Scientific contributions - Oral presentations

GEFTA Science Award

Netzsch-GEFTA Award

TA*Instruments* Industrial Research Award

Awa1	Christoph Schick (Rostock) *Calorimetry on time scales from microseconds to days*
Awa2	Jaroslav Šesták (Prague, CZ) *Pecularities of nano-structured systems: Thermodynamic (top-down) and quantum (bottom-up) issues*
Awa3	Leon Olde Damink (Herzogenrath) *Nerve guides - Thermal analysis as a key to successful product design*

Key lectures

KeyA1	Erhard Kemnitz (Berlin) *Fluorolytic Sol-Gel synthesis: A new approach towards nanoscopic metal fluorides*
KeyA2	Jens Fischer (Basel, CH) *Thermal properties of dental ceramics strongly influence their clinical success*
KeyA3	Wolfgang Bensch (Kiel) *Thermal decomposition of thiomolybdate precursors for preparation of catalysts*
KeyA4	Krzystof Pielichowski (Kraków, PL) *Application of thermal analysis for the design of novel inorganic-organic hybrid materials*
KeyB1	Dirk Walter (Gießen) *Toxicity of dust - Relevant parameters of health hazard*
KeyC1	Matthias Epple (Duisburg-Essen) *Applications of thermal analysis in biomaterials science and biomineralization*
KeyD1	Francis Stoessel (Basel, CH) *Application of calorimetry to the safety of industrial processes - From incidents to a mature science*
KeyD2	Gerhard Ziegmann (Clausthal-Zellerfeld) *Reaction kinetics of epoxide systems in composite materials*
KeyD3	S. Walter, S. Freitag, M. Tyrode (Mulhouse, F) *Thermal runaway prevention of high purity metals reacting with organic reagents*
KeyE1	J. Lerchner, T. Hartmann, A. Wolf, F. Mertens (Freiberg) *Towards high throughput chip calorimetry by use of segmented flow technology*

A Thermal analysis and calorimetry for the development of new materials

A1	K. Heide (Jena) *Mass-spectrometric EGA - an useful tool in material and geochemistry*
A2	J. Varga, M. Fischer, S. Wohlfahrt, M. Saraji-Bozorgzad, G. Matuschek, T. Denner, A. Reller, R. Zimmermann (München-Neuherberg) *Investigation of Sulfur Allotropes with Thermal Analysis - Single Photon Ionization Mass Spectrometry*
A3	A. A. Efimova, L. Pfützner, G. Hubrig, P. Schmidt (Cottbus-Senftenberg) *Thermal behavior and thermal decomposition mechanism of some alkyl-imidazolium ionic liquids*
A4	U. Bentrup, F. Emmerling, C. Rautenberg (Rostock) *Thermal decomposition of Keggin-type ammonium bismuth phosphomolybdates*
A5	S. Yariv, I. Lapides (Jerusalem, IL) *Formation of charcoal-montmorillonite complexes during the thermal analysis of organo-montmorillonites, their structures and stabilities*
A6	T. Engel, S. Schäfer, J. Moritz, G. Kickelbick (Saarbrücken) *Thermal analysis methods as a tool in the study of surface-functionalized inorganic nanoparticles*
A7	T. Gestrich, M. Herrmann, A. Kaiser, R. Neher (Dresden) *Thermal analysis of ceramic materials at high temperatures*
A8	J. I. Salazar Gómez, H. Lohmann, B. Krüger, B. Zeidler-Fandrich, I. Meyer, S. Reil, M. Jakuttis, A. Hornung (Oberhausen) *Thermal characterization of hydration-dehydration behavior of MgO composites as candidates for high-temperature waste heat storage*
A9	P. Tabero, E. Pawlowska (Szczecin, PL) *Reactivity of T-Nb_2O_5 or H-Nb_2O_5 towards Li_2CO_3*
A10	J. I. Salazar Gómez, B. Krüger, B. Zeidler-Fandrich, S. Bruzzano (Oberhausen) *Thermally responsive Diels-Alder materials as potential heat storage systems for the protection of electronic devices*

B Raw materials, environment, and sustainable development

B1	E. Smidt, J. Tintner, S. Klemm (Wien, A) *Aging of historical charcoals in the environment*
B2	C. Ortmann (Eschborn) *Investigation of contaminated soils*
B3	N. O. Gorodylova, V. Kosinová, P. Bělina, P. Šulcová (Pardubice, CZ) *Study on complex chromium zirconium phosphates for application as inorganic colourants*
B4	J. Rauch (Braunschweig) *Isoperibol gas calorimeter with a stirred water bath - uncertainty contributions of temperature inhomogeneities*

