ECTP BRATISLAVA 2005

17th EUROPEAN CONFERENCE ON THERMOPHYSICAL PROPERTIES

PROGRAMME

September 5 - 8, 2005
BRATISLAVA, SLOVAKIA

Slovak Academy of Sciences, University of Pau,
Constantine the Philosopher University

PROGRAMME

SUNDAY – September 4, 2005	
5:00 PM	**REGISTRATION** Place: Faculty of Electrical Engineering and Information Technology, Ilkovičova 3
6:00 PM	**GET TOGETHER PARTY** Place: Faculty of Electrical Engineering and Information Technology, Ilkovičova 3

MONDAY – September 5, 2005				
8:00 AM	**REGISTRATION** Place: Faculty of Electrical Engineering and Information Technology, Ilkovičova 3			
9:00 AM	**OPENING CEREMONY** Room: BC300			
9:20 AM	**KEY LECTURE** J. Fricke Vacuum insulation panels - exciting thermal properties and convincing applications Chairperson: Ľ. Kubičár, Room: BC300			
10:00 AM	**COFFEE BREAK**			**POSTERS, EXHIBITION**
10:20 AM	**PROCESSES** Session chair: Y. Nagasaka Room: AB150	**TESTING TECHNIQUES I** Session chair: H. Bauer Room: BC150	**MODELLING** Session chair: E. Vogel Room: CD150	
12:10 AM	**LUNCH**			
1:10 PM	**POSTER SESSION I**			
2:20 PM	**APPLICATIONS I** Session chair: H. P. Ebert Room: AB150	**TESTING TECHNIQUES II** Session chair: T. Baba Room: BC150	**REFRIGERANTS** Session chair: W. A. Wakeham Room: CD150	
4:00 PM	**COFFEE BREAK**			
4:20 PM - 6:00 PM	**APPLICATIONS II** Session chair: R. Černý Room: AB150	**FLASH TECHNIQUES** Session chair: A. Nabi Room: BC150	**VISCOSITY** Session chair: D. V. Nichita Room: CD150	
7:30 PM	**RECEPTION** Place: Restaurant Au Café, Tyršovo nábrežie 12			

TUESDAY – September 6, 2005				
9:00 AM	**KEY LECTURE** P. Ungerer: Molecular simulation of the thermophysical properties of fluids: from understanding toward quantitative predictions Chairperson: J. L. Daridon, Room: BC300			
9:40 AM	**COFFEE BREAK**			POSTERS, EXHIBITION
10:00 AM	**RADIATION I** Session chair: F. Righini Room: AB150	**TRANSIENT TECHNIQUES I** Session chair: R. P. Tye Room: BC150	**THERMAL CONDUCTIVITY/ PHASE EQUILIBRIA** Session chair: P. Ungerer Room: CD150	
12:10 AM	**LUNCH**			
1:10 PM	**POSTER SESSION II**			
2:20 PM	**LIFETIME AWARD** R. P. Tye From armco iron to pyroceram 9606 and back. A fifty eight year journey in and through thermal conductivity measurements Room: BC300			
3:05 PM	**NETZSCH AWARD** M. J. Lourenço A bridge between thermophysics and material sciences Room: BC300			
3:40 AM	**COFEE BREAK**			
4:20 PM - 6:00 PM	**RADIATION II** Session chair: P. Echegut Room: AB150	**ADVANCED MATERIALS I** Session chair: W. Neumann Room: BC150	**VOLUMETRIC AND ACOUSTIC PROPERTIES** Session chair: A. R. H. Goodwin Room: CD150	

WEDNESDAY – September 7, 2005

9:00 AM	**KEY LECTURE** Y. Nagasaka Applications of micro and nano-scale thermo-physical properties sensing for novel fluids and solids Chairperson: L. Vozár, Room: BC300			
9:40 AM	**COFFEE BREAK**			**POSTERS, EXHIBITION**
10:00 AM	**FAST TECHNIQUES** Session chair: G. Pottlacher Room: AB150	**ADVANCED MATERIALS II** Session chair: J. Fricke Room: BC150	**PETROLEUM** Session chair: V. Vesovic Room: CD150	
12:10 AM	**LUNCH**			
1:10 PM	**POSTER SESSION III**			
2:20 PM	**TRANSIENT TECHNIQUES II** Session chair: U. Hammerschmidt Room: AB150	**ADVANCED MATERIALS III** Session chair: M. Sheidlin Room: BC150	**PHASE EQUILIBRIA/ THERMAL CONDUCTIVITY** Session chair: M. J. Assael Room: CD150	
3:40 PM	**COFFEE BREAK**			
4:00 PM - 6:00 PM	**WORKSHOP** Photothermal and related measurement Chair: Ch. Glorieux Room: AB150	**WORKSHOP** The Industrial requirements for thermophysical properties - are we responding to industry needs? Chair: P. Quested Room: BC150	**WORKSHOP** Properties of novel fluids: Bio-nano and beyond Chairs: M. J. Assael, W. A. Wakeham Room: CD150	
7:30 PM	**BANQUET** Place: Restaurant Reduta, Medená ulica 2			

THURSDAY – September 8, 2005

9:00 AM	**HIGH TEMPERATURES I** Session chair: V. Fortov Room: AB150	**NEW TECHNIQUES** Session chair: A. Nagashima Room: BC150	**VOLUMETRIC PROPERTIES** Session chair: I. Cibulka Room: CD150	
10:30 AM	**COFFEE BREAK**			
10:50 AM	**HIGH TEMPERATURES II** Session chair: J. F. Sacadura Room: AB150	**ADVANCED MATERIALS IV** Session chair: P. Nesvadba Room: BC150		
11:55 AM	**CLOSING CEREMONY** Room: BC300			

SESSION DETAILS – ORAL PRESENTATIONS
Monday 5th September – First Session

PROCESSES Monday 10:20 - 12:10 AM, Session chair: Y. Nagasaka, Room: AB150	
10:20 AM	Prediction of properties of steels relevant to process simulation J. A. J. Robinson, A. W. D. Hills, A. T. Dinsdale, R. F. Brooks, L. A. Chapman, B. Roebuck, P. N. Quested (invited)
10:50 AM	Thermophysical properties of silicon carbide green bodies prior to, during and after the sintering process J. Blumm, J. Opfermann
11:10 AM	Thermal conductivity of polymer melts and implications of uncertainties in data for process simulation A. Dawson, M. Rides, J. Urquhart, C. S. Brown
11:30 AM	Thermal conductivity of amorphous carbon as a function of pyrolysis temperature M. Wiener, G. Reichenauer, F. Hemberger, H. P. Ebert
11:50 AM	Thermal conductivity of high temperature multicomponent materials with phase change K. Severing do Couto Aktay, R. Tamme, H. Müller-Steinhagen

TESTING TECHNIQUES I Monday 10:20 - 12:10 AM, Session chair: H. Bauer, Room: BC150	
10:20 AM	Micro electro mechanical system (MEMS) for the measurement of density and viscosity A. R. H. Goodwin, A. Fitt, K. Ronaldson, W. A. Wakeham (invited)
10:50 AM	Step-heated single-pan scanning calorimeter for the measurement of heat capacity of low density materials S. Yiftah, A. Nabi
11:10 AM	A convenient rapid method of measurement of thermal diffusivity of water-containing materials P. Nesvadba, F. Amat
11:30 AM	Development of high-speed and real-time sensing technique of thermal diffusivity by the forced Rayleigh scattering method M. Motosuke, Y. Nagasaka
11:50 AM	Apparent thermal conductivity measurements for the separation of heat and mass infiltration in underground sand beds H. Kiyohashi, S. Sasaki, H. Masuda

