

## Preface

Piotr Staszczuk · Dariusz Sternik

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This Special Chapter of the *Journal of Thermal Analysis and Calorimetry* contains a selection of papers presented at the *32nd International Conference on Vacuum Microbalance and Thermoanalytical Techniques* held at Kazimierz Dolny, Poland, during 21–24 June, 2009.

International VMT conferences cover all aspects of mass and force determination under vacuum and controlled atmosphere and related applications in thermogravimetry, measurement of surface properties and reactions at solid surfaces. Since the earliest conferences in the United States, there were meetings connected with instrument exhibitions in USA, The Netherlands, Germany, United Kingdom, Belgium, France, Morocco, Tunisia, Poland, Ukraine, Turkey and now again in Poland. The detailed list of the conferences is given in Table 1. The *Proceedings* of those conferences were published either in series of books and/or as special issues/chapters of journals, since several years in the *Journal of Thermal Analysis and Calorimetry*. The inter-disciplinary nature of advances leads to the broadening of techniques applied in scientific investigations. Thus, the papers in this Special Chapter cover vacuum microbalance and thermoanalytical techniques as well as related ones.

The 32nd Conference was organised, independent of many problems, by the workers of Department of Physicochemistry of Solid Surfaces, Faculty of Chemistry, Maria Curie-Skłodowska University, Lublin, Poland. The above *chapter* was prepared in cooperation with mgr. Magdalena Rycyk and Dr. Mirosław Kwietniewski, workers of Chair of Bionanomaterials, Institute of Biotechnology, The John Paul II Catholic University of Lublin, Poland. We acknowledge our sponsors: International Union of Pure and Applied Chemistry, Research Triangle Park, NC, USA and Netzsch Gerätebau GmbH, Selb, Germany.

Piotr Staszczuk and Dariusz Sternik



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P. Staszczuk (✉)  
Mathematic and Natural Sciences Faculty,  
Chair of Bionanomaterials, Institute of Biotechnology,  
The John Paul II Catholic University of Lublin,  
Lublin, Poland  
e-mail: pstaszczuk@kul.lublin.pl

