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Employment and positions

Institute of Metallurgy and Materials Science, Polish Academy of Sciences: metallurgist (since 2014), assistant professor (since 2015).

Scientific career

M.Sc.: Jagiellonian University, Faculty of Physics, Astronomy and Applied Computer Science, 2010

Ph.D.: Institute of Metallurgy and Materials Science, Polish Academy of Sciences, 2014

Scientific achievements

The most relevant publications during last 5 years:

1.

K. Stan-Glowinska, L. Litynska-Dobrzynska, J. Dutkiewicz, M.A. Gordillo, J.M. Wiezorek, Stability and Transformation of Quasicrystalline Phase in Transition Metal Modified Al-(Mn-Fe)-based Alloys, Microscopy and Microanalysis 21 S3 (2015) 1359-1360

2.

L. Lityńska-Dobrzyńska, J. Dutkiewicz, **K. Stan-Głowińska**, W. Wajda, L. Dembinski, C. Langlade, C. Coddet: Characterization of aluminium matrix composites reinforced by Al-Cu-Fe quasicrystalline particles, Journal of Alloys and Compounds 643 (2015) S114-S118

3.

K. Stan-Głowińska, Preparation and characterization of Al-Mn-Fe base alloys strengthened with quasicrystalline particles, ISBN: 978-83-60768-12-9, Kraków 2014

4.

L. Lityńska-Dobrzyńska, **K. Stan-Głowińska**, A. Góral, A. Wierzbicka-Miernik, W. Wajda, M. Mitka, J. Dutkiewicz, Wykorzystanie stabilnych i metastabilnych kwazikryształów jako fazy umacniającej w aluminium, rozdział w monografii „Polska Metalurgia 2011-2014" Ed. Komitet Metalurgii PAN (2014) 961-973

5.

L. Litynska-Dobrzynska, J. Dutkiewicz, **K. Stan-Glowinska**, L. Dembinski, C. Coddet and P. Ochin, Characterization of Rapidly Solidied Al65Cu20Fe15 Alloy in Form of Powder or Ribbon, Acta Physica Polonica A 126 (2014) 512-515

6.

K. Stan, L. Lityńska-Dobrzyńska, P. Ochin, G. Garzeł, A. Wierzbicka-Miernik, J. Wojewoda-Budka, Effect of Ti, Zr and Hf addition on microstructure and properties of rapidly solidified Al-Mn-Fe alloy, Journal of Alloys and Compounds 615 (2014) S607-S611

7.

K. Stan, L. Lityńska-Dobrzyńska, J.L. Lábár, A. Góral, Effect of Mo on stability of quasicrystalline phase in Al-Mn-Fe alloy, Journal of Alloys and Compounds 586 (2014) S395-S399

8.

J. Wojewoda-Budka, **K. Stan**, B. Onderka, R. Nowak, N. Sobczak: Microstructure, chemistry and thermodynamics of Al/NiOSC couples obtained at 1000 °C, Journal of Alloys and Compounds 615 (2014) S178-S182

9.

K. Stan, L. Lityńska-Dobrzyńska, P. Ochin, A. Wierzbicka-Miernik, A. Góral, J. Wojewoda-Budka: Effect of alloying elements on microstructure and properties of Al-Mn-Fe alloy, Archives of Metallurgy and Materials 58(2) (2013) 339-344

Research Projects

-

Influence of alloying elements on quasicrystals forming ability in alloys based on Al-Mn system., Project No. 2012/07/N/ST8/03922, 2013- 2016, project manager

-

High temperature interaction of aluminum with ZnO and NiO single crystals o various orientations, Project No. IP2011061071, 2012- 2013, participant

-

Characteristics of Al based composites reinforced with quasicrystalline particles Project No. 2011/03/B/ST8/05165, 2012- 2015, participant

Experienced gained abroad:

Department of Mechanical Engineering and Materials Science, University of Pittsburgh, USA: Investigations of thermal stability of a quasicrystalline phase in Al- (Mn-Fe)-based alloys (Etiuda project), October 2014 - March 2015 (6 months)

Institute for Technical Physics and Materials Science; Research Center for Natural Sciences, Hungarian Academy of Sciences, Budapest, Hungary: In-situ heating of thin foils in a transmission electron microscope to study phase transformations in novel aluminum base alloys strengthened with quasicrystalline particles, October 2011 (1 week), September - October 2012 (1 week), September 2013 (1 week)

Institute de Chimie et des Matériaux Paris Est, CNRS-Université Paris, France: Preparation of novel aluminum alloys strengthened with quasicrystalline particles by rapid solidification techniques (Erasmus+ program), April 2013 (2 weeks)

Organization of conferences and scientific events

Member of Organizing Committee "9th Polish-Japanese Joint Seminar on Micro and Nano Analysis" 10-13 September 2012, Sieniawa, Poland

Member of Organizing Committee "Advanced Materials and Nanoanalysis" 25-26 June 2012, Kraków, Poland

Membership in professional societies

Since 2014 -member of Polish Society for Microscopy

Since 2015 -member of Polish Society for Materials Science

Main scientific interests

Novel aluminum alloys for structural application, rapid solidification, structure and properties of metastable crystalline and quasicrystalline phases, complex metallic alloys, application of electron microscopy in materials science.