory, Faculty of Science, Osaka Univ.)

Low temperature calorimetric study of TMPD.

H. Suzuki, T. Matsuo*, H. Suga*, K. Yakushi and H. Kuroda

(Dept. of Chemistry, Faculty of Science, The Univ. of Tokyo and *Dept. of Chemistry, Faculty of Science, Osaka Univ.)

Thermal study on amorphous butylnitrile.

H. Hikawa, M. Oguni and H. Suga

(Dept. of Chemistry and Chemical Thermodynamics Laboratory, Faculty of Science, Osaka Univ.)

Thermodynamic study on $\text{La}(\text{ClO}_4)_3 \cdot n\text{H}_2\text{O}$ crystal.

Y. Igushi, T. Matsuo and N. Suga

(Dept. of Chemistry and Chemical Thermodynamics Laboratory, Faculty of Science, Osaka Univ.)

Heat capacity and phase transitions of $[\text{Fe}(\text{C}_5\text{H}_5)_2](\text{PF}_6)$ crystal.

Y. Shiomi and M. Sorai

(Chemical Thermodynamics Laboratory, Faculty of Science, Osaka Univ.)

Phase transition of β -cyclodextrin hydrate crystal.

H. Hanabata, T. Matsuo and H. Suga

(Dept. of Chemistry and Chemical Thermodynamics Laboratory, Faculty of Science, Osaka Univ.)

Thermodynamic study of ice and related compounds.

O. Yamamuro, M. Oguni, T. Matsuo and H. Suga

(Dept. of Chemistry and Chemical Thermodynamics Laboratory, Faculty of Science, Osaka Univ.)

DSC measurement for medicinal crystals in intercalation compounds and porous powders.

S. Izumikawa, K. Terada, K. Yamamoto and Y. Nakai

(Faculty of Pharmaceutical Sciences, Chiba Univ.)

Measurement of solder-coating by DTA.

Y. Kidaka and Y. Okino

(Analytical Applications Laboratory, Shimadzu Corp.)

Application of a heat flow calorimeter in the production of β -emitting radioisotopes.

T. Genka

(Japan Atomic Energy Research Institute.)

Automated data acquisition system for thermogravimetric analyzer.

K. Ishikiriyama, T. Hosoi, K. Taniguchi and M. Todoki

(Toray Research Center, Inc.)

Production and application of humidity control type thermomechanical analyzer.

K. Takahashi, S. Tanabe, H. Sagara and T. Azumi

(Sinku-Rico Inc.)

Newly developed thermal analyzer for the simultaneous control of four detectors.

M. Uchiike, K. Ito and M. Maruta

(R&D Engineering Dept., Analytical Instruments Div., Shimadzu Corp.)

Mathematical treatment of a unified model for classical DTA, power-compensated DSC, and heat-flux DSC.

K. Saito*, T. Atake and Y. Saito

(*Faculty of Science, Osaka Univ. and Research Laboratory of Engineering Materials, Tokyo Institute of Technology.)

Excess enthalpies of $\text{CH}_2\text{Cl}_2 + \text{FAMSO}$ and $\text{CHCl}_3 + \text{FAMSO}$ at 298.15 K.

T. Kimura, H. Mizuno and S. Takagi

(Dept. of Chemistry, Faculty of Science and Technology, Kinki Univ.)

Thermodynamic properties of binary decalin systems at 298.15 K.

Y. Shiohama, I. Fujihara*, H. Ogawa and S. Murakami

(Dept. of Chemistry, Faculty of Science, Osaka City Univ. and *Faculty of General Education, Osaka Industrial Univ.)

Thermodynamic studies on copolymer solutions.

K. Inoue, Y. Baba and A. Kagemoto

(Dept. of Chemistry, Osaka Institute of Technology.)

Flow microcalorimeter for excess heat capacity measurement.

H. Ogawa and S. Murakami

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

Interactions of solid polymers with aqueous solutions by immersion calorimetry.

S. Morimoto

(Research Institute for Polymers and Textiles.)

Thermal stability of DNA-histone solutions.

Y. Yoshikawa, Y. Baba and A. Kagemoto

(Dept. of Chemistry, Osaka Institute of Technology.)

The influence of ionic strength on the formation of polynucleotides duplex.

H. Tarui, Y. Baba, K. Tada and S. Kagemoto

(Dept. of Chemistry, Osaka Institute of Technology.)

Studies on heat of dilution of the flow microcalorimeter equipped with a computer control.

T. Tsujimoto, Y. Baba, K. Tada and A. Kagemoto

(Dept. of Chemistry, Osaka Institute of Technology.)