Dr hab. B. Lesiak-Orłowska

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Curriculum vitae

Born – 29th September 1957, Warszawa, Poland.

1983 MSci, physics, Department of Physics, University of Warsaw, Warszawa, Poland.

1983 junior assistant, Institute of Physical Chemistry, Polish Academy of Sciences, Warszawa, Poland.

1991 PhD, Physical and Theoretical chemistry, Institute of Physical Chemistry, Polish Academy of Sciences, Warszawa, Poland.

PhD thesis title: "Characterisation of carbonaceous residues at solid surfaces using Auger electron spectroscopy".

- 1992/1993 post-doctoral position (Royal Society), Department of Chemistry, University of Cambridge Prof. D. A. King, Cambridge, UK.
- adjunct, Institute of Physical Chemistry, Polish Academy of Sciences, Warszawa, Poland.
- 2004 habiltation thesis, Physical Sciences, Department of Physics and Astrophysics, Wrocław University, Wrocław, Poland. Habilitation thesis title: *"Elastic peak electron spectroscopy for application towards complex systems"*.

Cooperation:

- 1. Institute of Biocybernetics and Biomedical Engineering, Polish Academy of Sciences, cooperation from 1986.
- 2. Institute of Physics, Academy of Sciences of the Czech Republic, Prague, Czech Republic, cooperation from 1986.
- 3. Research Institute of Technical Physics and Materials, Hungarian Academy of Sciences, Budapest, Hungary, cooperation between 1992-2007.
- 4. Research Institute of Nuclear Physics ATOMKI, Hungarian Academy of Sciences, Debrecen, Hungary, cooperation from 1997.
- 5. Department of Materials Engineering, Technical University of Warsaw, Warszawa, Poland, 2008-2016.

Co-author of **115** publications published in international journals, **158** international conference contributions (posters, orals) including **14** invited contributions.

Coordinator of **2** projects of National Science Centre and several projects between Polish Academy of Sciences and Academy of Sciences of the Czech Republic and Hungarian Academy of Sciences, participant of European project SURPHARE and Horizon2020-MSC-COFUND-DP.

Number of citations (Webb of Knowledge) – 1313 (including self-citations); H=20.

Specialisation: chemical and structural properties of hybrid materials based on carbon nanomaterials; surface properties using electron spectroscopic methods

Memberships: Polish Vacuum Society

Awards: Team the IIIrd degree award of Rector of Nicolaus Copernicus University in Toruń (prof. dr hab. Andrzeja Radzimiński) for scientific research in 2010, Toruń, 14 Nov 2011.

Recent publications:

1. **B. Lesiak**, L. Stobinski, A. Malolepszy, M. Mazurkiewicz, L. Kövér, J. Tóth, *Graphene oxide* - *surface chemical and structural characterisation using electron spectroscopy*, J. Electron Spectroscopy and Related Phenomena, **193**, 92-99, 2014.

L. Stobinski, B. Lesiak, A. Malolepszy, M. Mazurkiewicz, B. Mierzwa, J. Zemek, P. Jiricek, I. Biełoszapka, *Graphene Oxide and Reduced Graphene Oxide Studied by XRD, TEM and Electron Spectroscopy Methods*, J. Electron Spectroscopy and Related Phenomena 195, 145-154, 2014.
A. Malolepszy, M. Mazurkiewicz, L. Stobinski, B. Lesiak, L. Kövér, J. Tóth, B. Mierzwa, A. Borodzinski, F. Nitze, T. Wågberg, *Deactivation resistant Pd-ZrO2 supported on multiwall carbon nanotubes catalyst for direct formic acid fuel cells*, Int. J. Hydrogen Energy 40 (46), 16724-16733, 2015.

4. **B. Lesiak**, M. Mazurkiewicz, A. Malolepszy, L. Stobinski, B. Mierzwa, A. Mikolajczuk-Zychora, K. Juchniewicz, A. Borodzinski, J. Zemek, P. Jiricek, *Effect of the Pd/MWCNTs anode catalysts preparation methods on their morphology and activity in direct formic acid fuel cell*, Appl. Surf. Sci. **387** (30), 929-937, 2016.

5. B. Lesiak, **P. Jiricek, I. Bieloshapka**, *Chemical and structural properties of Pd nanoparticledecorated graphene- electron spectroscopic methods and QUASES*, Appl. Surf. Sci., in press (2017).