

10TH IUPAC CONFERENCE ON CHEMICAL THERMODYNAMICS

August 29–September 2, 1988, Prague, Czechoslovakia

The 10th IUPAC Conference will be held under the auspices of the International Union of Pure and Applied Chemistry (IUPAC) Commission on Thermodynamics.

Organized by the Prague Institute of Chemical Technology, Czechoslovak Academy of Sciences, Czechoslovak Chemical Society R. Holub, Chairman of the Organizing Committee.

The Organizing Committee extends a cordial invitation for you to participate in the 10th IUPAC Conference on Chemical Thermodynamics which will be held in Prague (Czechoslovakia) from August 28 through September 3, 1988.

Scope

Theoretical and experimental studies in chemical thermodynamics. State-of-the-art and new trends in the fields outlined in the Topics.

Topics

- A. Pure Substances
- B. Mixtures of Non-electrolytes
- C. Phase Equilibria
- D. Thermodynamics and Thermochemistry of Interphase and Surface Phenomena
- E. Statistical Mechanics of Fluids and Solutions
- F. Polymer Systems
- G. Biological Systems
- H. Aqueous Systems
- I. Calorimetry and Other Experimental Techniques
- J. Data Treatment

Scientific Program

The scientific program will consist of invited lectures and contributed papers. About twenty invited main lectures will be presented. In addition, a limited number

of short lectures will be included in the Program. Further contributed papers will be presented as posters. The conference language will be English.

Invited Speakers. The following scientists have promised to present lectures:

- G. ERTL (Firtz-Haber-Inst., West Berlin);
- A. FREDENSLUND (Denmark Tech. Univ., Lyngby);
- K. E. GUBBINS (Cornell Univ., Ithaca, USA);
- H. V. KEHIAIAN (Univ. paris, France);
- F. KOHLER (Ruhr-Univ., Bochum, FRG);
- R. KONINGSVELD (Univ. Massachusetts, Amherst);
- B. C.-Y. LU (Univ. Ottawa, Canada);
- J. P. O'CONNELL (Univ. Florida, Gainesville);
- D. D. PATTERSON (McGill Univ., Montreal);
- P. L. PRIVALOV (Acad. Sci. USSR, Poustchino);
- M. T. RÄTZSCH (Tech. Univ., Merseburg, GDR);
- H. SUGA (Univ. Osaka, Japan);
- W. ZIELENKIEWICZ (Polish Acad. Sci., Warsaw).

Publication. Summaries of the main lectures, the short lectures and posters will be published in the Program Booklet. The full texts of the main lectures will be published in the official IUPAC journal "Pure and Applied Chemistry". The Conference Proceedings will not be published. Authors are free to publish their papers at will after the Conference.

Address for Correspondence

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P.O. Box 119
CS-160 00 Praha 6
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Telex: 122 744 vsch c (attn. THERMO-HOLUB)

**THE 22ND INTERNATIONAL
MICROBALANCE TECHNIQUES
CONFERENCE, RABAT (MOROCCO)**

E. Robens, Institut für Anorganische und Analytische Chemie
der Johannes-Gutenberg-Universität. Postfach 3980, D-6500 Mainz
L. Belkbir, Faculté des Sciences, Université Mohammed V,
Avenue Ibn Battuta, Rabat, Morocco

The 22nd International Microbalance Techniques Conference took place during the period of 21–23 April 1987 at the University Mohammed V in the Moroccan capital of Rabat. The meeting presented 47 papers from 14 countries; about 100 scientists participated. The contributions mostly covered thermogravimetric applications. The apparatus were mostly equipped with electromagnetic beam balances, others with magnetic suspension or spring balances and allowed investigations under vacuum and in controlled atmosphere. As an introduction two historical communications were presented concerning the Egyptian balance of the pharaonic era and an early large thermogravimetric laboratory at Lyon, France.

Program:

Indicator system and suspension of the old Egyptian Scales.

H. R. JENEMANN, E. ROBENS
(Universität Mainz, D)

Thermogravimetry and conditioning of silk of Lyon, a unappreciated adventure

C. EYRAUD, P. ROCHAS
(Université Lyon I, Villeurbanne, F)

Vacuum microbalance studies of lead deposits from natural water.