MODELLING Monday 10:20 - 12:10 AM, Session chair: E. Vogel, Room: CD150	
10:20 AM	Thermal conductivity of nanofluids – Theoretical review and simulation M. J. Assael, I. N. Metaxa, K. Kakosimos, D. Konstadinou (invited)
10:50 AM	Modeling of the speed of sound of heavy hydrocarbons using equation of state Th. Laffite, D. Bessières, M. M. Piñeiro, J. L. Daridon
11:10 AM	Spectroscopic and thermodynamic studies of alcohol + alkane and alcohol + amine mixtures based on quantum mechanical ab initio calculations of molecular clusters D. Wandschneider, A. Heintz
11:30 AM	Thermophysical properties of low density neat n-alkanes and their binary mixtures calculated by means of a (n-6) Lennard-Jones temperature-dependent potential U. Hohm, L. Zarkova, M. Damyanova
11:50 AM	Thermodynamic properties of fluids from molecular simulation R. J. Sadus

Monday 5th September – Second Session

APPLICATIONS I Monday 2:20 - 3:20 PM, Session chair: H. P. Ebert, Room: AB150	
2:20 PM	Multi-scale modelling of radiation heat transfer through nanoporous superinsulating materials F. Enguehard
2:40 PM	Thermal properties of mineral wool materials partially saturated by water M. Jiřičková, Z. Pavlík, P. Michálek, J. Pavlík, R. Černý
3:00 PM	Effective thermal conductivity of metallic foams determined with the transient plane source technique Th. Fend, O. Reutter, J. Sauerhering, K. Severing do Couto Aktay, R. Pitz-Paal, S. Angel

TESTING TECHNIQUES II Monday 2:20 - 4:00 PM, Session chair: T. Baba, Room: BC150	
2:20 PM	A precise PVT property measurement technique with magnetic levitation Y. Kayukawa, Y. Kano, K. Fujii, H. Sato
2:40 PM	Development of nanoscale thermophysical properties measurement technique using reflectance and fluorescence in near-field M. Kobayashi, Y. Horiguchi, Y. Taguchi, T. Saiki, Y. Nagasaka
3:00 PM	Development of measurement technique to evaluate thermal conductivity of thermoelectric Bi_2Te_3 submicron thin films by photothermal radiometry H. Jitsukawa, Y. Nagasaka
3:20 PM	Validation of thermal diffusivity measurement results obtained using modified monotonic heating regime procedure A. J. Panas, J. Sypek
3:40 PM	Development of computer aided dual sinker Archimedean densitometer for high temperature melt Y. Sato, Y. Anbo, K. Yanagase, T. Yamamura

REFRIGERANTS Monday 2:20 - 4:00 PM, Session chair: W. A. Wakeham, Room: CD150	
2:20 PM	Thermal diffusivity, sound speed, viscosity and surface tension of R227ea (1,1,1,2,3,3,3-heptafluoropropane) A. P. Fröba, C. Botero, A. Leipertz
2:40 PM	A reference multiparameter thermal conductivity equation for R134a in optimized functional form G. Scalabrin, P. Marchi, F. Finezzo
3:00 PM	Reliable thermophysical-property calculation for refrigerants R32, R125, R134a, R143a, R152a, R410A and hydrocarbons having theoretical background H. Sato, I. M. Astina, T. Adachi, K. Okabe, M. Yasui
3:20 PM	Second and third virial coefficients for pure refrigerants, and for mixtures with R744 - Theoretical calculations in comparison with experimental data J. Avsec, G. Di Nicola, M. Oblak, F. Polonara
3:40 PM	Isothermal vapour-liquid equilibrium measurements and correlation for the pentafluoroethane + cyclopropane and the cyclopropane + 1,1,1,2-tetrafluoroethane binary systems L. Fedele, S. Bobbo, M. Scattolini, R. Camporese

Monday 5th September – Third Session

APPLICATIONS II Monday 4:20 - 5:40 PM, Session chair: R. Černý, Room: AB150	
4:20 PM	Thermophysical analysis of high modulus composite for satellite structure H. S. Lee, K. J. Min
4:40 PM	Comparison of thermal conductivities of highly insulating materials and estimation of thermoradiative properties of coatings in spatial conditions M. Varenne-Pellegrini, L. Puigsegur, J. Pavie, T. Lanternier
5:00 PM	Gas-atmosphere and pore size distribution effects on the effective thermal conductivity of nano-scaled insulations U. Gross, G. Barth, R. Wulf, K. Raed
5:20 PM	Thermal conductivity of xonotlite insulation material G. Wei, X. Zhang, F. Yu

FLASH TECHNIQUES Monday 4:20 - 5:40 PM, Session chair: A. Nabi, Room: BC150	
4:20 PM	Light pulse heating methods for thermophysical property measurements T. Baba
4:40 PM	Measurement of the thermophysical properties of an NPL thermal conductivity standard Inconel 600 J. Blumm, A. Lindemann, B. Niedrig
5:00 PM	Study on a thermal diffusivity standard for the laser flash method measurements M. Akoshima, T. Baba
5:20 PM	Flash method for remote sensing of thermal diffusivity and absorption coefficient of thin film materials at the excitation wavelength O. Yu. Troitsky, H. Reiss

VISCOSITY Monday 4:20 - 6:00 PM, Session chair: D. V. Nichita, Room: CD150	
4:20 PM	Viscosity measurements on water vapour and their evaluation E. Vogel, V. Teske, E. Bich
4:40 PM	Diisodecylphthalate (DIDP) – a potential standard of moderate viscosity: Comparative study of surface tension effects on capillary viscometer calibration F. J. P. Caetano , J. M. N. A. Fareleira, A. Fernandes, C. M. B. P. Oliveira, A. P. Serro, W. A. Wakeham
5:00 PM	Reference data for the viscosity of liquid toluene in wide ranges of temperature – IATP project final report F. J. V. Santos, C. A. Nieto de Castro, J. H. Dymond, N. K. Dalaouti, M. J. Assael, A. Nagashima
5:20 PM	Viscosity studies on poly propylene glycol (PPG) in different solvents K. Venkatramanan, V. Arumugam
5:40 PM	Viscosity measurements on gaseous ethane D. Seibt, J. Wilhelm, E. Vogel, D. Buttig, E. Hassel

Tuesday 6th September – First Session

RADIATION I Tuesday 10:00 - 12:10 AM, Session chair: F. Righini, Room: AB150	
10:00 AM	Thermophysical properties of substances at high temperatures and high pressures V. E. Fortov (invited)
10:30 AM	Optical properties (at a wavelength of 684.5 nm) and radiance temperatures at the melting point of group VIIIb transition metals cobalt, nickel, palladium and platinum C. Cagran, B. Wilthan, G. Pottlacher
10:50 AM	Radiative properties of dense fibrous media in dependent scattering regime R. Coquard, D. Baillis
11:10 AM	From transparency to opacity in dielectric compounds with increasing of the temperature P. Echegut, J. F. Brun, D. De Sousa Meneses
11:30 AM	Influence of the texture on the normal spectral emittance of a fused silica glass B. Rousseau, D. De Sousa Meneses, J. F. Thovert, P. Echegut
11:50 AM	Measurement of total hemispherical emissivity using a calorimetric technique J. Hameury, B. Hay, J. R. Filtz

