

# PROGRAM

**Tuesday, June 17<sup>th</sup>**

Time Schedule	
15.00 - 19.00	<b>Registration and mixer</b>
18.30 - 19.30	<b>AFCAT Committee meeting</b>

**Wednesday, June 18<sup>th</sup>**

Time Schedule	
8.00 - 12.00	<b>Registration</b>
8.45 - 9.10	<b>Opening Ceremony</b>
9.15 - 9.35	<b>Jean ROUQUEROL</b> Calorimetry, from inspiration to recognition
9.40 - 10.10	<b>Welcome Coffee break, Instrument exhibition, Poster Session</b>
10.15 - 10.50	<b>STK AWARD LECTURE</b> <b>Anna SEELIG</b> : Multidrug resistance- Insights with thermodynamics
10.55 - 11.25	<b>Hans-Joachim LUNK</b> Chemistry of powder metallurgical production of tungsten for lighting and general application
11.30 - 12.10	<b>Poster Session – Instrument Exhibition</b>

WEDNESDAY	STREAM A : LIFE SCIENCE – PHARMA	STREAM B : CHEMICAL SAFETY
12.15 - 12.30	<b>Gabriela KLOCEK</b> : Melittin interaction with sulphated cell surface sugars	<b>Gilles RICHNER</b> : Fast online heat capacity determination with a new small-scale reaction calorimeter
12.40 - 13.50	<b>LUNCH</b>	
	STREAM A : LIFE SCIENCE – PHARMA	STREAM B : CHEMICAL SAFETY
14.00 - 14.25	<b>Danielle GIRON</b> : Challenging characterization and monitoring of polymorphs and pseudopolymorphs in pharmaceutical industry : latest developments	<b>Nicolas SBIRRAZZUOLI</b> : Isoconversional Kinetic Analysis of Thermally Stimulated Processes in Polymers
14.30 - 14.45	<b>Jacques LOUBENS</b> : A review of microcalorimetry applications in chemicals, pharmaceuticals and biological materials	<b>Françoise ROUQUEROL</b> : How should we rely on the Arrhenius' law in heterogeneous kinetics ?
14.50 - 15.05	<b>Karin GEHRICH</b> : Thermal behaviour of some pharmaceutical excipients	<b>Gérard THOMAS</b> : Thermal analysis for studying powder ageing
15.10 - 15.25	<b>Jean-François WILLART</b> : Solid state transformations in pharmaceutical materials induced by milling	<b>Francis STOESSEL</b> : Full scale calorimetry a tool for process control
15.30 - 15.55	<b>Janny DANDURAND</b> : Molecular mobility of a collagen/peptides mixture	<b>Jacques WISS</b> : Calorimetry or spectroscopy for on-line monitoring of chemical processes ?
16.00 - 16.15	<b>Nicolas DUJARDIN</b> : Solid state vitrification of glucose by mechanical milling	<b>Ena SMIDT</b> : Development of organic waste and incineration residues– monitoring by TG/MS and DSC
16.20 - 17.00	<b>Coffee break, Instrument exhibition, Poster Session</b>	
	<b>THERMAL APPLICATIONS</b>	
17.05 - 17.30	<b>Bertrand RODUIT</b> : Evaluating thermal aging, SADT and TMRad by advanced kinetics-based simulation approach	
17.35 - 18.00	<b>Eric DANTRAS</b> : Thermal and mechanical study of a biomimetic nanocomposites for bone substitution	<b>Serge WALTER</b> : Thermal measurements for non thermal applications
18.05 - 18.30	<b>Break</b>	
18.30 - 19.30	<b>AFCAT, GEFTA and STK annual meetings</b>	

**Thursday, June 19<sup>th</sup>**

<b>Time Schedule</b>		
8.30 - 9.05	<b>NETZSCH - GEFTA AWARD LECTURE :</b> <b>Erwin KAISERSBERGER :</b> Application of thermal analysis for new materials and new technologies	
	<b>STREAM A : COUPLING TECHNIQUES</b>	<b>STREAM B : THERMAL APPLICATIONS</b>
9.10 - 9.35	<b>Marek MACIEJEWSKI :</b> Advantages of monitoring gas composition in thermoanalytical experiments	<b>Jean-Pierre GROLIER :</b> Effect of water content on glass transition and heat capacities of starch : the use of conventional DSC and temperature modulated DSC (TMDSC)
9.40 - 9.55	<b>Florian EIGENMANN :</b> Quantification of FTIR signals with pulse thermal analysis	<b>Pierre REUSE :</b> Downsizing the sample, not the quality
10.00 - 10.15	<b>Ekkehard FÜGLEIN :</b> Characterization of decomposition gases by means of coupling techniques such as TG-FTIR-MS	<b>Alice MIJA :</b> Application of stochastic modulated DSC (TOPEM <sup>®</sup> ) to the glass transitions of lignin
10.20 - 10.35	<b>Jan HANSS :</b> An easy way to reduce oxygen in thermogravimetric analysers	<b>Valentin VALTCHEV :</b> Thermochemistry and zeolite nucleation
10.40 - 11.10	<b>Coffee break, Instrument exhibition, Poster Session</b>	
11.15 - 11.40	<b>Ralf ZIMMERMANN :</b> Photo-ionisation mass spectrometry for evolved gas analysis in thermogravimetry : Real-time detection of the organic signatures upon thermal treatment of polymers, bio mass fractions and crude oils	<b>Peer SCHMIDT :</b> The trace to ternary phosphide tellurides
11.45 - 12.00	<b>Dirk WALTER :</b> Characterization of carbon black, diesel exhaust and toner material by electron microscopy and thermal analysis	<b>John DUNCAN :</b> A novel plastics quality assurance testing device – identitiPol QA.
12.05 - 12.20	<b>Stefan HOFFMANN :</b> MS-TG-DTA under inert conditions	<b>Rudolf RIESEN :</b> Temperature modulated DSC : TOPEM <sup>®</sup> to identify thermal transitions
12.25 - 12.40	<b>Madeleine DJABOUROV :</b> Microcalorimetry and rheology of gelling systems	<b>Mohamed JEMAL :</b> Mechanisms of the attack of phosphates by acid solutions : a microcalorimetry application
12.45 - 13.50	<b>LUNCH</b>	

