

EDITORIAL

*Issue dedicated to the 10th International Scientific Conference "The Vital Nature Sign 2016"
Leidinys skirtas 10-ajai Tarptautinei mokslinei konferencijai "The Vital Nature Signs 2016"*



The Vital Nature Sign 2016

Prof., Habil. Dr. **Audrius Sigitas Maruška**

Chairman of conference series "The Vital Nature Sign"

Vytautas Magnus University

Vileikos st. 8, LT-40444 Kaunas Lithuania

On May 19–20, 2016, the 10th International Scientific Conference "The Vital Nature Sign 2016" was held in the Lithuanian Academy of Sciences (Vilnius, Lithuania). The conference was of a very broad multidisciplinary scope. Scientists and researchers from biomedical (medical, pharmaceutical, veterinary, etc.), physical and technological fields of sciences participated in the event. The conference was organised by Vytautas Magnus University, the Nordic Separation Science Society (NoSSS) and the Lithuanian Academy of Sciences.

The purpose of the conference was to disseminate the most recent scientific knowledge on life science objects: human, animal and plant biological, chemical and physical properties and their research methodologies. A welcome speech in this anniversary conference was delivered by Vice-Minister of the Ministry of Health Dr. Jadvyga Zinkevičiūtė and President of Lithuanian Association of Pharmacists Prof. Eduardas Tarasevičius. A review of the conferences in this series was presented by organiser of previous conferences Dr. Reda Kubiliūtė, who was at that time a PhD student in my research group and whom I cordially encouraged to initiate the scientific society of students at the Faculty of Natural Sciences of Vytautas Magnus University and to organise on a regular basis annual conferences of students at the Faculty as a common means for education, scientific discussion, communication and exchange of ideas.

The present series of conferences evolved from the student conference "Where nature meets science", organised in 2006. The conference venue since that time was Kaunas. The conference was dedicated to Lithuanian investigators; however, foreign researchers have shown their interest as well. Therefore, since 2007, it was organised as an international conference "The Vital Nature Sign". In 2007, 39 papers by researchers from 12 Lithuanian scientific institutions and 3 from foreign institutions were presented. In 2008, this conference expanded to 45 presentations from 19 Lithuanian and 8 foreign institutions. In 2009, the conference highlighted fundamental and experimental research aspects, covering a range of natural sciences, substantially broadening the horizons of participants and offering collaboration opportunities. A separate section was devoted to the problems of separation sciences. The conference was attended by 65 participants from 18 Lithuanian and 9 foreign scientific institutions. In 2010, the conference sections included pharmaceutical and chemical technology, biotechnology, bio-assay, biochemistry, energy and environmental science topics. In 2011, 152 participants registered for the conference from 17 Lithuanian and 12 foreign scientific institutions. The conference invited acknowledged foreign scientists who gave plenary and key-note lectures and actively participated in discussions. Seven foreign guests registered for the conference in 2012 and, in total, there were 62 oral

and 53 poster reports. The participants were provided with an opportunity to discuss their research problems with experts from various research fields and different institutions, make new contacts or strengthen old ones, and find partners for their further investigations not only in Lithuania but also in foreign countries. Each year, an increasing number of researchers from foreign research institutions and various regions has promoted the conference internationally. In 2007, the conference received attention of Swedish, Polish and Spanish speakers. In 2008, researchers from Germany, Sweden, France, Austria, Poland and Finland shared their experience in the scientific conference. The conferences in 2009 and 2010 integrated a section on separation sciences, which was presented at a high international level: reports of researchers from Poland, Italy, Norway, Latvia, the United States, Estonia, Germany, Austria and Turkey were presented in this section. In 2011 and 2012, the conference was financially supported by the Lithuanian Research Council. This provided a possibility to invite renowned scholars from 8 foreign scientific institutions: Institute of Chemical Methodology (CNR, Italy), Bayreuth University (Germany), Pardubice University (Czech Republic), Lund University (Sweden), University of Marburg (Germany), University of Helsinki (Finland), Biomedical Centre of Uppsala University and Lund University (Sweden). The scholars not only actively discussed and consulted but also chaired individual sections.