TRANSIENT TECHNIQUES I Tuesday 10:00 - 12:10 AM, Session chair: R. P. Tye, Room: BC150	
10:00 AM	Electric resistivity of aluminium alloys up to and above the melting temperature R. Brandt, G. Neuer (invited)
10:30 AM	On the use of the transient hot strip method for measuring the thermal conductivity of highly conducting thin bars M. Gustavsson, H. Wang, R M Trejo, E. Lara-Curzio, R. B. Dinwiddie, S. E. Gustafsson
10:50 AM	The virtual experiment design: Optimizing of the transient hot bridge sensor R. Model, U. Hammerschmidt
11:10 AM	Thermophysical sensors Ľ. Kubičár, V. Vretenár, V. Štofanik
11:30 AM	Transient hot bridge (THB) method: Uncertainty assessment U. Hammerschmidt, V. Meier, R. Model
11:50 AM	Repeatability and refinement of the transient hot wire instrument for measuring the thermal conductivity of high temperature melts J. Bilek, J. K. Atkinson, W. A. Wakeham

THERMAL CONDUCTIVITY/PHASE EQUILIBRIA Tuesday 10:00 - 12:10 AM, Session chair: P. Ungerer, Room: CD150	
10:00 AM	Thermal-wave photoacoustic setup for precise measurements of thermal diffusivity for liquids J. A. Balderas-López (invited)
10:30 AM	Thermophysical properties of mixtures containing imidazolium based ionic liquids. Experimental results of liquid-liquid equilibria and liquid-liquid interphase tension along the coexistence curve J. K. Lehmann, C. Wertz, A. Tschersich, A. Heintz
10:50 AM	Experimental determination of enthalpy of dissolution and solubility of CO2 in aqueous 2-amino-2-methyl-1-propanol (AMP) L. Rodier, H. Arcis, D. Koschel, J. Y. Coxam
11:10 AM	High pressure phase equilibria in methane + synthetic waxes: Influence of the light gas proportion J. Pauly, J.-L. Daridon, J. A. P. Coutinho
11:30 AM	Liquid-liquid equilibrium between water and ionic liquids M. G. Freire, L. M. N. B. F. Santos, I. M. Marrucho, J. A. P. Coutinho
11:50 AM	Excess properties of the ternary mixture tert-amyl methyl (TAME) + methanol + hexane at 313.15 K C. Alonso-Tristán, M. C. Martín, J. J. Segovia, C. R. Chamorro, E. A. Montero, M. A. Villamañán

Tuesday 6th September – Second Session

RADIATION II Tuesday 4:20 - 5:40 PM, Session chair: P. Echegut, Room: AB150	
4:20 PM	Simultaneous measurement of temperature, thermal diffusivity, thermal conductivity and spectral emissivity by photothermal radiometry M. Broussely, A. Levick, G. Edwards
4:40 PM	ARMCO iron normal spectral emissivity measurements L. del Campo, R. B. Pérez-Sáez, M. J. Tello, X. Esquisabel, I. Fernández
5:00 PM	Measurement of directional spectral emissivities of microstructured surfaces J. Gengenbach, S. Kabelac, L. R. Koirala
5:20 PM	Experimental investigation of thermooptical characteristics of refractory dielectric materials in a field of high intensity radiation Yu. Yu. Protasov, A. M. Semenov

ADVANCED MATERIALS I Tuesday 4:20 - 6:00 PM, Session chair: W. Neumann, Room: BC150	
4:20 PM	Thermophysical properties of advanced heat sink materials E. Neubauer, P. Angerer, G. Korb
4:40 PM	Thermophysical analysis of Gioia marble in dry and saturated stage by pulse transient method V. Vretenár, Ľ. Kubičár, V. Boháč, P. Tiano
5:00 PM	Self-referential Monte-Carlo method for calculating the free energy of crystalline solids M. B. Sweatman
5:20 PM	Thermophysical characterization of CrN deposit J. L. Battaglia, A. Kusiak
5:40 PM	Examination of bond strength and tribological properties of ceramic-polymer composite coating formed by plasma and flame spray R. Samur, H. Demirer

VOLUMETRIC AND ACOUSTIC PROPERTIES Tuesday 4:20 - 6:00 PM, Session chair: A. R. H. Goodwin, Room: CD150	
4:20 PM	Speed of sound measurements in n-nonane at temperature between 294 and 394 K and at pressure up to 100 MPa S. Lago, P. A. Giuliano Albo, R. Spagnolo
4:40 PM	Measurements of the speed of sound in liquid propane under high pressures K. Meier, S. Kabelac
5:00 PM	Speed of sound predictive modeling in a three-parameter corresponding states format. Application to pure and mixed haloalkanes G. Scalabrin, P. Marchi, M. Grigiante
5:20 PM	Corresponding states modeling of the speed of sound of long chain hydrocarbons A. J. Queimada, I. M. Marrucho, J. A. P. Coutinho, J. L. Daridon
5:40 PM	Interfacial tension measurements and modeling of hydrocarbon + water systems A. J. Queimada, C. Costa, C. Miqueu, G. M. Kontogeorgis, I. M. Marrucho, J. A. P. Coutinho

Wednesday 7th September – First Session

FAST TECHNIQUES Wednesday 10:00 - 12:10 AM, Session chair: G. Pottlacher, Room: AB150	
10:00 AM	Laser heating in high-temperature thermophysics M. Sheindlin (invited)
10:30 AM	Thermophysical properties of the solid and liquid TA6V titanium alloy M. Boivineau, C. Cagran, D. Doytier, V. Eyraud, M. H. Nadal, G. Pottlacher, B. Wilthan
10:50 AM	Palladium: Normal spectral emissivity (at 684.5 nm) and thermophysical properties at the melting transition and in the liquid state C. Cagran, G. Pottlacher
11:10 AM	A novel method for measuring specific heat capacity by pulse-heating technique H. Watanabe
11:30 AM	Thermophysical properties of zirconium in a wide temperature range N. D. Milošević, K. D. Maglić
11:50 AM	A new millisecond pulse heating system at the Los Alamos National Laboratory A. Seifter, M. R. Furlanetto, J. R. Payton, A. W. Obst

ADVANCED MATERIALS II Wednesday 10:00 – 12:10 AM, Session chair: J. Fricke, Room: BC150	
10:00 AM	A network database system for thermophysical property data T. Baba, A. Ono (invited)
10:30 AM	Thermal and electrical properties of a suspended nanoscale thin film X. Zhang, H. Xie, M. Fujii, H. Ago, K. Takahashi, T. Ikuta, H. Abe, T. Shimizu
10:50 AM	Influence of thermal strain on thermal properties of composites A. Rudajevová, S. Kúdela jn., S. Kúdela
11:10 AM	Characterization of thin films using scanning thermal microscopy L. David, S Gomès, B. Vassort, P. Galland, M. Raynaud
11:30 AM	Numerical and experimental studies on thermal contact resistance at solid-solid interfaces X. Zhang, P. Cong, Y. Ren, M. Fujii
11:50 AM	Improved access to thermophysical properties data with evitherm G. Neuer, J. Redgrove, D. Talebi

