

Preface

The 28th International Vacuum Microbalance Techniques Conference (IVMTC28) was held in Kyiv, capital of Ukraine, June 23–25, 1999. This Conference was organized by the Institute of Surface Chemistry of National Academy of Sciences of Ukraine. The joint sponsors were Ukrainian Chemical Society and National University of 'Kyiv-Mohyla Academy', together with Science and Technology Center in Ukraine; Rubotherm GmbH, Germany; PPG Industries, USA; Ecology Protection Company 'Kreoma-Pharm', Ukraine; Corporation 'Orisil', Ukraine; C.I. Electronics Limited, United Kingdom; Sartorius AG, Germany.

25 lectures, 69 posters and 4 exhibitors of scientific equipment were presented by scientists from 15 countries. The opening ceremony was attended by the Rector of National University of 'Kyiv-Mohyla Academy', S. Ivanyuk, the Chairman of the International Steering Committee, E. Robens, and the Conference Chairman, V. A. Tertykh.

In compliance of the tradition the topics of the Conference included new trends in the design of balances, coupling the microbalance techniques with other analytical methods, application of microweighing methods to study adsorption and chemisorption equilibria, measurement of adsorption and desorption kinetics. At the IVMTC28 considerable attention was devoted to the application of microweighing and thermal analysis methods in studies of fundamental characteristics of adsorbents, catalysts, polymers and other solids. The participants presented new and pioneering methods, results and practical applications of microbalance techniques and special thermal analysis methods. The results of the studies of important materials (adsorbents, catalysts, zeolites, minerals and other solids) by means of various apparatus and their theoretical interpretation were presented. During the plenary and poster sessions there were many discussions and exchanges of opinions. The abstracts of the presentations were collected in the Conference Abstracts Book. The meetings took place in the Congregation Hall of the University 'Kyiv-Mohyla Academy' in excellent, friendly atmosphere. Excursions enabled the participants to see the historic places of Kyiv, 'the Mother of All Russian Cities', one of the largest and oldest cities of Europe.

The Conference was summarized by the Chairman of the International Steering Committee Erich Robens. The 29th IVMTC will take place in Middlesborough (United Kingdom) in 2001 and the 30th IVMTC will be held in Casablanca (Morocco) in 2003. E. Robens was confirmed as Chairman of the International Steering Committee.

The participants were invited to submit manuscripts for publication in a special issue of the Journal of Thermal Analysis and Calorimetry devoted to the 28th IVMT Conference. The received papers were reviewed by a double team of referees: one was chosen by the Journal, and the other by the Guest Editors. The process has now been completed with

the publication of the present issue containing the selected papers. We hope that they will be of interest to the readers. We thank all the authors for providing the manuscripts. Finally, we wish to express our kind gratitude to the Editorial Staff and especially Prof. Judit Simon, Editor-in-Chief, who has made possible the appearance of this issue with highest standard of quality.

Valentin A. Tertykh
Valeriy A. Pokrovskiy
Guest Editors

Full manuscripts arrived January 30, 2000

Acknowledgements

The Guest Editors and the Editor-in-Chief are thankful to the following scientists whose critical review of manuscripts has significantly contributed to the high scientific level of this Conference issue

L. Bogutska, Kyiv, Ukraine
M. T. Bryk, Kyiv, Ukraine
V. L. Budarin, Kyiv, Ukraine
G. W. Chadzynski, Wroclaw, Poland
F. Dreisbach, Bochum, Germany
J. Germanus, Leipzig, Germany
Yu. G. Goltsov, Kyiv, Ukraine
A. Herbst, Leipzig, Germany
V. G. Il'in, Kyiv, Ukraine
S. A. A. Jayaweera, Middlesborough, UK
N. T. Kartel, Kyiv, Ukraine
N. Kozak, Kyiv, Ukraine
R. Leboda, Lublin, Poland
V. V. Lobanov, Kyiv, Ukraine
A. A. Malygin, St.-Petersburg, Russia
A. Mangel, Salisbury, United Kingdom
P. A. Manorik, Kyiv, Ukraine
L. Matzui, Kyiv, Ukraine
R. Nasuto, Lublin, Poland
K. Patrylak, Kyiv, Ukraine
V. P. Privalko, Kyiv, Ukraine
A. M. Puziy, Kyiv, Ukraine
H. Rahier, Brussel, Belgium
E. Robens, Mainz, Germany
W. Rudzinski, Lublin, Poland
Yu. N. Shevchenko, Kyiv, Ukraine
N. Smirnova, Kyiv, Ukraine
P. Staszczuk, Lublin, Poland
M. Sychev, Kyiv, Ukraine
Yu. I. Tarasevich, Kyiv, Ukraine
G. M. Tel'biz, Kyiv, Ukraine
L. Vovchenko, Kyiv, Ukraine
V. V. Yanishpolskii, Kyiv, Ukraine
V. N. Zaitsev, Kyiv, Ukraine
V. Zazhigalov, Kyiv, Ukraine