

Events

1975-NATAS CONFERENCE

The North American Thermal Analysis Society held its 5th Meeting in Peterborough, Ontario, Canada on June 8th—11th, 1975.

Dr. F. E. KARASZ, University of Massachusetts, (AMHERST, U. S. A.) was presented with the 1975 Mettler Award.

The following lectures were presented:

General session

Thermal Analysis: Past-Present-Future

W. W. WENDLANDT
(Univ. Houston, Houston, Texas USA)

NMR Spectra of the High Temperature Solid Phase of Tetra-n-Hexyl Ammonium Perchlorate

E. M. BARRALL, T. T. HORIKAWA, J. T. S. ANDREWS*
(IBM Research Lab, San Jose, Calif.;
* Liquid Crystal Inst. Kent State University, Kent, Ohio 44242)

The Effect of CO₂ Pressure and Alkali Salt on the Mechanism of Decomposition Dolomite

W. R. BANDI, G. KRAPF
(U. S. Steel Corp., Monroeville, Penn. 15146 USA)

Composition and Oxidation of Petroleum Fractions

G. E. CRANTON
(Imperial Oil Enterprises Ltd. Research Department, Sarnia, Ontario, Canada)

Autoignition Temperatures of Military High Explosives

JOEL HARRIS, E. DEMBERG
(Picatinny Arsenal, Dover, N. J. USA)

Thermal Decomposition of Phosphine Complexes of Pt (II) Dihalides

C. E. SCOTT, S. H. MASTIN
(Monsanto Co. P. O. Box 1311, Texas City, Texas 77590 USA)

Critical Review of Methods for the Determination of Purity by DSC

E. F. PALERMO, JEN CHIU
(Dupont Wilmington, Del. 19898 USA)

A Programmable Calculator System for Thermal Analysis

A. P. GRAY, R. B. CASSEL

(The Perkin Elmer Corp. Inst. Division, Norwalk Connecticut USA)

A Study of the Thermal Decomposition of Some Alkali Metal Dihydrogen Phosphates and Arsenates

P. K. GALLAGHER

(Bell Laboratories, Murray Hill, N. J. 07974 USA)

Phase Diagram for the Ternary System $CaCl_2 - KCl - CaCrO_4$

R. P. CLARK, F. W. REINHARDT

(Sandia Laboratories, Albuquerque, New Mexico, 87115 USA)

Triglyceride Specific Heat Determined by DSC and Computer

J. W. HAMPSON, V. G. METZGER, R. A. BARFORD, H. L. ROTHBART

(Eastern Regional Research Center, Philadelphia, Penn., 19118 USA)

*Polymer session**Thermal Desorption*

D. L. MILLER, R. H. WILDNAUER

(Dept. Skin Biology, Johnson & Johnson, New Brunswick, New Jersey USA)

Isothermal and non-Isothermal Cure Kinetics of Epoxy Resins by DSC

S. SOOURI, M. R. KAMAL*

(Dupont Canada Ltd., Research Center, P. O. Box 2100, Kingston, Ont., *Dept. Chem. Eng. McGill Univ. P. O. Box 6070 Montreal, Que., Canada)

Statistical Analysis of Thermogravimetry Data

B. DICKENS, J. H. FLYNN

(Institute of Materials Research NBS Washington, D. C. 20234 USA)

Thermal Characterization of Polymeric Materials used in Semi Conductor Die Bonding

D. E. EISENMANN, S. M. HALYARD

(IBM, 9500 Godwin Drive, Manassas, Virginia, 22110 USA)

Effect of Molecular Weight of Polystyrene on Heat Capacity, Second Order Transitions and Thermal Decomposition

B. V. KOKTA, J. L. VALADE, V. HORNOF, D. JAIN

(University of Quebec, Trois-Riviere, Quebec, Canada)

Thermomechanical Analysis Evaluation of Plastics in Electronics Industry

R. THOMAS, T. SCHARR, E. PASTIRIK

(Motorola SPI, 5005 East McDowell Rd. Phoenix, Arizona, 85008 USA)

The Photothermal Properties of Various Polymers

A. M. WYNNE, W. W. WENDLANDT

(Dept. of Chemistry, Univ. of Houston, Houston, Texas 77004 USA)

*Techniques session**Measurement and Control of Temperature in Thermogravimetric Flow Systems*

J. H. FLYNN, B. DICKENS, L. A. DUNLAP

(Institute for Materials Research, Washington, D. C. 20234 USA)

Simultaneous Hot Pressing and DTA

A. E. SCHWALM, D. BARHAM

(Univ. of Toronto, Dept. of Chem. Eng. & Applied Chem. Toronto, Ontario, Canada)