PETROLEUM Wednesday 10:00 – 12:10 AM, Session chair: V. Vesovic, Room: CD150	
10:00 AM	An analytical consistent pseudo-component delumping procedure for equations of state with non-zero binary interaction parameters D. V. Nichita, C. F. Leibovici (invited)
10:30 AM	Measurement and modeling of hydrocarbon dew points for certain synthetic natural gas mixtures Ø. Mørch, Kh. Nasrifar, O. Bolland, E. Solbraa, A. O. Fredheim, L. H. Gjertsen
10:50 AM	Thermodynamic properties of natural gas mixtures using equation of state Kh. Nasrifar, O. Bolland
11:10 AM	Towards asphaltenes characterization by simple measurements S. Verdier, F. Plantier, D. Bessières, S. I. Andersen, H. Carrier
11:30 AM	The influence of thermophysical properties on vaporisation of liquefied natural gas V. Vesovic
11:50 AM	Phase equilibrium of aqueous systems containing acid gases - Systems of interest for sequestration D. Koschel, J. Y. Coxam, V. Majer

Wednesday 7th September – Second Session

TRANSIENT TECHNIQUES II Wednesday 2:20 - 3:40 PM, Session chair: U. Hammerschmidt, Room: AB150	
2:20 PM	Analysis of uncertainties associated to thermophysical parameters of materials using a periodic method measurements A. Boudenne, L. Ibos, Y. Candau
2:40 PM	Thermal conductivity measurements of liquid mercury and gallium by a transient hot wire method in a static magnetic field H. Fukuyama, T. Yoshimura, H. Yasuda, H. Ohta
3:00 PM	Fractal analysis utilization for data evaluation measured by transient methods O. Zmeškal, P. Štefková, V. Boháč
3:20 PM	Thermophysical parameters estimation in dynamic methods S. Malinarič

ADVANCED MATERIALS III Wednesday 2:20 - 3:40 PM, Session chair: M. Sheidlin, Room: BC150	
2:20 PM	Density measurement of molten CaF_2 by an electrostatic levitator I. Minato, H. Fukuyama, T. Ishikawa, P. F. Paradis, J. Yu, S. Yoda
2:40 PM	Refractive index measurements on CaF2 single crystal and melt using ellipsometry S. H. Firoz, T. Sakamaki, R. Kojima, M. Susa
3:00 PM	Thermal fields monitoring when growing large alkalihalide single crystals from melt O. Ts. Sidletskiy, V. I. Goriletsky, B. V. Grinyov, M. M. Tymoshenko, O. V. Sizov, V. V. Sumin
3:20 PM	Influence micromechanisms fracture fibres on destruction unidirectional composite G. H. Narzullaev

PHASE EQUILIBRIA/THERMAL CONDUCTIVITY Wednesday 2:20 - 3:40 PM, Session chair: M. J. Assael, Room: CD150	
2:20 PM	A reference multiparameter thermal conductivity equation for R152a in optimized functional form G. Scalabrin, P. Marchi, F. Finezzo
2:40 PM	Vapor-liquid equilibria from (1 bar to 17 bar) of binary mixtures acetic acid- alkanes by a static apparatus with on-line analysis of the vapour phase N. Ainous, L. Negadi, A. Hajjaji, I. Mokbel, J. Jose
3:00 PM	Thermal properties of perfluorobenzene near the critical point S. V. Stankus, R. A. Khairulin
3:20 PM	Transport properties of organic liquids: Theoretical models and experimental evidence G. Latini, G. Passerini

Thursday 8th September – First Session

HIGH TEMPERATURES I Thursday 9:00 – 10:30 AM, Session chair: V. Fortov, Room: AB150	
9:00 AM	Density and surface tension of liquid ternary Ni-Cu-Fe alloys J. Brillo, I. Egry, T. Matsushita (invited)
9:30 AM	Advances in the mass-spectrometric studies of the laser-induced vaporisation of graphite and uranium dioxide R. Pflieger-Cuvellier, M. Sheindlin, J. Y. Colle
9:50 AM	A critical review of the European guarded hot plate standard for operation at high temperatures D. R. Salmon, R. P. Tye, N. Lockmuller, C. Stacey
10:10 AM	Parametric estimation of thermo-radiative properties of materials based on harmonic excitation B. Agoudjil, S. Datcu, A. Boudenne, L. Ibos, Y. Candau

NEW TECHNIQUES Thursday 9:00 – 10:10 AM, Session chair: A. Nagashima, Room: BC150	
9:00 AM	A new instrument for the measurement of thermal conductivity of fluids S. G. S. Beirão, M. L. V. Ramires, C. A. Nieto de Castro
9:30 AM	Transversely oscillating MEMS viscometer: The “Spider” K. Ronaldson, A. Fitt, A. R. H. Goodwin, W. Wakeham
9:50 AM	A versatile evaporative cooling system designed for the use in an elementary particle detector G. Hallewell, V. Vacek

VOLUMETRIC PROPERTIES Thursday 9:00 - 10:30 AM, Session chair: I. Cibulka, Room: CD150	
9:00 AM	Volumetric properties of dilute aqueous solutions of organic solutes in extended ranges of temperature and pressure: Experiment, data, and new observations L. Hnědkovský, I. Cibulka
9:30 AM	Measurements of (p, ρ, T) properties for propane in the temperature range from 280 K to 440 K at pressures up to 200 MPa H. Miyamoto, M. Uematsu
9:50 AM	p ρ T measurements and EoS predictions of ester lubricants up to 45 MPa O. Fandiño, J. García, M. J. P. Comuñas, E. R. López, J. Fernández
10:10 AM	Critical phenomena in binary hydrocarbon-water systems G. V. Stepanov, S. M. Rasulov, V. A. Mirskaya, A. R. Rasulov

Thursday 8th September – Second Session

HIGH TEMPERATURES II Thursday 10:50 – 11:50 AM, Session chair: J. F. Sacadura, Room: AB150	
10:50 AM	Impact of auto-irradiation on the thermophysical properties of oxide nuclear reactor fuels D. Staicu, T. Wiss, M. Sheindlin, V. V. Rondinella, J. P. Hiernaut, C. Ronchi
11:10 AM	Development of thin heater apparatus for high temperature thermal transmission properties E. G. Wolff, J. E. Sharp, D. A. Schneider, B. C. Nielsen
11:30 AM	Viscosities of nickel base super alloys Y. Sato, K. Sugisawa, D. Aoki, T. Yamamura

ADVANCED MATERIALS IV Thursday 10:50 – 11:50 AM, Session chair: P. Nesvadba, Room: BC150	
10:50 AM	A microscopic theory of current density spikes associated with phase transitions on crystalline electrodes I. Medveď, D. A. Huckaby
11:10 AM	The calculation of thermal conductivity for nanofluids containing nanoparticles and nanotubes J. Avsec
11:30 AM	Thermophysical properties of ceramic substrates with modified surfaces M. Rohde