C Bioinorganics, biological and pharmaceutical systems

C1	Géza Regdon (Szeged, H) *Importance of thermal analysis in pharmaceutical technology*
C2	A. Ferencz, T. Fekecs, M. Mehdi, I. Zapf, D. Lőrinczy (Pécs, H) *DSC as a diagnostic tool in the medical applications*
C3	E. Marti, E. Kaisersberger (Basel, CH, Marktleuthen) *Prediction, crystallization and stability of polymorphs: Influenced by the entropy differences of their solid states*
C4	F. Könczöl, D. Lörinczy (Pécs, H) *Examination of the cyclophosphamide induced polyneuropathy on Guinea pig sciatic nerve and gastrocnemius muscle with differential scanning calorimetry*

E Instrumentation, Theory

E1	P. Šimon, T. Dubaj, Z. Cibulková (Bratislava, SK) *Reasonable application of isoconversional methods*
E2	A. Brandenburg, E. Wappler, R. Moos, J. Kita (Bayreuth) *Development and optimization of a novel miniaturized ceramic differential scanning calorimeter*
E3	E. Moukhina (Selb) *Direct Fourier analysis in modulated thermogravimetry*
E4	E. Dümichen, U. Braun, H. Sturm, R. Senz (Berlin) *A new method for analyzing the decomposition gases of polymers by thermogravimetric solid-phase extraction thermal desorption gas chromatography mass spectrometry (TGA-SPE/TDS-GC-MS)*
E5	M. A. Bohn (Pfinztal) *Modelling of DMA loss factor of elastomer binders for composite materials to separate binder fractions with different molecular mobility to assess their changes on external impacts*
E6	E. Zhuravlev, J. W. P. Schmelzer, A. S. Abyzov, V. M. Fokin, R. Androsch, Ch. Schick (Rostock) *Two-stage crystallization of poly(ε-caprolactone) studied by Fast Scanning Calorimetry*
E7	E. Moukhina, A. Schindler (Selb) *Automatic evaluation and identification of DSC curves*
E8	J. E. K. Schawe, E. Hempel (Schwerzenbach, CH) *Influence of processing conditions on polymer crystallization measured by fast scanning DSC*
E9	M. Feist, M. Ahrens, A. Siwek, Th. Braun, E. Kemnitz (Berlin) *Silane-modified aluminium chlorofluoride - Various ways of qualitative evaluation of Pulse*TA *measurements*
E10	P. van Ekeren, H. Berden, W. de Klerk, G. van den Mooter, Th. Pijpers, G. van den Poel (Therm. Anal. Working Group of the NL) *Quantitatively measuring the resolutions of a DSC using n-hexatriacontane*

Poster contributions
(Alphabetically ordered by the first author)

P1	R. Arhelger, B. Brückel, M. Roth, D. Walter (Giessen) *Safety and health in the workplace - Verification of flour dust*
P2	K. Bajer, U. Braun (Berlin) *The memory effect in polyolefinic products: A tool for confirming the steam-sterilization process?*
P3	Christian Blocks, Robert Heinemann, Peer Schmidt (Senftenberg) *Vapor phase equilibria in the system Zn/P/O*
P4	A. Blonska-Tabero, E. Filipek, A. Galera (Szczecin, PL) *Preliminary study on a new solid solution $Co_{2-x}Mg_xFeV_3O_{11}$: synthesis, thermal stability and IR spectra*
P5	M. Bosacka, E. Filipek (Szczecin, PL) *The synthesis and thermal stability of $In_3Cu_2VO_9$*
P6	A. Brandenburg, E. Wappler, J. Kita, R. Moos (Bayreuth) *Influence of the temperature distribution on the thermal resolution of a miniaturized ceramic differential scanning calorimeter*
P7	G. Buntebarth, A. Péntek, A. Weller (Clausthal-Zellerfeld) *Thermal and humidity-dependent expansion of rocks*
P8	G. Dąbrowska (Szczecin, PL) *Phase relation in the $ZnSb_2O_6$-$ZnTa_2O_6$ system*
P9	M. Dreifke, D. I. Fried, M. Fröba (Hamburg) *Designing enzyme cascades for cofactor regeneration*
P10	E. Durand, B. Guillaume, A. Demourgues, A. Tressaud (Bordeaux, F) *When thermal analysis leads to fundamental information in chemistry: the case of fluorinated materials*
P11	T. Gestrich, J. Meinl , A. Michaelis (Dresden) *Processes during oxidative stabilisation of PAN-based carbon fibres*
P12	W. Hohenauer, D. Lager (Wien, A) *Thermophysical properties of un-charred cork*
P13	M. Jablonski, S. Tylutka (Szczecin, PL) *The influence of the initial concentration of sulphuric acid on thermal effect of the reaction with titanium raw materials*
P14	M. Jablonski, S. Tylutka (Szczecin, PL) *Thermokinetics parameters for determination of risk of thermal explosion in the reaction of sulfuric acid with titanium raw materials*
P15	D. Klimm (Berlin) *Thermal analysis for crystal growth beyond 2000°C: Case studies*

