Editorial

In 2010 the Department of Inorganic Chemistry at the Ivan Franko National University of Lviv will be 115 years old.

The staff of the department has increased from three collaborators in 1895 (professor, assistant professor, laboratory assistant) to 53 in 2009 (four professors, seven associated professors, two assistant professors, 21 research assistants, two heads of laboratories, five engineers, five laboratory assistants, seven Ph.D. students).

In 1895 the lecturers delivered courses in inorganic, analytical, and physical chemistry to students of the faculties of philosophy, medicine, and natural sciences. In 1945 the Department of Inorganic Chemistry became part of the Faculty of Chemistry and since then only students specialized in inorganic chemistry graduate here. In 2009/2010 the lecturers of the department deliver the following general courses: Inorganic Chemistry, Crystal Chemistry, Informatics and Programming, Chemistry of Coordination Compounds, Methodic of Teaching of Chemistry for students of the Faculty of Chemistry, Inorganic Chemistry and Methodic of Teaching of Chemistry for students of the Faculty of Biology, Chemistry for students of the Faculty of Geology, General Chemistry for students of the Faculty of Physics, and others.

The first director of the department was Prof. B. Lachowicz (1896-1903). He was followed by professors S. Tołłoczko (1905-1935), W. Trzebiatowski (1938-1945), E. Cherkashyn (1945-1968), E. Gladyshevskii (1968-1989), and O. Bodak (1989-2005). Since 2006 Prof. R. Gladyshevskii is the head of the department.

During the first three decades, the scientific activity of the department was mainly focused on studies of the natural resources of Galicia – oil, natural gas, salts and mineral water, but considered also problems of organic, physical and analytic chemistry, chemical technology, and chemistry of metals. In the 1950s the research activities dealt with problems of inorganic chemistry in general and with crystal chemistry of intermetallic compounds in particular. Over the last 60 years, scientists at the department have investigated the interaction of the chemical elements in 2600 ternary systems, constructed isothermal sections of phase diagrams for some 1100 systems, reported the formation of over 7000 new compounds, and determined the crystal structure of 6100 compounds crystallizing with 750 structure types, of which 430 were previously unknown. Regularities in the interaction of the components in various types of system have been discovered and analyzed. A generally accepted systematization of intermetallic structure types, based on the atomic coordination, was developed and different types of relationships between structure types were examined.

In the 80s the research activity was extended to include also chemistry of coordination compounds of metal halogenides with organic ligands. At the end of the last century, studies of oxides (high-temperature superconductors) and hydrides (hydrogen reservoirs) started at the department.

The total number of scientific publications of the department reached 4000 by the end of 2009, including 27 monographs, 45 textbooks and other manuals for students.

The department periodically organizes scientific conferences, meetings, seminars, and schools, involving top scientists from different countries. The series of international conferences on Crystal Chemistry of Intermetallic Compounds (IMC) has been held in Lviv since 1971.

More than 30 universities and research centers in Ukraine and abroad are partners of the department. The international collaboration covers vast geographic zones, including well-known scientific centers such as the W. Trzebiatowski Institute of Low Temperature and Structure Research (Wroclaw), Jožef Stefan Institute (Ljubljana), Leibniz Institute for Solid State and Materials Research (Dresden), Vienna University of Technology, Charles University (Prague), Technical University of Munich, University of Vienna, Néel Institute (Grenoble), University of Rennes, Technical University of Darmstadt, Max Planck Institute for Chemical Physics of Solids (Dresden), University of Munster, University of Genoa, M.V. Lomonosov Moscow State University, University of Geneva, and many others.

Every year, 45-50 undergraduate students take active part in the scientific work of the department. Many graduates continue their research work as Ph.D. students, in Ukraine or abroad, successfully defend their theses and contribute to the development of science and education.

The department always welcomes new students and scientific partners cordially. We believe that the history that started 115 years ago can serve as a solid basis for future accomplishments.

Roman GLADYSHEVSKII