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Employment and positions

Institute of Metallurgy and Materials Science, Polish Academy of Sciences: metallurgist (since 2010), assistant professor (since 2014).

Scientific career

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

H. Kazimierczak „*Electrodeposition of Zn-Mo layers from aqueous citrate solutions*”, IMIM PAN, Kraków 2014, ISBN: 978-83-60768-11-2, str. 1-143.

2.

P. Ozga, **H. Kazimierczak**, Z. Świątek, M. Słupska, A. Dębski, E. Bielańska, R. Socha, B. Onderka, M. Michalec „*Opracowanie podstaw elektrolitycznego otrzymywania stopów na bazie Zn-Sn oraz Mn-Sn z domieszką molibdenu lub wolframu zastępujących kadm oraz eliminujących Cr(VI)*” rozdział w „Zaawansowane materiały i technologie ich wytwarzania” ISBN 978-83-938792-1-2, Wydawca: Instytut Metali Nieżelaznych, Gliwice, 2014, str. 497-510

3.

H. Kazimierczak, P. Ozga, M. Słupska, Z. Świątek, K. Berent, „*Electrodeposition of Sn-Mn layers from aqueous citrate electrolytes*” Journal of the Electrochemical Society, 161 (6) (2014) D309-D320

4.

H. Kazimierczak, P. Ozga, A. Jałowiec, R. Kowalik, „*Tin-zinc alloy electrodeposition from aqueous citrate baths*” Surface & Coatings Technology 240 (2014) 311-319

5.

H. Kazimierczak, P. Ozga, R.P. Socha "Investigation of electrochemical co-deposition of zinc and molybdenum from citrate solutions" Electrochimica Acta 104 (2013) 378-390

6.

H. Kazimierczak, P. Ozga, Z. Świątek "Characterization of Zn-Mo surface layers electrodeposited from citrate solutions" Journal of Alloys and Compounds 578 (2013) 82-89

7.

H. Kazimierczak, P. Ozga, "Electrodeposition of Sn-Zn and Sn-Zn-Mo layers from citrate solutions" Surface Science 607 (2013) 33-38

8.

H. Kazimierczak, A. Jałowiec, P. Ozga, R. Kowalik "Electrochemical deposition of tin-zinc alloys from citrate solutions" " Inżynieria Materiałowa 4 (2013) 290-294

9.

Z. Świątek, **H. Kazimierczak**, P. Ozga, A. Bohnyk, H. Savytsky, M. Michalec, "X-ray structural and microstructural analysis of electrolytic Zn-Mo layers. Studies and ab initio calculations ." Physico-chemical Mechanics of Materials tom.1, nr 10, pp. 305-309 (2014)

10.

M. Słupska, P. Ozga, Z. Świątek, **H. Kazimierczak**, "The development of stable baths for electrodeposition of Sn-Zn-Cu free solder alloys" " Inżynieria Materiałowa, 3 (2013) 193-197

11.

Z. Świątek, M. Michalec, P. Ozga, **H. Kazimierczak**, O. Bonchyk, G. Savitskij, "Phase changes during the process of corrosion In the binary and ternary electrodeposited zinc-based layers" Physico-chemical mechanics of materials vol.1 no.9 (2012)

Research Projects

European Union Projects

ZAMAT. Advanced materials and their production technologies, Advanced materials and their production technologies. Project jointly financed by European Union and Poland, POIG.01.01.02-00-015/09-00, IMMS PAS, participant, 2010-2013

Projects from Ministry of Science and Higher Education „Electrochemical deposition of Zn-Mn-Mo Allom layers from aqueous citrate baths" IMMS PAS, project leader, 2015-2016

Training and courses:

• „Raman Revealed training workshop", Renishaw, 5-7.10.2014, Wotton-under-Edge, UK,

“São Paulo School of Advanced Sciences on Electrochemistry, Energy Conversion and Storage" 7-14.12.2013, Sao Paulo, Brasil

“European Advanced Training Course: Nano-scale Materials and Advanced Characterization Techniques", Dresden Fraunhofer Cluster Nanoanalysis, 5-6.12.2012, Dresden, Germany

“Advanced Materials and Nanoanalysis", IMMS PAS, 25-26.06.2012, Krakow

"Electrochemical Impedance Spectroscopy and its applications" 14-25.05.2012, Faculty of Chemistry, University of Warsaw

"Bath Electrochemistry Winter School", 9-13.01.2012, Bath University, UK

"Theory and Practice of Electrochemical Impedance Spectroscopy", 19-21.07.2011, Bath University, UK

Organisation of conferences and scientific events

Member of Organizing Committee "XII International Symposium on Explosive Production of New Materials: Science, Technology, Business and Innovations - EPNM 2014" 25-30.05.2014 Kraków

Membership in professional societies

Since 2013 -member of International Society of Electrochemistry (ISE)

Main scientific interest

- Kinetics and mechanisms of electrochemical deposition of metals and alloys, with special emphasis on the induced electrodeposition of molybdenum in aqueous solutions
- Electrodeposition of
 - corrosion resistant alloy layers
 - Pb-free soldering materials
 - semiconductors
- Corrosion of metals and alloys
- Physico-chemical properties of electrodeposited materials