SESSION DETAILS – POSTERS
Monday 5th September

POSTER SESSION I - THERMOPHYSICAL PROPERTIES OF SOLIDS Monday 1:10 - 2:20 PM (available 10:00 AM - 6:00 PM)	
1	Effect of flame parameters on the properties of stainless steel coatings formed by thermal spray method R. Samur, H. Demirer, M. Sungur
2	Thermodynamic properties of $TlMeX_2$ (Me-Co, Cr; X-S, Te) E. M. Kerimova, M. A. Aldjanov, S. N. Mustafaeva
3	Temperature - dependent relaxation currents in $TlGaSe_2$ <Fe> single crystals S. N. Mustafaeva, M. M. Asadov
4	High temperature thermal properties of alkali activated aluminosilicate materials L. Zuda, J. Toman, P. Rovnaníková, P. Bayer, R. Černý
5	Thermal properties of alkali activated aluminosilicate materials after thermal load L. Zuda, Z. Pavlík, P. Rovnaníková, P. Bayer, R. Černý
6	Effect of moisture on thermal conductivity of cementitious composites E. Mňahončáková, M. Jiřičková, J. Pavlík, R. Černý
7	Using the box method for measurement of thermophysical properties: Application to the porous medium A. El Bouardi, H. Ezbakhe, T. Ajzoul, A. El Bakkouri
8	Comprehensive analysis of the composition of zeolite-bearing rocks using thermal analysis techniques V. I. Sukharenko, K. B. Zhogova, L. I. Borisovs, T. V. Serova, P. I. Gavrilov, M. M. Prorok, T. A. Permyakova
9	High-temperature behavior of simple solids. Premelting effects A. I. Karasevskii, V. V. Lubashenko
10	Thermal diffusivity measurement of engineering alloys in dependence on temperature Herzogova, Z. Jedlicka, M. Prihoda
11	Measurement the electrical resitivity of steel with 0.20% C A. Macháčková, Z. Klečková, M. Příhoda, Z. Jedlička
12	Thermal capacity measurement of engineering alloys in dependence on temperature Z. Jedlicka, I. Herzogova
13	Normal spectral emissivity and its prediction equation for liquid Ni-Cu binary alloys R. Tanaka, M. Susa
14	Determination of the local thermal diffusivity of polycrystalline aluminium nitride by a modified laser flash method F. Hemberger, H. P. Ebert, J. Fricke
15	Thermal conductivity of simulated fuel with fission products forming solid solutions K. H. Kang, H. S. Moon, K. C. Song, M. S. Yang, S. H. Lee, S. W. Kim
16	Thermal conductivity of polycrystalline ZnS, ZnSe, and CdTe in the temperature range 4-400 K S. M. Luguev, N. V. Lugueva, A. B. Batdalov
17	Thermal conductivity of U-Mo/Al alloy dispersion fuel meats S. H. Lee, J. M. Park, C. K. Kim
18	Thermal conductivity of thermoplastics reinforced with natural fibres S. W. Kim, S. H. Lee, J. S. Kang, K. H. Kang
19	Thermal conductivity of heat treated TiO_2 thin films S. W. Kim, J. K. Kim, S. H. Hahn, S. H. Lee, K. H. Kang
20	Measurement of the heat capacity of Plastic Waste / Fly Ash composite material using differential scanning calorimetry J. Fujino, T. Honda

21	Modeling and calibration of lateral heat loss rate in measuring the R value of a partly heated wall J.-S. Kang, S.-E. Lee
22	Thermophysical properties of dilute Ni-Cr alloys and some industrial Ni-Cr-based alloys V. E. Sidorov, I. V. Vandisheva, F. A. Tutrin, E. E. Barishev, B. A. Baum, G. V. Tyagunov,T. K. Kostina
23	Intercomparison of insulation thermal conductivities measured by various methods R. Wulf, G. Barth, U. Gross
24	Examination of workability behavior and rheologic properties of fresh concrete under pressure K. T. Yucel, H. H. Ince
25	Thermal conductivity of graphite at high temperatures A. V. Kostanovskiy, M. E. Kostanovskaja, M. G. Zeodinov
26	Studies on the thermophysical properties of some plant fibres D. Saikia
27	Thermal characterization of hydrophilic acrylic composites with synthetic hydroxyapatite G. Fuentes, Y. Campos, S. Torres, E. San Martín, R. A. Muñoz Hernández, A. Calderón, E. Marin
28	A pulse method for determination of specific heat and thermal diffusivity of plastics J. Terpiłowski
29	Microstructure and thermal properties in electrochemical etching porous silicon A. Florido Cuellar, G. Peña-Rodríguez, J. A. I. Díaz Góngora, R. A. Muñoz Hernández, E. Marin, A. Calderón
30	Analysis of the temperature distribution in a guarded hot-plate apparatus for measuring thermal conductivity L. Lira, J. Xamán
31	Thermal diffusivity of ceramic powders G. Peña-Rodríguez, A. Calderón, E. Marin, R. A. Muñoz Hernández
32	Quasi-isothermal measurement by TMDSC in isotactic polypropylene T. Osada, M. Iijima, H. Kaneko
33	Nanostructure with clusters in Nafion® by DSC Y. Sasaki, M. Iijima, T. Osada, K. Miyamoto, M. Nagai
34	Calorimetric investigation of the C60, C70 solvated crystals with the aromatic solvents N. V. Avramenko, M. V. Korobov, A. M. Parfenova, P. A. Dorozhko, N. A. Kiseleva, P. V. Dolgov
35	Experimental results for thermal conductivity of adsorbed natural gas on activated carbon J. M. Gurgel, F. R. M. Tavares, P. A. Oliveira, A. S. Marques, L. G. Oliveira
36	Thermal diffusivity at high temperatures U. V. Mardolcar, C. A. Nieto de Castro
37	Experimental investigation of the liquid carbon crystallization and amorphization A. Yu. Basharin
38	Thermo-electrical properties of germanium in solid and liquid states Ja. B. Magomedov, G. G. Gadzhiev, S. M. Rasulov
39	Complex study of thermophysical properties of ceramics $SiC_{1-x}AlN_x$ M.-R. M. Magomedov, I. K. Kamilov, G. G. Gadzhiev, M. M. Khamidov
40	Thermo- and electrophysical properties of aluminium-copper-silicon-sivibirium alloys M. M. Safarov, D. Hui, Z. V. Kobuliev, S. G. Rizoev
41	Experimental investigation α→β and β→α turn into of titanium at speeds of heat 102 - 104 K/c V. E. Peletskii, I. I. Petrova, B. N. Samsonov, V. D. Tarasov, B. A. Shur
42	Thermoelectrical properties of sulphides of rare-earth G. G. Gadzhiev, V. V. Sokolov, Sh. M. Ismailiv, M. M. Khamidov, Kh. Kh. Abdullaev
43	Thermal conductivity of liquid UO_2 near the melting point M. Sheindlin, W. Heinz, D. Staicu, C. Ronchi, B. Rémy, A. Degiovanni

