

# XXI International Conference on Chemical Thermodynamics in Russia (RCCT-2017

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Guest Editor



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This compilation is based on the peer-reviewed and selected papers presented at XXI International Conference on Chemical Thermodynamics in Russia.

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## **Preface**

Vladimir Logvinenko<sup>1,2</sup>

I am very pleased to introduce this Special Chapter of the Journal of Thermal Analysis and Calorimetry dedicated to fundamental and applied areas of chemical thermodynamics, including multidisciplinary and related ones. The series of papers contains some of the lectures and communications presented at the XXI International Conference on Chemical Thermodynamics in Russia (RCCT-2017). The RCCT-2017 took place in the capital of "the Siberian science"—Akademgorodok (Novosibirsk) from June 26 to 30, 2017. The main organizer was Nikolaev Institute of Inorganic Chemistry SB RAS.

The conferences on chemical thermodynamics are among the largest conferences held in Russia since 1961. The RCCTs take place every 2 years in various large Russian scientific centers such as Moscow, St. Petersburg, Nizhny Novgorod, Novosibirsk, Kazan, Samara. Every RCCT was unique and significant event both for Russian and for world thermodynamic community as a whole. On the whole, more than 300 people from 21 countries and four continents took part in the RCCT-2017. The RCCT-2017 participants came not only from different parts of Russia (Moscow, St. Petersburg, Ivanovo, Novosibirsk, Samara, Yekaterinburg, Tver, Sevastopol, Chelyabinsk, Tomsk, Omsk, Krasnoyarsk, Perm, Kazan, Tyumen, Biysk), but from the USA, the countries of Europe (Germany, Great Britain, France, Switzerland, Sweden, Finland, Italy, Romania, Hungary), Southeast Asia (China, Taiwan, Thailand), Africa (the Republic of South Africa, Algeria), and the CIS countries (Ukraine, Kazakhstan,

Azerbaijan, Armenia, Belarus). The RCCT-2017 included 242 presentations in 30 technical sessions devoted to diverse application of chemical thermodynamics for individual substances, solutions and heterogeneous systems, phase transitions, surface and self-organization phenomena in fluid systems, as well as to general problems and applied aspects of chemical thermodynamics. The sponsorship was provided by the companies METTLER TOLEDO, SETARAM Instrumentation and NETZSCH, by Russian Foundation for Basic Research (RFBR), and Federal Agency for Scientific Organizations (FASO Russia), by Technopark of Novosibirsk Akademgorodok, and Novosibirsk State University.

I would like to express my sincerest gratitude to all authors for the submission of high-quality papers for this special chapter and for their timely responses to the reviewer recommendations. Every paper has been reviewed at least by two independent reviewers. I am very grateful to all of them for critical and valuable reviews and as a special thanks to their great work all of the reviewers.

I would like to acknowledge Imre Miklós Szilágyi (Editor-in-Chief), Sophie Korda (Head of Editorial Office), and all JTAC staff for providing support to complete this Special Chapter. Finally, I am also indebted to both the Organizing and Scientific Committees of RCCT-2017 for their time and the devotion to hard work.

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## **Images of RCCT-2017**





