Participants from various Lithuanian and international scientific institutions took part in the conference last year. In addition, it reflected an important cooperation between science and business, science and politics to as well as public welfare and dissemination of new scientific knowledge. The invited speakers were encouraged to review in their presentations the most up-to-date achievements concerning their particular research fields. The session speakers included Prof. PhD Pierre Duez, Prof. Dr. Murat Kaya, Prof. Dr. Arvydas Kanopka, Prof. Dr. Rimantas Venskutonis, Dr. Akvilė Viršilė, Prof. Dr. Vitalis Briedis, Dr. Vidmantas Bendokas, Prof. Dr. Elena Bartkienė and others. In total, 115 participants from Lithuania and 6 foreign countries – Belarus, Belgium, France, Kazakhstan, Poland and Turkey – were actively engaged in the conference. They presented 17 oral and 119 poster presentations.

This conference also offered training of specialists from various fields of science. On May 18, 2016, a one-day intensive course with a hands-on-seminar on capillary electrophoresis uses for qualitative and quantitative analysis of various natural samples, supervised by Prof. Habil. Dr. Audrius Maruška, was organised at the Instrumental Analysis Open Access Centre of Vytautas Magnus University in Kaunas. It should be noted that the main feature distinguishing this conference from others is that “The Vital Nature Sign” is not limited to one scientific area, it is multidisciplinary and interdisciplinary. It demonstrates the importance of multidisciplinary and interdisciplinarity for modern society. Interdisciplinarity is an efficient tool for future science and education of young researchers and scholars.

I wish to thank the sponsors for their support of the event: UAB Apiproduktai, UAB Armgate, UAB Analytical Solutions, UAB Festo, UAB Labochema, UAB ThermoFisher Scientific and many others, and especially the local organising team Prof. O. Ragažinskienė, Dr. T. Dreivinskas, K. Bimbiraitė-Survilienė, Dr. M. Stankevičius, J. Mikašauskaitė, Dr. V. Bartkuvienė, Assoc. Prof. Dr. V. Kaškonienė, Assoc. Prof. Dr. N. Tiso, Dr. R. Mickienė, G. Naujokaitytė, A. Katilevičiūtė, T. Jakevičius, L. Juškaitė, D. Dilytė, E. Šaučiūnas, E. Gladkauskas and G. Dūda.

Conference proceedings and abstracts are published in English. In 2009, the conference proceedings obtained an ISBN. Since 2011, information has been placed on a separate “The Vital Nature Sign” web page on the internet address <http://vns.microsep.org>. Participants are offered to publish their presentations in different scientific journals, namely “Chemija”, “Fizika”, “Biologija”, “Toxicological & Environmental Chemistry”, “Environmental Research, Engineering and Management”, etc. In the present special issue of “Environmental Research, Engineering and Management”, which is devoted to the “The Vital Nature Sign 2016” conference, selected papers from those presented at the conference are published. The conference volume of the Journal is dominated by the articles on environment quality research. The articles deal with health issues, potentially polluting facilities – municipal waste landfills and factories, assessment of an environmental impact using biological and chemical research methods, investigation of bioremediation possibilities using plants and mi-

croorganisms, and influence of different environmental factors on plant research.

The increasing numbers of participating Lithuanian and foreign researchers show that this conference is necessary and unique due to its multidisciplinary and interdisciplinary. Currently, it covers physical, biomedical and technological sciences, research of natural prod-

ucts (food, phytoproducts, etc.), pharmaceutical and chemical technology, biotechnology, biochemistry, bio-analytical investigations, energy and the environment, separation sciences, biophysics topics and even social aspects of science. Invited and young researchers present their research reports as oral and poster presentations in fundamental and applied research sections.