44	Thermal expansion of framework orthophosphates of tantalum and niobium having rhombohedral and cubic modifications (the development of conception) A. I. Orlova, A. K. Korytseva, E. V. Bortsova, S. V. Nagornova, G. N. Kazantsev, S. G. Samoilov, A. V. Bankrashkov, V. S. Kurazhkovskaya
45	Heat and electrical transport in new composites SiC/Si – canal-type ecoceramics H. Misiorek, J. Mucha, A. Jeżowski, L. S. Parfeneva, I. A. Smirnov, B. I. Smirnov, F. M. Varela-Feria, J. Martinez-Fernandez, A. R. deArellano-Lopez
46	Thermal properties of GaN/Si heterostructures grown by molecular beam epitaxy M. Cervantes-Contreras, M. López-López, G. González de la Cruz, M. Tamura
47	Thermal barrier effect of refractory “EV”- enamel I. Pencea, M. Branzei, D. Stroe Gaal, F. Miculescu, D. Gheorghe, V. Manoliu
48	A comparative study on the structural transformation parameters of a Cu-Ti rich glassy alloy using thermophysical methods and differential scanning calorimetry M. Adam, M. Calin, D. Stroe Gaal, M. Miculescu, D. Bunea
49	Thermal diffusivity measurement of solids using the flash apparatus. Comparison of different thermal models F. Mzali, F. Albouchi, S. Ben Nasrallah
50	Calculation of density and heat capacity of silicon by molecular dynamics simulation R. Kojima, Y. Fujihara, M. Susa
51	Development and characterization of low emitting ceramics J. Manara, M. Reidinger, S. Korder, M. Arduini-Schuster, J. Fricke
52	Universal assessment technique of thermodynamic properties O. Yu. Goncharov
53	Numerical simulation of thermal conduction and diffusion through nanoporous superinsulating materials F. Enguehard, D. Rochais
54	Thermal conductivity and moisture effect of some major elements of a typical middle eastern house envelope B. M. Suleiman
55	Aztec and colonial archeological potteries: A study on fired J. L. Jiménez Pérez, A. Brancamontes Cruz, J. Jiménez-Pérez, A. Cruz Orea, A. Gordillo-Sol, H. Yee-Madeira
56	Thermal conductivity and melting point measurements on paraffin-zeolite mixtures U. R. Fischer
57	Induced changes in structural and thermal properties of polyethylene, polyamide-6 and their conjoint at high environmental temperature N. A. El-Zaher, A. A. Abd El-Megeed, M. Mekawy
58	Calculation of heating power generated from ferromagnetic thermal seed (PdCo-PdNi-CuNi) alloys used as interstitial hyperthermia implants A. H. El-Sayed, A. A. Aly, N. I. El-Sayed, M. M. Mekawy, A. A. El-Gendy
59	Thermophysical properties of piezoelectric PZT ceramics S. N. Kallaev, G. G. Gadjiev, I. K. Kamilov, M. M. Khamidov, Z. M. Omarov, S. M. Sadycov
60	Spectral emissivity and radiance temperature plateau of self-supporting Al_2O_3 melt at rapid solidification V. A. Petrov, A. Yu. Vorobyev
61	An experimental study on the thermal conductivity change of building insulation materials with long-time elapse J. S. Kang, Y. S. Jeong, G. S. Choi, S. E. Lee
62	Ageing of thermal insulation materials by accelerated laboratory test methods J. S. Kang, Y. S. Jeong, G. S. Choi, S. E. Lee

Tuesday 6th September

POSTER SESSION II - THERMOPHYSICAL PROPERTIES OF FLUIDS Tuesday 1:10 - 2:20 PM (available 9:40 AM - 6:00 PM)	
1	Transport properties of binary and ternary mixtures J. Avsec, G. F. Naterer, M. Oblak
2	The (p, ρ, T) and (ps, ρs, Ts) properties of $ZnBr_2$ + methanol solutions R. Jannataliyev, J. Safarov, A. N. Shahverdiyev
3	The volumetric properties of $Ca(NO_3)_2$ (aq) G. Najafov, J. Safarov, S. Huseynov, A. N. Shahverdiyev, E. Hassel
4	The (p, ρ, T) and (ps, ρs, Ts) properties of aqueous methanol solutions E. Hanifayeva, M. Talibov, J. Safarov, A. N. Shahverdiyev
5	Transport properties of some refrigerant gases from effective and isotropic pair potential energies M. M. Papari, J. Moghadasi, A. A. Mohsenipour
6	Effect of drugs on formation of double stranded nucleic acid by calorimetric measurements Y. Baba, T. Ikeda
7	Comparative experimental and modelling studies of the viscosity behaviour of ethanol + C7 hydrocarbon mixtures versus pressure and temperature C. K. Zéberg–Mikkelsen, G. Watson, A. Baylaucq, G. Galliero, C. Boned
8	Prediction of the second cross virial coefficients of binary mixtures L. Meng, Y. Duan
9	On the possibility of restriction of experimental data's number used at compiling equation of state for refrigerant's mixture A. A. Vasserman, V. P. Malchevskyy, A. V. Bogdanov
10	Measurement of vapor-liquid equilibria for the binary mixture of propane (R-290) + propylene (R-1270) Q. N. Ho, B. G. Lee, K. S. Yoo, J. S. Lim
11	Density of liquid eutectic Pb–Bi alloy at high temperatures S. V. Stankus, R. A. Khairulin, A. G. Mozgovoy
12	Anomalous volumetric behavior of water-hydrocarbon mixtures S. Ikawa, S. Furutaka, Y. Jin
13	Measurements of thermal conductivity and thermal diffusivity of carbon dioxide at sub-/super- critical states H. Gu, H. Xie, X. Zhang, M. Fujii
14	Study of the thermophysical troperties of clays in the northwest of Spain M. M. Piñeiro, M. L. Mourelle, R. Meijide, C. Medina, J. L. Legido
15	Viscosity measurements on methanol vapour and their evaluation V. Teske, E. Vogel
16	Viscosity measurements on nitrogen D. Seibt, E. Vogel, E. Bich, D. Buttig, E. Hassel
17	The thermodynamic properties of 1-alkenes in the liquid state T. S. Khasanshin, O. G. Poddubskij, A. P. Shchamialiou, V. S. Samuilov
18	Liquid-liquid equilibrium and interfacial properties of water and perfluorocarbons: Measurements and modeling M. G. Freire, A. J. Queimada, P. J. Carvalho, I. M. Marrucho, L. M. N. B. F. Santos, J. A. P. Coutinho
19	Common features of liquid systems near criticality in different confining geometries K. A. Chalyy, L. A. Bulavin, A. V. Chalyi
20	Critical dynamics of liquid mixtures in reduced geometry A. V. Chalyi, L. A. Bulavin, K. A. Chalyy, L. M. Chernenko, Ya. V. Tsekhmister
21	Density and ultrasound velocity of some pure metals in liquid state P. S. Popel, V. E. Sidorov, D. A. Yagodin, G. M. Sivkov, A. G. Mozgovoj
22	Molecular dynamics simulation of liquid-vapor interface of the pure Lennard-Jones fluid near the critical point E. R. Zhdanov, I. A. Fakhretdinov

