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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

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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

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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:**

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

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"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