K. J. DANDO, D. R. GLASSON
(PLYMOUTH POLYTECHNIC, GB)

Advanced high capacity corrosion resistant thermogravimetric analysis

G. VAN DER PLAATS
(Cahn Instruments, Cerritos, CA, USA)

Quantitative differential thermogravimetric analysis of oxidable ions for manganese substitution in magnetit of submicron size

M. LAARJ, I. PIGNONE, M. EL GUENDOUI, B. GILLOT, P. TAILHADES, A. ROUAËT
Υνφθερσφτητ Δφφογ F→
*(Université Toulouse, F)

Mit einem Thermomicrobalance with combined mass spectrometer as well-suited monitor unit for the study of heterogeneous solid state reactions

P. HUG, A. RELLER
(Universität Zürich, CH)

Thermogravimetric study of the behaviour of protective layers on titanium in oxygen atmosphere at elevated temperatures

M. KABBAJ, A. GALERIE, M. CAILLET
(C.N.R.S., Montpellier)
*(C.N.R.S., Saint-Martin d'Hères, F)

Oxidation of titanium and zirconium carbides

J. N. CLARK, D. R. GLASSON, S. A. A. JAYAWEERA
(Plymouth Polytechnic
(Teesside Polytechnic, Middlesbrough, GB)

Thermogravimetric determination of the behaviour of Fe 2.25Cr 1Mo in oxidizing and/or sulfurizing atmosphere at elevated temperatures

A. SKALLI, A. GALERIE, M. CAILLET
(L.A.R.G.S., Saint-Martin d'Hères, F)

Thermogravimetric study of the kinetics of hydrogenation and dehydrogenation of Mg-alloys

M. EL HAMMIOU, N. GÉRARD
(Université Cadi Ayyad, Marrakech, MA)
(Faculté des sciences Mirande, Dijon, F)

Kinetic and structural study of the reduction of iron oxides

H. EL ABDOUNI, J. HEIZMANN, J. BESSIERES
(Université Metz, F)

Study of the substitution of phosphate groups in apatite sediments by means of thermogravimetric analysis

M. A. ALAOUI, M. DELPINE, E. HASSANI
(Centre d'Etude et de Recherche des Phosphates Minéraux, Casablanca, MA)

Thermogravimetric studies of the kinetics of polymer decompositions

L. J. CLARK, T. R. MANLEY, S. A. A. JAYAWEERA, M. W. THWAITES
(newcastle Polytechnic, GB)
(Teesside Polytechnic, Middlesbrough, GB)

Thermal analysis of Moroccan oil shale

H. BARKIA, L. BELKBIR, S. A. A. JAYAWEERA, J. H. MOSS, M. W. THWAITES
(Université Mohammed V, Rabat, MA)
(Teesside Polytechnic, Middlesbrough, GB)

Thermochemical decomposition of gypsum under reduction gas-medium

A. BARAKA, PL. KIRILOV, IV. DOMBALOV, Y. PELOVSKI, IV. GRUNCHAROV
(Ministère d'Énergie et de Mines, Rabat, MA)
(Institut für Chemische Technologie, Sofia, BG)

Kinetic aspects of the pyrolysis of oil shale

K. HARFI, A. MOKHLISSE
(Université Cadi Ayyad, Marrakech, MA)

Alternative thermal decomposition of some iodates(V)

J. A. BARTLETT, N. GRAINGER, S. A. A. JAYAWEERA, J. H. MOSS, A. ROBINSON, A. SHAW
(Teesside Polytechnic, Middlesbrough, GB)

Combination of thermogravimetry with infrared spectroscopy

K. SBAI, M. H. SIMONOT-GRANGE
(Université Hassan II, Casablanca MA)
(Université Dijon, F)

Thermal analysis of Weardale quarry coal

S. A. A. JAYAWEERA, J. H. MOSS, M. W. THWAITES
(Teesside Polytechnic, Middlesbrough, GB)

Combination of a thermobalance with a flow through tube reactor

G. HAKVOORT, J. H. F. GRONDEL
(Delft University of Technology, NL)

Investigation of swelling of iron oxide pellets during reduction using a combined thermogravimetric and dilatometric technique

M. JALLOULI, F. AJERSCH, M. RIGAUD
(Ecole Nationale de l'Industrie Minérale, Rabat, MA)
(Ecole Polytechnique, Montreal, QUE, CAN)

Reduction of natural gypsum by coals

A. BARAKA, IV. GRUNCHAROV, PL. KIRILOV
(Ministère d'Energie et de Mines, Rabat, MA)
(Institut für Chemische Technologie, Sofia, BG)

Careful reduction of hematite crystals in magnetite by a oxidizing and reducing mixture of carbon monoxide/carbon dioxide

M. ETTABIROU, B. DUPRÉ, C. GLEITZER
(Université Kénitra, MA)
(Université Nancy I, F)

Reactivity of lime in paper manufacture

D. R. GLASSON, T. MALINOWSKI
(Plymouth Polytechnic, GB)
(Pulp and Paper Research Institute, Lodz, PL)

Thermogravimetric identification and analysis of reaction products during oxidation of solid or liquid sulfides