23	Computer simulation of nucleation in gas-supersaturated solutions E. R. Zhdanov, I. A. Fakhretdinov
24	The new calculated data on properties of metals liquid/vapor critical point A. S. Basin
25	Measurements of viscosity and density of quantitative n-alkane mixtures (C6-C60) H. G. Yucel, A. Uysal
26	Measurements of the temperature dependent viscosity and density of quantitative PAHs mixtures H. G. Yucel, A. Uysal
27	Changes of enthalpy and entropy of positional isomerization reactions of dibenzylbenzols in liquid phase V. V. Konovalov, A. A. Pimerzin
28	Temperature dependences of Pd-Si alloys both in liquid and solid states G. Sivkov, D. Jagodin, P. Popel, V. Sidorov
29	Examination of behavior of fresh concrete under pressure K. T. Yucel
30	Comparing fresh concrete workability using experimental studies and theoretical statements K. T. Yucel, C. Ocal, C. Ozel, H. H. Ince
31	Gas solubility in polylactic acid: The annealing effect N. S. Oliveira, C. M. B. Gonçalves, J. Dorgan, A. Ferreira, I. M. Marrucho
32	Volume effects, isentropic compressibility, and viscosity of 1-butanol + 2-methyl-2,4-pentanediol mixtures at the temperature range (293 – 313) K E. Zorębski, M. Gwiazda, A. Klimczyk
33	New data for the viscosity of molten lithium and sodium nitrates V. M. B. Nunes, M. J. V. Lourenço, F. J. V. Santos, C. A. Nieto de Castro
34	Calculation and comparison of interfacial tension for binary aqueous mixtures A. F. Chang, Y. P. Chen
35	Density and surface tension variation with temperature for the mixture n-nonane + 1-hexanol M. M. Piñeiro, J. García, B. E. De Cominges, J. Vijande, J. L. Valencia, J. L. Legido
36	Estimation of critical point parameters of liquid-vapor phase transition of molybdenum from results of shock-wave experiments A. N. Emelyanov, D. N. Nikolaev, V. Ya. Ternovoi
37	Effects of dynamic compressibility in a near-critical fluid: Comparison with a perfect gas E. Soboleva
38	Thermal diffusivity measurements in edible oils using transient thermal lens R. Carbajal Valdez, J. L. Jiménez Pérez, A. Cruz Orea
39	Thermal diffusivity measurements in fluids containing nanoparticles using transient thermal lens J. F. Sánchez Ramírez, J. L. Jiménez Pérez, R. Carbajal Valdez, A. Cruz Orea
40	Thermodynamic properties of liguid-vapour equilibrium and the energies of specific intermolecular interactions of components of vitamin‘s “E” synthesis A. A. Baev, A. K. Baev
41	Bubble point pressures for 1,1-difluoroethane with difluoromethane and pentafluoroethane at 243 K to 333 K by an acoustic absorption technique T. Takagi, K. Sawada, J. H. Jun, H. Urakawa, T. Tsuji
42	The study of Raman spectra lines width and shape of some monosubstituted benzene in solutions Sh. A. Abdurakhmanova, Sh. F. Faizullaev
43	Unsteady-state energy transfer in high-temperature gases T. N. Abramenko
44	Densite of ternary systems (diethylenglicoly + water + hydrazine) in dependence temperature and pressure M. M. Safarov, M. A. Zaripova, U. Karamatulloev, T. F. Fathulloev

45	Phase equilibria properties of binary and ternary systems containing isopropyl ether + isobutanol + benzene at 313.15 K R. M. Villamañán, M. C. Martín, C. R. Chamorro, M. A. Villamañán, J. J. Segovia
46	Thermodynamic properties investigation of liquid metal alloys with application of the effusion method new variant in the pressure range between Knudsen's and hydrodynamic efflux modes D. N. Kagan, G. A. Krechetova, I. I. Fomin, E. E. Shpilrain
47	Measurement of gas phase PVT properties for binary mixture of difluorethane (HFC152a) and pentafluorethane(HFC125) Z. Liu, J. Wu, Y. Junyong
48	Measurements of the vapor-liquid coexistence curve in the critical region for refrigerant mixture HFC152a/HFC125 J. Wu, Z. Liu
49	Viscosity and viscosity index for mixtures of PE lubricants at several pressures M. J. P. Comuñas, X. Canet, A. S. Pensado, L. Lugo, J. Fernández
50	Viscous behaviour of undercooled melts in system $(GeS_2)_x$ $(Sb_2S_3)_{1-x}$ P. Košťál, J. Shánělová, D Švadlák, J. Málek
51	Critical indices calculations with small parameters A. D. Alekhin
52	Order parameter of equilibrium solution under gravity near the critical consolute temperature A. D. Alekhin, L. A. Bulavin, Yu. L. Ostapchuk, E. G. Rudnikov
53	Renormgroup approach for determine of magnitude of fluctuations interior field A. D. Alekhin, E. G. Rudnikov
54	The heating effect in biocompatible magnetic fluid A. Skumiel, A. Jozefczak, M. Timko, P. Kopčanský, F. Herchl, M. Koneracká
55	Fluid inclusions record thermal and fluid evolution in sandstones reservoir, Shahejie Formation in the Dongying Depression of the Bohaiwan Basin, China Q. Li, S. Shao, T. Hao, S. SongLing
56	A practical method to calculate partial properties from equations of state R. Akasaka, T. Ito
57	Thermophysical properties characterization of polymers and liquids using the flash technique J. Blumm, A. Lindemann, J. Opfermann
58	Noncontact measurement technique for wide range of viscosity of μ1-order liquid sample K. Yabui, Y. Nagasaka
59	Theoretical bases and experimental results in thermophysical properties measurements by laminar flow methods S. V. Ponomarev, S. V. Mischenko, T. F. Irvine Jr.
60	Thermophysical properties of a quaternary refrigerant mixture: Dynamic light scattering measurements in comparison with a simple prediction method A. P. Fröba, C. Botero, A. Leipertz
61	Group contribution method for aqueous solutions of polar organics in a wide range of conditions J. Sedlbauer, V. Majer
62	Thermodynamical basis of a radio-frequency electromagnetic field impact on milticomponent petroleum fluids L. Kovaleva, A. Galimbekov
63	Modelling of the density profile and surface tension of pure liquid-vapour interface H. Lin, Y. Y. Duan

Wednesday 7th September

POSTER SESSION III - THEORY AND MODELLING, NOVEL EXPERIMENTAL TECHNIQUES AND DEVICES THERMOPHYSICS FOR ENGINEERING APPLICATIONS Wednesday 1:10 - 2:20 PM (available 9:40 AM - 6:00 PM)	
1	Thermal distribution in electrical arc welding of tungsten inert gas (TIG) process A. Boutaghane, A. Hammouda, M. Zergoug, Y. Benkedda, M. Bouafia, K. Bouhadef
2	Multi-front phase transitions during nonisothermal filtration R. F. Sharafutdinov, R. A.Valiullin, A. Sh. Ramazanov, A. A. Sadretdinov
3	Environmental balances of thermal superinsulations L. Swanstrom, H. Reiss, O. Yu. Troitsky
4	Equations of state for additive hard-disk fluid mixtures: A comparative analysis for extreme diameter ratios C. Barrio, J. R. Solana
5	Relating the equation of state of additive hard-sphere fluid mixtures to that of a monodisperse fluid C. Barrio, J. R. Solana
6	Dynamic viscosity of mixtures: the one-fluid approximation in Lennard-Jones fluids G. Galliéro, C. Boned, A. Baylaucq, F. Montel
7	Short-hot-wire technique for measuring thermal conductivity and thermal diffusivity of various materials H. Xie, H. Gu, X. Zhang, M. Fujii
8	Surface heat impedance in photothermal phenomena Yu. G. Gurevich, G. N. Logvinov, I. M. Lashkevich
9	An equation of state for thermodynamic properties of methanol D. Kume, N. Sakoda, M. Uematsu
10	The thermochemical properties of intermetallides in the Al-Ce system T. V. Kulikova, N. I. Ilynych, O. A. Gornov, V. A. Bykov, G. K. Moiseev, K. Ju. Shunjaev, V. E. Sidorov
11	A new simple method for solving inverse heat conduction problems J. Gembarovic, M. Löffler
12	A reference multiparameter viscosity equation for R152a in optimized functional form P. Marchi, G. Scalabrin, M. Grigiante
13	Specific heat measurements by a thermal relaxation method: Influence of convection and conduction H. Valiente, O. Delgado-Vasallo, J. A. I. Díaz Góngora, R. A. Muñoz Hernández, A. Calderón, E. Marin
14	Estimation of thermophysical parameters of a heat conduction problem using the proper orthogonal decomposition method J. Zmywaczyk, P. Koniorczyk
15	On error estimation of true temperature and emittance determinated via thermal radiation spectrum of body S. P. Rusin
16	Computational coefficients thermal diffusion gasous simple ethers M. M. Safarov, M. A. Zaripova, A. A. Naimov, S. A. Tagoev
17	On the surface pressure for nanocrystal M. N. Magomedov
18	On the prediction of properties of the binary covalent crystals M. N. Magomedov
19	On the prediction of properties of the FCC fullerites M. N. Magomedov
20	Effect of the heat-loss from the specimen surface on the measuring process of the pulse transient method M. Dieškova, Ľ. Kubičár

