Phone: (012) 2952824, Fax: (012) 2952804

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Employment and positions

Institute of Metallurgy and Materials Science, Polish Academy of Sciences: assistant professor since 2007, associate professor since 2015

Scientific career

M.Sc.: AGH – University of Science and Technology, Faculty of Non-ferrous Metals, 2002

Ph.D.: AGH – University of Science and Technology, Faculty of Non-ferrous Metals, 2006

Dr.hab. - Institute of Metallurgy and Materials Science PAS, 2015

Scientific achievements

51 papers, 42 of them (abstracted) cited by the Journal Citation Reports

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The most relevant publications during last 5 years

1.

P. Fima, H. Flandorfer: Enthalpy of mixing of liquid Ag-Bi-Cu alloys at 1073 K. Thermochim. Acta 575 (2014) 336-342.

2.

P. Fima, G. Garzeł, A. Sypień: Wetting of Cu pads by Bi-2.6Ag-xCu alloys and phase equilibria in the Ag-Bi-Cu system. J. Electron. Mater. 43 (2014) 4365-4373.

3.

P. Fima, G. Garzeł, K. Berent: Microstructure and Thermal Analysis of As-Cast Ag-Bi-Ni alloys. J. Electron. Mater. 45 (2016) 136-144.

4.

S. Terlicka, A. Dębski, **P. Fima**: Enthalpy of formation of Li2Sb and Li3Sb and mixing enthalpy of liquid Li-Sb alloys. J. Alloy Compd. 673 (2016) 272-277.

5.

T. Gancarz, **P. Fima**: Wetting and Interfacial Chemistry of Sn-Zn-Ga Alloys with Cu Substrate. J. Mater. Eng. Perform. 25 (2016) 3358-3365.

6.

P. Fima, H. Flandorfer: Mixing enthalpies of liquid Bi-Ni and Ag-Bi-Ni alloys. Thermochim. Acta 657 (2017) 134-143

7.

P. Fima, R. Novakovic, 2018, Surface tension modelling of liquid Cd-Sn-Zn alloys, Philosophical Magazine, 98, 1608-1624

8.

S. Terlicka, A. Dębski, **P. Fima**, 2018, Enthalpy of Mixing of Ternary Li-Pb-Sb Alloys, Journal of Phase Equilibria and Diffusion, 39, 412-425

9.

M. Bugajska, S. Furtauer, H. Flandorfer, **P. Fima**, 2018, Enthalpy of mixing of liquid Ag-Li-Sb alloys, Journal of Molecular Liquids, 269, 501-510

10.

M.E. Trybula, S. Terlicka, **P. Fima**, 2019, Thermodynamics of liquid Li-Sb alloys - experiment vs modeling, Journal of Chemical Thermodynamics, 128, 134-140

11.

J. Dutkiewicz, Ł. Rogal, D. Kalita, **P. Fima**, 2019, Development of new age hardenable Mg-Li-Sc alloys, Journal of Alloys and Compounds, 784, 686-696

Research projects

Projects from the Ministry of Science and Higher Education/National Science Centre

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Thermodynamic properties and phase diagram of Ag-Bi-Cu alloys, (Project IP2011 012571), IMIM PAN, project leader, 2012-2014

-

Thermodynamic properties and phase equilibria in Ag-Bi-Ni alloys, (Project IP2012 035672), IMMS PAS, principal investigator, 2013-2015

-

Physicochemical properties of Sn-Zn+(Ga,Na) alloys, (Project 2013/09/D/ST8/03991), IMMS PAS, investigator, 2014-2017

-

Microstructural and kinetics characterization of phenomena occurring at the interface between Ti-6Al-4V-based alloys brazed with TiZrCuPd amorphous ribbons, (Project 2013/11/B/ST8/04286), IMMS PAS, key investigator, 2014-2017

-

Optimization of the grain refining effect to the nano range in Mg-Li alloys with variable crystal structure by intensive deformation, (Project 2014/15/B/ST8/03184), IMMS PAS, investigator, 2015-2018

-

Thermodynamics and structure of liquid Ag-Li-Sb alloys, (Project 2015/19/B/ST8/01074), IMMS PAS, principal investigator, 2016-2019

European Union Projects

-

Advanced materials and technologies of their production, (Project POIG.01.01.02-00-015/09), IMMS PAS, participant, 2010-2013

-

Adaptation of the research potential of IMMS PAS to the requirements of global standards for comprehensive research in the field of materials science, (Project POIG.02.01.00-12-175/09), IMMS PAS, participant, 2011-2014

Experience gained abroad

KTH Royal Institute of Technology in Stockholm, Sweden, 2004 (2 months)

Foundry Research Institute in Krakow, Poland, 2007-2010 (postdoc fellowship)

Department of Inorganic Chemistry/Materials Chemistry, University of Vienna, Austria, 2012 (1 month), 2014 (2,5 week), 2016 (2 weeks)

IEK-2 Microstructure and Properties of Materials, Forschungszentrum Jülich, Germany, 2013 (2 weeks)

Department of Inorganic Chemistry - functional Materials, University of Vienna, Austria, 2018 (2 weeks)

Education of scientific staff

PhD advisor: S. Terlicka, M. Bugajska

Prizes and awards

2007 Ministry of Science and Higher Education fellowship “Pol-Postdoc”

2012 IMMS PAS Director Award for first place in the group of young researchers in the evaluation of scientific research achievements for 2009-2010

2013 IMMS PAS Director Award for the third place in the group of young researchers in the evaluation of scientific research achievements for 2011-2012

2014 Scientific Award of Division IV, Technical Sciences, of the Polish Academy of Sciences

Membership in professional societies

Secretary of the Associated Phase Diagram and Thermodynamics Committee

Editor of the Archives of Metallurgy and Materials

Main areas of scientific interests

Wettability and surface tension of liquid metals and alloys, properties of lead-free solders; modeling of thermodynamic and thermophysical properties; thermodynamics and phase equilibria of alloys, Li-based alloys for energy storage.