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Employment and positions

Institute of Metallurgy and Materials Science, Polish Academy of Sciences (1974-present):
from 1997 deputy head of Laboratory of Transmission Analytical Electron Microscopy, from
2010 - professor PAS

Scientific Career

M.Sc.: Jagiellonian University (Solid state physics), 1974

Ph.D.: Institute of Metallurgy and Materials Science, Polish Academy of Sciences,
2000

D.Sc.: Institute of Metallurgy and Materials Science, Polish Academy of Sciences,
2010

Scientific achievements

236 papers (**132** cited by the Journal Citation Reports), **2** books and **5** chapters in books

The most relevant publications during last 5 years

1.

H. Paul, **L. Lityńska-Dobrzyńska**, M. Prazmowski; Microstructure and Phase Constitution Near the Interface of Explosively Welded Aluminum/Copper Plates, Metallurgical and Materials Transactions, 44A (2013) 3836-3851

2.

J. Wojewoda-Budka, Z. Huber, **L. Lityńska-Dobrzyńska**, N. Sobczak, P. Zieba; Microstructure and chemistry of the SAC/ENIG interconnections, Materials Chemistry and Physics, 139 (2013) 276-280

3.

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

4.

K. Kubok, **L. Lityńska-Dobrzyńska**, J. Wojewoda-Budka, A. Góral, A. Debski, Investigation of Structures in As-Cast Alloys from the Mg-Zn-Ca System, Archives of Metallurgy and Materials 58 (2013) 329-333.

5.

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.

6.

M. Mitka, A. Góral, Ł. Rogal, **L. Lityńska-Dobrzyńska**; Microstructure of mechanically alloyed and annealed Al₆₂Cu_{25.5}Fe_{12.5} powder, Journal of Alloys and Compounds 653 (2015) 47-53.

7.

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.

8.

L. Lityńska-Dobrzyńska, M. Mitka, A. Góral, K. Stan-Głowińska, J. Dutkiewicz; Microstructure and mechanical properties of aluminium matrix composites reinforced by Al₆₂Cu_{25.5}Fe_{12.5} melt spun ribbon, Materials Characterization 117 (2016) 127-133.

9.

K. Stan-Głowińska, **L. Lityńska-Dobrzyńska**, J. Morgiel, A. Góral, M.A. Gordillo, J.M. Wiezorek; Enhanced thermal stability of a quasicrystalline phase in rapidly solidified Al-Mn-Fe-X alloys, Journal of Alloys and Compounds 702 (2017) 216-228.

10.

B.D. Napruszewska, A. Michalik-Zym, R. Dula, E. Bielanska, W. Rojek, T. Machej, R.P. Socha, **L. Lityńska-Dobrzyńska**, K. Bahranowski, E.M. Serwicka; Composites derived from exfoliated Laponite and Mn-Al hydrotalcite prepared in inverse microemulsion: A new strategy for design of robust VOCs combustion catalysts, Applied Catalysis B- Environmental 211 (2017) 46-56.

Research Projects

Production of nano and ultramicrocrystalline super high-strength Al-Mg-Zn-Cu-Zr-Sc alloys and characteristic of their structure by high resolution transmission electron microscopy methods - supervisor, (2008-2010)

Characterization of aluminium matrix composites reinforced with quasicrystal particles (2012-2015) - supervisor

Intermetallic compounds produced by rapid and directional solidification for catalytic applications 2018-2021) - supervisor

Experience gained abroad

École Nationale Supérieure de Chimie de Paris, Paris University, *INCO-Copernicus Project*, Paris-France, 1998 (3 months); 1999 (2 months)

Centre d'Etude de Chimie Metallurgique (CNRS), Vitry (Paris)-France, 2000 (3 weeks), 2001 (2 weeks)

German Aerospace Center, Cologne-Gemany, 2001 (3 months)

Institute of Applied Physics, ETH Zurich-Switzerland, 2003 (3 months)

Università Politecnica Delle Marche, Ancona-Italy, 2005 (1 month), 2006 (1 month).

Organisation of conferences and scientific events

Symposium MRS Fall Meeting: Phase Stability, Phase Diagrams, Thermodynamics, Modelling and Applications (2006) - symposium secretariat

9th Polish-Japanese Joint Seminar on Micro and Nano Analysis (2012) - symposium secretariat

Membership in professional societies

Member of Scientific Board of the Institute of Metallurgy and Materials Science of the Polish Academy of Sciences

Member of Polish Society for Microscopy

Member of Committee on Materials Science of the Polish Academy of Sciences

Main scientific interest

Characterisation of microstructure by transmission electron microscopy methods, properties and structure of aluminium and magnesium alloys, quasicrystals, rapid solidification casting techniques.