21	Determination of temperature field and an analysis of influence of certain factors on a temperature fields M. Diešková, P. Dieška, V. Boháč, Ľ. Kubičár
22	Modelling of effective thermal conductivity of highly porous systems R. Singh, H. S. Kasana
23	Potential of the average force, radial function of distribution and virial coefficients in geometric model of equation of state of real gas V. I. Nedostup, O. V. Nedostup
24	Isoperibol calorimeters: Some aspects of thermophysical basics of their use V. E. Ostrovskii
25	Photoacoustic measuring technique for the investigation of thermal properties of high Tc superconducting materials S. Sarkar, B. K. Sarkar
26	Simultaneous thermal analysis of a sample array using time resolved infrared thermography G. Harhausen, V. Drach, J. Fricke
27	Determination of the anisotropic thermal conductivity of carbon aerogel-fibre-compound by use of a non-contact thermographic technique V. Drach, M. Wiener, G. Reichenauer, H. P. Ebert, J. Fricke
28	The simultaneous estimation of multiple thermal parameters of living tissues using noninvasive method K. Yue, X. Zhang, F. Yu
29	Design of a portable emittance emittance measurement system for spacecraft thermal design and quality control H. Yamana, A. Ohnishi, Y. Nagasaka
30	Pyrometry of melt/crystal interface during growth of BGO single crystals V. B. Tsvetovsky, V. D. Golyshev, V. N. Senchenko
31	Experimental and software tools to forecast the temperature evolution of thermal protection for combustion chambers D. Demange, A. Bouvet, M. Bejet
32	The passing behaviors of vapor through cloth A. Narumi, K. Uchida
33	A new panel test facility for effective thermal conductivity measurements up to 1650°C G. Barth, U. Gross, R. Wulf
34	High-pressure gas sorption in polymers using a quartz crystal microbalance N. S. Oliveira, J. A. P. Coutinho, J. L. Daridon, J. Dorgan, A. Ferreira, I. M. Marrucho
35	A new apparatus for measuring thermal diffusivity and specific heat of solid at very high temperature B. Hay, S. Barré, J. R. Filtz, M. Jurion, D. Rochais, P. Sollet
36	Development of method and device for measurement of moisture diffusion coefficient in capillary-porous and disperse materials S. V. Ponomarev, S. G. Tolstykh
37	Photopyroelectric determination of thermal conductivity and effusivity of complex liquids S. Pittois, S. George, K. Denolf, J. Ravi, J. Thoen, C. Glorieux
38	Influence of radiation losses on thermal conductivity determination at low temperatures A. Rudajevová, D. Vasylyev, O. Musil, V. Lang
39	Measurement of mass diffusion coefficient by the Soret forced Rayleigh scattering method (Analysis of the optimum experimental setting for measurement of fullerene in solution and probing dye in polymer electrolyte membrane) Y. Yamamoto, Y. Nagasaka

40	Experimental investigation of the vapour-liquid equilibrium of binary and ternary mixtures containig dibutyl ether (DBE), cyclohexane and toluene at 313.15 K C. Alonso-Tristán, M. C. Martín, J. J. Segovia, C. R. Chamorro, E. A. Montero, M. A. Villamañán
41	Thermal diffusivity measurement of a composite material with orthogonal anisotropy using the flash method: Optimal experimental design analysis L. Vozár, J. Beňačka, I. Štubňa, V. Vozárová
42	New features of the glass transition revealed by the StepScan® DSC M. Liška, Z. Černošek, J. Holubová, M. Chromčíková, L. Vozár, E. Černošková
43	Thermoelastic photoacoustic effect in Vickers indented metals under external loading K. L. Muratikov, A. L. Glazov
44	Acoustic-optical investigations of longitudinal and transversal waves in liquids matters F. R. Akhmedzhanov
45	Thermodynamic study and system modeling of the Einstein refrigeration machine S. Mazouz, J. Ghazouani, A. Bellagi
46	Experimental investigation and theoretical model of a diffusion absorption machine J. Ghazouani, S. Mazouz, A. Bellagi
47	Physical properties of liquids and gases (database) Yu. K. Vinogradov, V. I. Lopatin
48	Thermal properties of thermal protection materials for aerospace vehicle H. S. Lee, G. W. Nam, K. J. Min
49	Phase diagrams for heterogeneous azeotropic systems J. E. Schmitz, R. J. Zemp, M. J. Mendes
50	A study of the flow through capillary-tube tunned up for the cooling circuit V. Vacek, V. Vinš
51	Optimum applicability level of exterior structural walls constructed by using engineering insulation materials: PONZA and EPS K. T. Yucel, C. Ozel
52	Effect of structural heat insulation on energy saving and air pollution preventions K. T. Yucel, C. Ozel, C. Ocal
53	Measuring system for monitoring of temperature, velocity and size of spraying particles in thermal plasma processes V. N. Senchenko, Yu. V. Vizilter
54	Microstructure and thermal diffusivity of ceramic powders G. Peña-Rodríguez, J. A. I. Diaz Góngora, R. A. Muñoz-Hernández, J. L. Fernández-Muñoz, E. Marin, A. Calderón
55	Photoacoustic analysis of blue corn pigments in nixtamalized flours A. Cortes Gomez, J. L. Jiménez Pérez, A. Cruz Orea, E. San Martin
56	Recent advances on TG-DSC accurate measurements C. M. Santos, M. J. V. Lourenço, F. J. V. Santos, C. A. Nieto de Castro
57	An application of the Peng-Robinson equation of state using UNIQUAC gE mixing rule to analyses of refrigeration cycles T. Yamaguchi, K. Kanemaru, S. Momoki, T. Shigechi, T. Yamada
58	Influence of water on the total heat transfer in ‘evacuated’ insulations U. Heinemann
59	Analysis of heat transfer coefficient measurements for building structures applying different measuring techniques S. Gendelis, A. Jakovičs
60	Optical and thermal radiation properties of dielectrics and semiconductors as applicable to contactless measurement of their temperature V. A. Petrov