

List of abstracts accepted for XVIII ISBC in Lund 1-4 June 2014

[www.biocalorimetry.org](http://www.biocalorimetry.org)

#	Authors	Title
1	M.-T. Weichler, S. Paufler, T. Rohwerder, H. Harms and T. Maskow	Calorimetric Process Control for Microbial Product Formation Using Toxic Feedstocks
2	M. Fredua-Agyeman, A. Basit, P. Stapleton, A. Beezer, S. Gaisford	A real-time study of defined mixed cultures of bacteria
3	Thomas Maskow, Frida Mariana Morais, Sven Paufler, Luis Rosa, Qian Yi Guang, Falk Harnisch, Hauke Harms	How reliable is isothermal microcalorimetry of growing cells in the wake of oxygen limiting conditions?
4	M. Jakubowska, M. Normant and J. Drzazgowski	The heat production of blue mussel <i>Mytilus edulis trossulus</i> - is there a synergistic effect of water acidification and oxygen deficiency?
5	L. Marszewska, M. Normant and R. Schubring	Energy value of Norway lobster <i>Nephrops norvegicus</i> (Linnaeus, 1758) from the North Sea
6	M. Normant, K. Kurpisz, M. Jakubowska and J. Drzazgowski	Oxygen-related behaviour and heat output in the the Baltic clam <i>Macoma balthica</i>
7	J. Lerchner, T. Hartmann, A. Wolf, J. Schemberg, A. Grodrian and F. Mertens	Chip calorimetry of aggregated biological samples in segmented flow
8	T. Hartmann, A. Wolf, F. Mertens and J. Lerchner	Antibacterial activity of commercial nAg and nTiO <sub>2</sub> against beads-grown <i>P. putida</i> biofilms – a chip-calorimetric study
9	A. Wolf, T. Hartmann, J. Schemberg, A. Grodrian and J. Lerchner	Segmented-flow technology enhances chip calorimetry
10	N. Barros, C. Siewert, V. Piñeiro, A. Wolf, F. Mertens and J. Lerchner	Sensitivity of chip calorimetry to study the degradation of the soil organic matter
11	Jihye Kim, Jonghyun Kim, Joonyoung Koh, and Wonhee Lee	Parylene microfluidic calorimeter integrated with vanadium oxide thermistor

12	S. Winzen, S. Schoettler, C. Rosenauer, K. Landfester and K. Mohr	Protein Adsorption on Nanocapsules: Demonstrating the Differences between the Hard and Soft Corona
13	T. Bölscher, L. Wadsö, G. Börjesson and A.M. Herrmann	Microbial energetics of soils exposed to different temperatures and land uses
14	Katarzyna Dymek, Petr Dejmek, Lars Wadsö and Federico Gómez	Enhanced metabolic activity of spinach baby leaves as a consequence of pulsed electric field treatment (PEF) and vacuum impregnation (VI)
15	N. Barros, J.A. Rodríguez, J. Proupín, M. Villanueva, V. Piñeiro, L. D. Hansen, M. T. Dell'Abate	Factors influencing the calculation and evolution of calorespirometric ratios in soils determined by calorimetry
16	O. Braissant, D. Wirz, P. Grüner, A. Bachmann and G. Bonkat	Determining the antimicrobial properties of coatings and porous biomaterials by taking advantage of isothermal microcalorimetry
17	O. Braissant, L. Wernli, D. Wirz, A. Bachmann and G. Bonkat	Autophagy: a possible survival strategy for <i>Candida spp.</i>
18	O. Braissant, A. Egli, D. Wirz, R. Frei, A. Widmer, A. Bachmann and G. Bonkat	Combination of isothermal microcalorimetry and mass-spectrometry for rapid drug susceptibility testing in suspected urosepsis
19	S. Paufler, H. Sträuber, H. Harms, and T. Maskow	Difficulties in interpretation of high resolution anaerobic biocalorimetric data due to non-perfect reference analysis
20	C. Paul, A. Johansson, P. Rådström, K.M.Persson and M. Jansson	Isothermal microcalorimetry with reporter bacteria for assessment of nutrient content in source and processed drinking water
21	Anke M. Herrmann, Kristin Boye, Tobias Bölscher, Naoise Nunan, Elsa Coucheney, Michael Schaefer and Scott Fendorf	Revisiting the terrestrial carbon cycle: New insights into microbial metabolism
22	N. Kabanova, A. Popov and R. Vilu	Application of microcalorimetric method for the study of diffusion processes in gelatin matrices
23	Y. Cardona, A. Torres, W. Hoffmann and I. Lamprecht	Thermoanalytical analysis of wood used for nest sites of the carpenter bee <i>Xylocopa lachnea</i>
24	F. Pinzón, A. Torres, W. Hoffmann and I. Lamprecht	Combustion calorimetric investigations of nest paper in wasps from Colombia

