



Pavlo Solokha

Fixed-term assistant professor

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Education and training

2008

PhD in Chemistry

Interaction of the components in Tb-(Fe Ni Cu)-(Zn Mg) ternary systems and related to them (phase equilibria crystal structure and physical properties of compounds) - 5/5

Ivan Franko National University of Lviv - Lviv - UA

2003

Master degree in Chemistry

Isothermal section of the Tb-(Cu Ni)-Zn ternary systems - 5/5

Ivan Franko National University of Lviv - Lviv - UA

Academic experience

2013 - ONGOING

Researcher (B type)

University of Genoa - Genoa - IT

crystallography of intermetallic compounds their crystal-chemical relations
chemical bond studies for intermetallics

Language skills

Ukrainian

Mother tongue

Russian

Mother tongue

English

Proficient

French

Independent

Research interests

- Study of new ternary and multicomponent alloys
- Experimental determination of phase equilibria of binary and multicomponent metal systems
- Crystallographic characterization of intermetallic phases, in particular:
 - Study of the ordering phenomenon of vacancies for binary and ternary germanides and structural problems related to it;
 - Crystallographic modeling based on the symmetry principle using TOPOS;
 - Modulated structures; twins of intermetallic crystals, etc.
- Chemical bonding studies in intermetallics, especially polar

intermetallics.

Assignments abroad

Dr. Solokha has spent several research periods abroad, during which he has investigated aspects related to his research topics, in the context of national and international collaborations:

- June 2018, at the Institute of Experimental Physics, Technische Universität Bergakademie Freiberg, Germany. Object of the research activity:

'Application of the' high entropy 'method for the resolution of complex crystalline structures and construction of electronic density maps.

Collaboration with dr. Tilmann Leisegang.

- Several stays (2014-2017), at the Samara Center for Theoretical Materials Science (SCTMS), Samara State University, Russia. Object of the research activity: 'Topological analysis of intermetallic compounds'. Collaboration with Prof. V. Blatov (Samara State University) and with Prof. D.M. Proserpio (University of Milan).

- August-September 2012 at the Max Planck Institute for Chemical Physics of Solids, Dresden, Germany. Object of the research activity: 'Analysis of the chemical bond in the intermetallic compounds through the ELI-D function'.

Collaboration with Prof. Yu. Grin, the dr. F. Wagner and dr. A. Baranov.

- December 2009 at the Institute of Inorganic Chemistry at RWTH Aachen University, Germany. Object of the research activity: 'Calculations of electronic structure with the LMTO-ASA program'. Collaboration with Prof. R. Dronskowski.

- 2005-2008 (for a total period of 18 months) at the Institut Charles Gerhardt, Montpellier, France (under the supervision of Prof. JC Tedenac), Object of the research activity: studies on some aspects related to the crystal-chemistry of alloys ternaries of rare earths (rare earth alloys - {Zn, Cu, Ni} -Mg) within the Research Doctorate.