

Editorial

This year the tenth volume of *Chemistry of Metals and Alloys* is published. Since the first issue was launched in March 2008, almost 300 scientific contributions have been published, covering recent developments in fundamental and applied research in the fields of phase diagrams, synthesis, crystal structures, physical properties, *etc.* of intermetallic and related compounds.

The geography of the authors and their affiliations is continuously expanding. Up to now, the authors from over 30 countries have presented results of their research in *Chemistry of Metals and Alloys*, including Ukraine, Algeria, Austria, Bangladesh, Belarus, Belgium, Bulgaria, Canada, China, Czech Republic, Egypt, France, Germany, India, Iran, Italy, Japan, Latvia, Nepal, Nigeria, Norway, Poland, Portugal, Russia, Saudi Arabia, Slovakia, Slovenia, Sweden, Switzerland, Tunisia, United Kingdom, and USA. A considerable part of the published papers are prepared in collaboration between various institutes, proving that modern science does not know borders and high-quality results often require joint efforts.

We can also assume a broad geographic distribution of the readers of *Chemistry of Metals and Alloys* and of those who use data published here in their research: around 450 citations of articles from *Chemistry of Metals and Alloys*, are listed in Web of Science.

During its years of existence, the journal has covered some of the major scientific forums on chemistry held in Lviv. The proceedings of the 9th (2005), 10th (2007), 11th (2010), 12th (2013), and 13th (2016) editions of the International Conference on Crystal Chemistry of Intermetallic Compounds, the 17th Ukrainian Conference on Inorganic Chemistry (2008), the 16th International Seminar on Physics and Chemistry of Solids (2010), and the 14th Scientific Conference “Lviv Chemical Readings” (2013) were published in *Chemistry of Metals and Alloys*. It is always a pleasure to meet our authors in person!

Among the topics covered by *Chemistry of Metals and Alloys* the most popular is crystal structure determination. Almost 50% of the published reports deal with crystal structures of novel compounds. A dozen of new structure types of intermetallic and inorganic compounds were revealed in *Chemistry of Metals and Alloys*, as well as a number of novel metal-organic structures. The number of papers dealing with fine microstructure parameters is increasing. Besides crystalline phases, the objects of investigation include also amorphous alloys, thin films, and composites. Each fifth paper reports and analyses physical properties of new phases, mainly transport, magnetic, and mechanical properties. The experimental results are often supported by electronic structure calculations and chemical bonding analysis. A smaller number of articles describe chemical properties, such as electrochemical, catalytic properties, *etc.* Over 20% of the published manuscripts present phase diagram investigations, most of them experimental, but in certain cases supported by thermodynamic calculations. The journal also provides a ground for sharing recent achievements in data processing. Certain papers on the advances in crystallographic software, databases, or new approaches in data treatment, published here, may be a useful tool for scientific research.

For Ukrainian authors, it is important to know that *Chemistry of Metals and Alloys* is included in the official list of journals of the Ministry of Education and Science of Ukraine.

We acknowledge the synergy of the authors, editors and referees, who bring the scientific results to the readers. We encourage you all to submit papers to *Chemistry of Metals and Alloys*, while on our side we will go on focusing on meeting the standards of a modern scientific journal.

Roman GLADYSHEVSKII
Khrystyna MILIYANCHUK