

Events

THERMAL ANALYSIS IN THE INVESTIGATION OF MINERALS AND MATERIALS

Kraków, Poland, May 4–6, 1977

Symposium on this topic has been organised by the Institute of Geology and Mineral Deposits of the Academy of Mining and Metallurgy, Kraków, together with the Thermal Analysis Section of the Committee of Analytical Chemistry of the Polish Academy of Science and of the Mineralogical Society of Poland.

The following lectures were presented:

Modern thermal analysis — methods, requirements and technical possibilities

W. D. EMMERICH, E. KAISERSBERGER
(Netzsch-Gerätebau, Selb)

Application of thermal analysis to the estimate of technological properties of ceramic mineral raw materials

L. STOCH
(Institute of Geology and Mineral Deposits, Academy of Mining and Metallurgy, Kraków)

Thermal dissociation of the basic aluminium — ammonium sulphate in vacuum and atmosphere of gaseous products of their decomposition

J. PYSIAK, B. PACEWSKA
(Technical University, Płock)

Thermal analysis equipments (DTA, thermobalances and dilatometers) and their evolution for example of firm Netzsch apparatus

E. KAISERSBERGER
(Netzsch-Gerätebau, Selb)

Simultaneous techniques in thermal analysis

W. D. EMMERICH, E. KAISERSBERGER
(Netzsch-Gerätebau, Selb)

Application of simultaneous mass-spectrometer and thermal analysis for the investigation of mechanism and kinetics of heterogeneous reaction

M. SZALKOWICZ

(Institute of Metallurgy, Academy of Mining and Metallurgy Kraków)

Quadrupol mass spectrometer. Coupling interface of thermal analysis apparatus and mass spectrometer

H. EPPLER

(Balzers AG, Liechtenstein)

Research possibilities of coupled DTA 429 apparatus and quadrupole mass spectrometer systems

W. D. EMMERICH, E. KAISERSBERGER

(Netzsch-Gerätebau, Selb)

Thermal analysis of elastomers

L. ŚLUSARSKI

(Technical University, Łódź)

Thermal analysis of polyvinylcarbazoles and their derivatives

J. PIELICHOWSKI

(Technical University, Kraków)

Thermal analysis in investigation of building materials

R. KRZYWOBŁOCKA-LAUROW

(Institute of Building Technique, Warszawa)

Calibration and standardization in thermoanalytical experiment

E. KAISERSBERGER

(Netzsch-Grätebau, Selb)

The modern methods of refractories research and actual state of international normalization

H. U. HECKT

(Firm Prüftechnik, Graz)

Analytical thermal analysis — new research method

H. W. HENNICKE

(Institut für Steine und Erden, TU Clausthal — Zellerfeld)

STANISLAW BRETZNAJDER SEMINAR: THERMAL DISSOCIATION OF SOLIDS

Płock, Poland, November 23–25 1977

The First Polish Stanislaw Bretznajder Seminar entitled: "Thermal Dissociation of Solids" and devoted to thermal decomposition of inorganic compounds and thermal analysis of polymers and plastics was held at the Płock Branch of Warsaw Technical University.

The Seminar was organized by the Thermal Analysis Division of Analytical Chemistry Commission of Polish Academy of Sciences, the Płock Division of Polish Chemical Society, and the Institute of Chemistry of Płock Branch of Warsaw Technical University.

The Seminar was held under an honorary protectorship of the President of Polish Chemical Society, Prof. B. Baranowski and the Dean of Chemical Faculty of Warsaw Technical University, Prof. A. Górski

The following plenary lectures were given:

Kinetics and mechanism of decomposition of kaolinite group minerals

L. STOCH
(Academy of Mining and Metallurgy, Kraków)

A review of non-isothermal methods for the study of kinetics and mechanism of thermal dissociation of solids

M. MACIEJEWSKI
(Warsaw Technical University)

Compensation effect and isokinetic temperature of thermal dissociation reaction of the type $A_{\text{solid}} \rightleftharpoons B_{\text{solid}} + C_{\text{gas}}$ — an interpretation of the Arrhenius equation as a projection correlation

J. PYSIAK
(Płock Branch of Warsaw Technical University)

Application of pyrolytic methods in the studies on elastomers

M. KRYSZEWSKI
(Centre of Molecular and Macromolecular Studies, Polish Academy of Sciences, Łódź)

Application of thermal analysis in the studies of elastomers

L. ŚLUSARSKI
(Technical University Łódź)

The plenary lectures were illustrated by 18 reports on the subject closely connected with the subjects treated in the lectures:

Attempts of determining the dehydroxylation of kaolinite minerals by thermogravimetric studies

J. WACLAWSKA, L. STOCH
(Academy of Mining and Metallurgy, Kraków)

Thermal decomposition of molecular complexes of $PbCl_2$ in solid phase

J. BŁĄZEJOWSKI, J. SZYCHLIŃSKI
(University Gdańsk)

Attempts of evaluating the usability of non-isothermal methods in the studies of kinetics and mechanism of thermal dissociation of solids on the example of syngenite dehydration

K. WIECZOREK-CIUROWA, J. DOMKIEWICZ

Determination of kinetic parameters of one-stage thermal decomposition of solids under non-isothermal conditions by the linear estimation method

J. LEYKO, M. MACIEJEWSKI, R. SZUNIEWICZ
(Warsaw Technical University)

Simulation of TG and DTG curves by a mathematical model

J. PYSIAK, B. PACEWSKA
(Płock Branch of Warsaw Technical University)

On the sensitivity of scales in the Arrhenius' equation

B. SABALSKI, J. PYSIAK
(Płock Branch of Warsaw Technical University)

Discussion of coefficients of the compensation equation for thermal dissociation reaction of the type $A_{solid} \rightleftharpoons B_{solid} + C_{gas}$

J. PYSIAK*, B. SABALSKI

(*Płock Branch of Warsaw Technical University, University of Warsaw)

A mathematical model for treatment of results of kinetic studies

J. PYSIAK, B. PACEWSKA

(Płock Branch of Warsaw Technical University)

Modifications of the Freeman-Carroll difference—differential method for determining the activation of thermal dissociation reactions

M. MACIEJEWSKI

(Warsaw Technical University)

Determination of activation of thermal dissociation reactions from experiments under different heating rates

M. MACIEJEWSKI

(Warsaw Technical University)

Studies on polymer mixtures with the aid of rapid pyrolysis at high temperatures

B. WANDELT

(Łódź Technical University)

Use of mass spectroscopy in the studies on thermal degradation of polymers

J. JACHOWICZ

(Łódź Technical University)

Derivatographic studies of N-fluoroalkoxymethyl polycaproadamides

M. WŁODARCZYK*, M. SZCZEPANIAK

(*Łódź Technical University, Inst. of Leather Industry, Łódź)

Studies on thermal properties of 1,5-polyenes

G. JANOWSKA

(Łódź Technical University)

Studies of thermal degradation of polypropylene and high-pressure polyethylene

W. BALCEROWIAK, CZ. LATOCHA, T. ZAWADE

(Inst. of Heavy Organic Synthese, Blachownia)

Thermal degradation of sulfonated copolymers of styrene and divinylbenzene

R. DABEK

(University, Toruń)

New possibilities of using thermal analysis in the studies of charge-transfer complexes

J. PIELICHOWSKI, E. MORAWIEC

(Kraków Technical University)