D. Sternik  
Chemistry Faculty, Maria Curie-Skłodowska University,  
Lublin, Poland

**Table 1** Conferences on vacuum microbalance techniques

#	Year	Place	Organiser	Proceedings
1	1960	Fort Monmouth, NJ, USA	M.J. Katz	M.J. Katz (ed.), VMT, Vol. 1, 1961
2	1961	Washington, DC, USA	R.F. Walker	R.F. Walker (ed.), VMT, Vol. 2, 1962
3	1962	Los Angeles, CA, USA	K.H. Behrndt	K.H. Behrndt (ed.), VMT, Vol. 3, 1963
4	1964	Pittsburgh, PA, USA	P.M. Waters	P.M. Waters (ed.), VMT, Vol. 4, 1965
5	1965	Princeton, NJ, USA	K.H. Behrndt	K.H. Behrndt (ed.), VMT, Vol. 5, 1966
6	1966	Newport Beach, CA, USA	A.W. Czanderna	A.W. Czanderna (ed.), VMT, Vol. 6, 1967
7	1968	Eindhoven, Netherlands	C.H. Massen, J.A. Poullis	C.H. Massen, H. van Beckum (eds.), VMT, Vol. 7, 1970
8	1969	Wakefield, MA, USA	A.W. Czanderna	A.W. Czanderna (ed.), VMT, Vol. 8, Plenum, New York 1971
9	1970	Berlin, Germany	Th. Gast, E. Robens	Th. Gast, E. Robens (eds.), PVMT, Vol. 1, 1972
10	1972	Uxbridge, U.K.	S.C. Bevan, S.J. Gregg, N.D. Parkyns	S.C. Bevan, S.J. Gregg, N.D. Parkyns (eds.), PVMT, 1973
11	1973	New York, NY, USA	A.W. Czanderna	A.W. Czanderna (ed.), JVST 11 (1974) 396–439
12	1974	Lyon, France	C. Eyraud, M. Escoubes	C. Eyraud, M. Escoubes (eds.), PVMT, Vol. 3, 1975
13	1975	Philadelphia, PA, USA	W. Kollen	W. Kollen (ed.), JVST 13 (1976) 541–560
14	1976	Salford, U.K.	D. Dollimore	D. Dollimore (ed.), TA 24 (1978) 204–431
15	1977	Boston, MA, USA	P. Ficalora	P. Ficalora (ed.), JVST 15 (1978) 745–821
16	1978	Kiel, Germany	O.T. Sørensen, H.-J. Seifert	O.T. Sørensen (ed.), TA 29 (1979) 198–360
17	1979	New York, NY, USA	A.W. Czanderna	A.W. Czanderna (ed.), JVST 17 (1980) 90–124
18	1981	Antwerpen, Belgium	R. de Batist, A. van den Bosch	E. Robens (ed.), TA 51 (1981) 1–95
19	1982	Baltimore, MD, USA	R. Vasovsky	R. Vasovsky (ed.), JVST 20 (1983)
20	1983	Plymouth, U.K.	S.A.A. Jayaweera	S.A.A. Jayaweera (ed.), TA (1984)
21	1985	Dijon, France	N. Gérard	N. Gerard, S.A.A. Jayaweera (eds.), TA 103 (1986)
22	1987	Rabat, Morocco	L. Belkbir	L. Belkbir, S.A.A. Jayaweera (eds.), TA 152 (1989)
23	1989	Middlesbrough, U.K.	S.A.A. Jayaweera	W. Hemminger, S.A.A. Jayaweera, E. Robens (eds.), TA 1993/94
24	1991	Hammamet, Tunisia	M. Jemal	W. Hemminger, M. Jemal, E. Robens, (eds.), TA 1993/94
25	1993	Siegen, Germany	J.U. Keller, E. Robens	J.U. Keller, E. Robens (eds.), VMT'94
26	1995	Marrakech, Morocco	M. Ben Chanaa	M'bark Ben Chanaa (ed.), VMT'95
27	1997	Lublin, Poland	P. Staszczuk	P. Staszczuk (ed.), JTAC 1999
28	1999	Kyiv, Ukraine	V.A. Tertykh	V.A. Tertykh (ed.), JTAC
29	2001	Middlesbrough, U.K.	S.A.A. Jayaweera	S.A.A. Jayaweera, E. Robens (eds.), JTAC 71 (2003)
	2003	(cancelled)		E. Robens, S.A.A. Jayaweera, (eds.), JTAC 76 (2004)
30	2005	Wroclaw, Poland	G.W. Chadzyński	G.W. Chadzyński, E. Robens, S.A.A. Jayaweera, (eds.), JTAC 86 (2006) 1
31	2007	Izmir, Turkey	D. Balköse	D. Balköse, E. Robens, S.A.A. Jayaweera, (eds.), JTAC 94 (2008) 3
32	2009	Kazimierz, Poland	P. Staszczuk, D. Sternik	P. Staszczuk, D. Sternik (eds), JTAC (2010)
33	2011	Zamość, Poland	Z. Rzączyńska	

*JTAC* Journal of Thermal Analysis and Calorimetry, Kluwer Academic Publishers, Dordrecht & Akadémiai Kiadó, Budapest, *JVST* Journal of Vacuum Science and Technology, American Institute of Physics, New York, *PVMT* Progress in Vacuum Microbalance Techniques, Vol. 1–3, Heyden, London 1972–1975, *TA* Thermochemica Acta, Elsevier, Amsterdam. ISSN 0040-6031, *VMT* Vacuum Microbalance Techniques, Vol. 1–8, Plenum Press, New York 1961–1971. SBN 306-38408-6, *VMT'94* J.U. Keller, E. Robens (eds.) Vacuum Microbalance Techniques '94, Multiscience Publishing, Brentwood 1994, *VMT'95* M'bark Ben Chanaa (ed.) Proceedings of the XXVth International Conference on Vacuum Microbalance Techniques. Faculté des Sciences Semlalia, Université Cadi Ayyad, Marrakech 1995

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