F. AJERSCH, B. BENLYAMANI
(Ecole Polytechnique, Montreal QUE, CDN)

Thermal decomposition siderite under isothermal and nonisothermal conditions

A. R. PANDE, A. N. GOKARN, L. K. DORAISWAMY
(National Chemical Laboratory, Pune, IND)

Coupling of a gas analyser at a thermobalance

M. JEMAL, I. KHATTECH
(Université Tunis, TN)

Thermogravimetric study of the coupling between reactions

J. BESSIERES, A. BESSIERES, J. HEIZMANN
(Université Metz, F)

Compositional analysis of a new symmetrical micro thermobalance

W.-D. EMMERICH, E. KAISERSBERGER, W. MICHIELS
(Netsch-Gerätebau GmbH, Selb, D)

Disturbances due to buoyancy

E. ROBENS, K. K. UNGER, B. STRAUBE
(Universität Mainz, D)
(Grace GmbH, Worms, D)

Study of the dehydration of trioxalato chromate(III) and trioxalato ferrate(III) of ammonium trihydrates

ÉL. H. MERRACHI, F. CHASSENEUX, B. F. MENTZEN, J. BOUIX, J. PARIS, R. COHEN-ADAD
(Université Lyon I, Villeurbanne, F)

Precipitation and ageing of copper sulphide

S. A. A. JAYAWEERA, J. H. MOSS, A. WEARMOUTH
(Reesside Polytechnic, Middlesbrough, GB)

Thermogravimetric study of the activation of CoMo hydrodesulfurization catalysts

R. PRADA SILVY, P. GRANGE, B. DELMON
(Université Catholique, Louvain, B)

Surface properties of illite

N. M. GUINDY, S. HANAFI
(Ain Shams University, Kairo, ET)

On some thermodynamical and kinetic aspects of desorption from zeolites under microwave irradiation

M. BEN CHANNA, M. LALLEMANT, M. H. SIMONOT-GRANGE, G. BERTRAND
(Université Cadi Ayyad, Marrakech, MA)
(Université Dijon, F)

Thermal analysis and X-ray diffraction studies on catalyst supports of potassium tungstate (tungsten bronzes) and potassium magnesium titanium oxide

M. T. MIRZA, J. R. WALLS, S. A. A. JAYAWEERA
(Teesside Polytechnic, Middlesbrough, GB)

Suggestions for pore models on the basis of gravimetric sorption experiments

H. H. WILLEMS, C. H. MASSEN, J. J. HARDON, J. A. POULIS
(Nederlandse Philips Bedrijven B.V., Sittard, NL)
(University of Technology, Eindhoven, NL)
(Universität Mainz, D)

Sample holders and reactivity in thermogravimetric studies

N. GERARD
(Université Dijon, F)

Experiments to determine the phase of a condensate in pores

E. ROBENS, U. MÜLLER, K. K. UNGER
(Universität Mainz, D)

Simultaneous determination of mass and dielectric constant of small samples with the microbalance

VON TH. GAST, K. NOLTE
(Technische Universität Berlin, D)

Application of buoyancy

E. ROBENS, TH. GAST, B. STRAUBE
(Universität Mainz, D)
(Technische Universität Berlin, D)
(Grace GmbH, Worms, D)

On the magnetic behaviour of superconducting lead discs

A. VAN DEN BOSCH, J. VANSUMMEREN
(Studiecentrum voor Kerneoeergie, Mol, B)

An improved mechanical microanemometer for low air velocities

M. J. F. P. PLUIJM, J. B. GRUPA, C. H. MASSEN
(University of Technology, Eindhoven, NL)

Use of balances in anemometry, part II

M. J. F. P. PLUIJM, M. S. J. PILMMYER, C. H. MASSEN
(University of Technology, Eindhoven, NL)

Kinetic study of the thermal decomposition of natural phosphates

E. M. BANANE, J. BAHRAOUI-BURET, L. BELKBIR, G. FLAMANT
(Université Mohammed V, Rabat, MA)
(I.M.P.-C.N.R.S., Font-Romeu, F)

Dynamic surface-tension measurements on surface-active materials: part II

C. H. MASSEN, D. GIELES
(University of Technology, Eindhoven, NL)

Review on the work performed in the Laboratoire de la réactivité des Systemes Gaz-solide

L. BELKBIR
(Université Mohammed V, Rabat, MA)

The contributions will be published in a special issue of "Thermochimica Acta". The next XXIIIrd International Microbalance Techniques Conference will be organized by Prof. S. A. A. Jayaweera in Autumn 1989 at the Department of Chemistry, Teesside Polytechnic, Middlesbrough, Cleveland, TS1 3BA, U.K.