25	A. Zubrienė, V. Morkūnaitė, L. Baranauskienė, J. Gylytė, J. Kazokaitė, A. Kasiliauskaitė, A. Smirnov, L. Manakova, E. Čapkauskaitė, V. Dudutienė, V. Jogaitė, V. Michailovienė, J. Matulienė, S. Gražulis and D. Matulis	Thermodynamics of anticancer fluorinated lead binding to target carbonic anhydrases by isothermal titration calorimetry and thermal shift assay
26	R. Vilu, N. Kabanova, I. Stulova, A. Seiman and K. Adamberg	Isothermal microcalorimetry and development of systems biology of bacteria growing in solid state and opaque liquid media
27	S. Adamberg, K. Tomson, H. Vija, M. Puurand, N. Kabanova, R. Vilu and K. Adamberg	Metabolism of prebiotic fructans by colon microbiota studied by isothermal microcalorimetry
28	Yina Salmanca and Anke M. Herrmann	Simultaneous measurements of microbial energetics, methane and CO <sub>2</sub> in soils with varying water contents
29	V. Kocherbitov	Application of sorption calorimetry for studies of hydration of biomolecules
30	C. Albèr, J. Engblom and V. Kocherbitov	Hydration of Sodium Hyaluronate Studied by Sorption Calorimetry and Differential Scanning Calorimetry
31	Heiko K. Cammenga and K. Gehrich	The gonadal fat deposits of the African Elephant - A latent heat storage?
32	L. Wadsö	The ice calorimeter of Lavoisier and Laplace
33	L. Castellanos, A. Torres, W. Hoffmann and I. Lamprecht	FTIR and thermal analysis of nest paper in nine species of Polistinae wasps from Colombia
34	E. Dejmková, J. Mrázková, L. Malinovská, L. Adamová, G. Demo, M. Pokorná, M. Wimmerová	Studies of mutant lectin binding behaviour by microcalorimetry
35	M. Suurkuusk	New and modernized isothermal calorimeters open new possibilities
36	L. Peña–Caraballo, P. Torres–Sanchez, A. Cárdenas–Figueroa, and A. Torres	Host Preference and Performance of Lichenivorous <i>Astylus</i> sp. adults (Coleoptera: Meliridae) in Relation to Lichen energy contents and heat production rates

37	K. Honarmand Ebrahimi, P.L. Hagedoorn, W.R. Hagen	Isothermal titration calorimetry for biocatalysis: Measuring metal ion binding to proteins and catalytic activity of enzymes
39	L. Wadsö	A new calorimetric vessel for isothermal calorimeters
40	L. Wadsö	Lactic acid fermentation studied by isothermal calorimetry
41	Ö. Topel	Thermodynamics of interaction between L-serine and TiO <sub>2</sub> nanoparticle
42	V. Panarese, P. Rocculi, L. Wadsö, A.G. Rasmusson and F. Gómez Galindo	Modulating metabolic activity by controlled vacuum impregnation of spinach leaves
43	C. Ortmann	Investigation of contaminated soils
44	U. Hess, S. Paufler, T. Maskow, H. Nilsson	High Sensitive Reaction Calorimetry for Anaerobic Biotechnology
45	L. D. Hansen, G. L. W. Hart, M. Transtrum and C. W. Hansen	Completing the temperature function in metabolic theories of ecology
46	L. G. Neven, N. Lehrman and L. D. Hansen	Effects of temperature and modified atmospheres on diapausing 5th instar codling moth metabolism
47	A. Nowacka, D. Q Pham, S. Björklund, F. Costa-Balogh, S. Douzan, H. Wennerström, D. Topgaard, L. Wadsö, E. Sparr	How small polar molecules protect membrane systems against osmotic stress
48	P. Junghans, A.-H. Tauson, A. Chwalibog	Indirect calorimetry and N balance measurements may be affected by endogenously produced nitrogen
49	J. Röttgers, J. Koch, M. Wolf, D. Singer	Heat Flow Measurement in Human Preterm Neonates: Towards a “Calorimetric” Incubator
50	A. Feldmann, P. Schmidtke, D. Singer	Microcalorimetry and Microrespirometry of Human Placental Samples: A Feasibility Study

51	I. Wadsö	Will isothermal microcalorimetry ever become a routine method for estimation of 'bio-activity'?
52	K. Bhadra	Isoquinoline alkaloids and their binding with DNA: Calorimetry and thermal analysis applications.
53	J. M. del Río and J.-P. E. Grolier	Application of the Gibbs-Duhem equation to the study of the relation between forward and reverse titration in ITC
54	I. Rakipov, M. Varfolomeev, B. Solomonov	Calorimetric study of intermolecular interactions of model biomolecules in aqueous-organic solvents: the ratio "structure-property"
55	Q. D. Pham and E. Sparr	The effect of terpene on phospholipid membranes
56	S. Tappi, U. Tylewicz, A. Berardinelli, S. Romani, L. Ragni, M. Dalla Rosa, P. Rocculi	Effect of cold plasma on fresh-cut fruit tissues metabolism
57	Y. Montanholi, K. Colliver, J. Doelman, A. Fontoura, S. Lam, S. Miller	Bovine feed efficiency evaluated through indirect calorimetry and infrared imaging
58	J-H. Ferrasse and A. Soric	Preliminary modeling of a continuous calorimetric set-up for aerobic measurement
59	Gillian Lewis and Wayne Bowen	The application of chipCAL, a flow microcalorimeter (FMC) for high throughput analysis of enzyme activity
60	J. Lerchner, T. Förster, F. Mertens and K. Lemke	Chip calorimetry on spheroids: Study of proliferation and viability
61	P. Vikegard, N. Barros and V. Piñeiro	Calculation of the Activation Energy to describe sensitivity of soil organic matter to temperature: Application of TAM III
62	S. Tappi, U. Tylewicz, S. Romani, M. Dalla Rosa and P. Rocculi	Effect of vacuum impregnation with calcium salts on quality and metabolic aspects of fresh-cut melon
63	S. Tappi, U. Tylewicz, E. Cocci, S. Romani, M. Dalla Rosa and P. Rocculi	Influence of ripening stage on metabolic heat production of fresh-cut kiwifruit and melon

64	U. v. Stockar	Energy dissipation and performance in microbes, animals, and distillation columns
----	---------------	---