## Thursday, June 19<sup>th</sup>

14.00 - 14.20	<b>Michael FEIST</b> : Dynamic and stepwise isothermal heating runs for elucidating a decomposition mechanism; a TA-MS investigation of ammonium paratungstate tetrahydrate under non-reducing conditions.	<b>Erwin MARTI</b> : Reference substances and materials for the characterization and calibration of instruments in thermal analysis
14.25 - 14.40	<b>Aline AUROUX</b> : The use of coupling microcalorimetry to other techniques to study catalyst surfaces and catalytic processes.	<b>Rémi ANDRÉ</b> : Development of a new tool for the assessment of heat capacity at high temperatures based on Calvet principle
14.45 - 15.00	<b>Bernadette JOUGUET</b> : An in depth study of supported nanogold oxidation catalysts using adsorption calorimetry and thermal analysis techniques coupled with mass spectrometry	<b>Kai HASSDENTEUFEL</b> : Determination of the specific heat capacity of various inorganic materials up to 1600 °C
15.05 - 15.35	<b>Coffee break, Instrument exhibition, Poster Session</b>	
16.00 - 19.30	<b>EXCURSION</b>	
20.00 - 23.30	<b>CONFERENCE DINNER</b>	

**Friday, June 20<sup>th</sup>**

Time Schedule		
8.30 - 9.05	<b>AFCAT SETARAM AWARD LECTURE :</b> <b>Christelle LOPEZ :</b> Coupling of time-resolved synchrotron X-ray diffraction and DSC to elucidate the crystallisation properties and polymorphism of triglycerides in milk fat globules	
	<b>STREAM A : FOOD</b>	<b>STREAM B : THERMAL APPLICATIONS</b>
9.10 - 9.25	<b>Alejandro MARABI :</b> New insights into the dissolution enthalpy and kinetics of food powders	<b>Gérard THOMAS :</b> Thermal reactivity of silica gel-magnesium stearate solid mixtures. Application to the modelling of interaction forces between materials
9.30 - 9.45	<b>Reinhard SCHUBRING :</b> Crystallisation and melting behaviour of fish oil measured by DSC	<b>Saeda DIDAOUI-NEMOUCHI :</b> Correlation and prediction of volumetric and Thermal behavior of binary system of Thiophene with alkanes (C7-C12) from 288.15 to 313.15K
9.50 - 10.10	<b>Elisabeth VAN HECKE :</b> Determination of thermal properties of food products below atmospheric pressure	<b>Sabine VALANGE :</b> Stabilization of Fe <sub>2</sub> O <sub>3</sub> nanoparticles into SBA-15 mesopores and on mesoporous alumina through thermal degradation of iron chelates: a new route yielding performant Fenton catalysts
10.15 - 10.45	<b>Coffee break, Instrument exhibition, Poster Session</b>	
	<b>THERMAL APPLICATIONS</b>	
10.50 - 11.15	<b>Emmerich WILHELM :</b> A brief survey of some recent calorimetric results	<b>Colette LACABANNE :</b> Physical properties of hybrid ferroelectrics nanomaterials
11.20 - 11.35	<b>Thierry CHOUCROUN :</b> Advanced DSC and STA tests using state-of -the -art instruments	<b>Andreas WURM :</b> Simultaneous calorimetric, dielectric and SAXS/WAXS experiments during polymer crystallization
11.40 - 11.55	<b>Tim GESTRICH :</b> Characterisation of the influence of humidity on powdertechnological processes by means of thermal analysis	<b>Pierre REUSE :</b> On-line reaction calorimetry optimisation of safety parameters
12.00 - 12.15		
12.20 - 12.45	<b>CLOSING CEREMONY</b>	
12.50 - 14.00	<b>LUNCH BUFFET and Participants' Departure</b>	