P16	C. Lavenn, N. Guillou, G. Ledoux, R. Chiriac, A. Fateeva, B. Jouguet, A. Demessence (Lyon, F) *In-depth study of the solid-state crystallization of a luminescent gold-thiolate coordination polymer*
P17	J. Lerchner, T. Hartmann, A. Wolf, F. Mertens (Freiberg) *Chip calorimetry of aggregated biological samples in segmented flow*
P18	C. Meyer, R. Schadrack, R. Müller (Berlin) *Calibration of a push rod dilatometer*
P19	B. Mietner (Hamburg) *Melting and freezing of water in ordered, nanoporous host structures with different surface polarities*
P20	P. Myśliński , Ł. Szparaga, P. Kamasa, A. Gilewicz, J. Ratajski (Koszalin, PL) *Application of dilatometry with modulated temperature for thermo-mechanical analysis of antiwear coating/substrate systems*
P21	A. Paczesna, E. Filipek, A. Gontarek (Szczecin, PL) *DTA-TG and XRD studies of the Ni_2InVO_6-CuO system*
P22	A. Pająk, S. Żaczek, P. Rybiński, G. Janowska (Łodz, PL) *Flammability and thermal stability of elastomeric composites containing aluminium or magnesium hydroxide and phthalocyanine derivatives*
P23	M. Piz, G. Dąbrowska, E. Filipek (Szczecin, PL) *High-temperature reactions in the ternary VO_2-Nb_2O_5(Ta_2O_5)-Fe_2O_3 systems*
P24	S. Reinsch, R. Müller, J. Deubener, H. Behrens *DMTA study of hydrated soda-lime-silicate glasses*
P25	U. Sazama, K. Peikert, M. Fröba (Hamburg) *Thermally induced phase transition behaviour of three new fluorinated metal-organic frameworks*
P26	R. Stößer, M. Feist, C. Willgeroth, F. Emmerling, M. Menzel, H. Reuther (Berlin, Dresden) *The "quiet" Goldschmidt reaction 2 Al + α-Fe_2O_3 → 2 Fe + α-Al_2O_3*
P27	P. Šulcová (Pardubice, CZ) *Activities of the Czech Group for Thermal Analysis*
P28	P. Šulcová, K. Těšitelová (Pardubice, CZ) *Study of mixes oxide pigments based on Bi-Ce-Nb*
P29	P. Tabero, A. Frackowiak (Szczecin, PL) *Formation of the $Al_8V_{10}W_{16}O_{85}$ by the solution method*
P30	J. Tintner, E. Smidt (Wien, A) *Description and interpretation of organic matter in soils and waste by means of thermal analysis*
P31	E. Tomaszewicz, E. Filipek (Szczecin, PL) *Phase equilibria and thermal stability of $CuMo_{(1-x)}W_xO_4$ and $CuW_{(1-y)}Mo_yO_4$ in the $CuMoO_4$-$CuWO_4$ system*

P32	A. Vogel, S. Platz, T. P. Vu, F. Kern, U. Menzel, R. Gadow (Stuttgart) *Thermal behaviour of powdered activated carbon and sewage substances after the separation by a combined electrocoagulation and electroflotation process*
P33	S. Wrabetz, T.C.R. Rocha, D. Teschner, A. Knop-Gericke, G. Vilé, J. Pérez-Ramirez, R. Schlögl (Berlin, Zürich, CH, Guará, BR) *Active sites characterisation using adsorption microcalorimetry at reaction temperature*

Late-nominated poster contributions

P34	V. Siozios, St. Neuenfeld, W. Kunze (Eschborn, Darmstadt) *Sample mass and heating rate influence on the DSC resolution of n-Hexatriacontane*