A High Heating Rate Thermal Analysis Apparatus

A. J. BEARDELL, J. STALEY, C. CAMPBELL

(Pyrotechnics Branch, Explosives Division, Dept. of the Army Picatinny Arsenal, Dover, N. J. 07801 USA)

Steady State Parameter-Jump Methods and Relaxation Methods in Thermogravimetry

J. H. FLYNN, B. DICKENS, L. A. DUNLAP

(Institute for Materials Research, Washington, D. C. 20234 USA)

A DSC Study of Reactions in Potassium Halide Matrices

A. M. WYNNE, W. W. WENDLANDT

(Dept of Chemistry, Univ. of Houston, Houston, Texas, 77004 USA)

A Thermogravimetric Study of the Sulphation of Limestone and Dolomite

E. P. O'NEILL, D. L. KEAIRNS, W. F. KITTLE

(Westinghouse Research Lab. Pittsburgh, Penn. 15235 USA)

Automated and Computerized Systems for Purity Determination by DSC

S. A. MOROS

(Hoffman-LaRoche, Nutley, New Jersey, 07110 USA)

Thermogravimetry New Instrumentation and New Methods

R. B. CASSEL, A. P. GRAY

(Perkin Elmer Corp. Inst. Div. Norwalk, Connecticut USA)

*Testing of materials by thermal methods**New Uses of DSC in Testing of Polymeric Materials*

W. P. BRENNAN

(Perkin Elmer Corp., Lombard, Ill. USA)

Determination of Vapour Pressure by DTA

R. J. SEYLER

(Eastman Kodak Co. Kodak Park, Bldg 205, Rochester, N. Y. 14650 USA)

A Proposed Replacement Procedure of ASTM D1519

P. A. PILATO, R. A. GILL

(Xerox Corporation, 1540 Phillips Rd W 139, Webster, N. Y. 14580 USA)

Qualification of Magnet Wire Insulation Using DSC

W. E. CLARK

(Delco Products Div. GMC, P. O. Box 230, Rochester, N. Y. 14601 USA)

Detection of Quartz in Clay Minerals by DSC

J. P. SCHELS

(Johnson & Johnson, New Brunswick, N. J. USA)

Stress Relaxation and Fiber Tension Measurements by Thermal Analysis

L. WOO

(Dupont deNemours, Instrument Div., Wilmington, Del. 19898 USA)

Micro Parallel Plate Plastometer — Operation and Application

A. A. DUSWALT, L. C. CESSNA

(Hercules Incorp., Research Centre, Wilmington, Del. 19898 USA)

Thermal Analysis in Measurement of Rate of Dissolution of Solid Drug Substances

S. S. SZINAI, C. A. TULLEY

(College of Pharmacy, Univ. of Florida, Gainesville, Florida, 32610 USA)

Determination of Polymer Viscosities by Thermomechanical Analysis

P. S. GILL

(Dupont deNemour, Instrument Div., Wilmington, Del. 19898 USA)

Thermal Analytical Characterization of Fossil Fuels

R. L. BLAINE, R. L. HASSEL

(Dupont deNemour, Instrument Div., Wilmington, Del. 19898 USA)

QUANTITATIVE DIFFERENTIAL THERMAL ANALYSIS

The 3rd Seminar on Calorimetry

The Society of Calorimetry and Thermal Analysis, Japan 25 March 1975

The seminar on the quantitative method of heat of reaction and heat of transition by thermoanalytical techniques was organized by Prof. Hirotaro Kambe in Tokyo (Institute of Space & Aeronautical Science, University of Tokyo, Meguro-ku, Tokyo).

Seven review papers were presented and about 30 participants discussed on the topics of the principle, applications and the limit of the method of quantitative DTA in comparison with DSC and adiabatic calorimetry.

The following review papers were presented:

Quantitative differential thermal analysis — ICTA Nomenclature

H. KAMBE

(University of Tokyo)

Calorimetry by DTA and DSC

T. OZAWA

(Electrotechnical Laboratory, Tokyo)

The measurement of heat of transition by DSC

T. HATAKEYAMA

(Research Institute for Polymers & Textiles)

The measurement of transitions by thermal analysis and its problems

S. ICHIHARA

(Mitsubishi Petrochemical Co., Yokkaichi)

The quantitative measurement of heats of reaction and transition by differential thermal analysis

M. MARUTA

(Shimadzu Seisakusho Co., Kyoto)

The principle of quantitative measurement by DSC

C. JINDO

(Nissei Sangyo Co., Tokyo)

The quantitative measurement of thermal energy by DTA

M. MOMOTA

(Rigaku Denki Co., Tokyo)