

CURRICULUM VITAE

PERSONAL INFORMATION

Name: **Karol Kyziół, D.Sc., Ph.D., Eng.**

Date of birth: 09.10.1979

Address: AGH University of Science and Technology, Faculty of Materials Science and Ceramics, A. Mickiewicza 30 Ave., 30-059 Cracow, Poland

Phone: (+48) 12 617 24 65

Email: kyziol@agh.edu.pl

Personal web site: <http://home.agh.edu.pl/~kyziol/>



ORCID profile: <http://orcid.org/0000-0001-5414-952X>

ResearchID: **A-9055-2017**

Scopus Author ID: **23492534700**

EDUCATION

- 2017 - June** **Habilitation** (materials engineering)
- 2010 -** assistant professor, Department of Physical Chemistry and Modelling, Faculty of Materials Science and Ceramics, AGH University of Science and Technology, Cracow
- 2009 - 2010** assistant, Department of Physical Chemistry and Modelling, Faculty of Materials Science and Ceramics, AGH University of Science and Technology, Cracow
- 2009 - June** **Doctor of Technical Sciences** (materials engineering)
- 2004 - 2009** PhD studies, Faculty of Materials Science and Ceramics, AGH University of Science and Technology, Cracow
- 2004 - June** **Master of Science, engineer**
- 1999 - 2004** MSc studies, Faculty of Materials Science and Ceramics, AGH University of Science and Technology, Cracow, specialization: Thin Layers Technology

PERSONAL SKILLS AND COMPETENCES

- 1) **synthesis and physicochemical characterization of coatings and thin gradient materials: PVD, CVD, PA CVD**, IR, Raman, XRD, XPS; SEM; EDS, TEM; AFM; corrosion analysis, indentation technique, *etc.*
- 2) study on influence of technological parameters on physicochemical and biological properties of modified surfaces, **design of technology for improving mechanical, tribological and corrosion resistance** of light-weight materials (*incl.* aluminum and magnesium alloys), surface functionalization of biomaterials, *etc.*

RESEARCH PROJECTS - PRINCIPAL INVESTIGATOR

- 1) **Bioactive chitosan layers on the plasmochemical activated surface of NiTi alloy**, research project European Union and Ministry of Science and Higher Education (POWER 3.3), grant decision no. 68.72.160.87820, 2018-2019
- 2) **Surface functionalization of Ti6Al7Nb alloy with biopolymers using plasmochemical activation**, research project Polish National Center for Science (NCN), grant decision DEC-2017/01/X/ST8/00886NCN, 2017-2018

BOOK OR CHAPTERS BOOK

- 1) **K. Kyziół**, A. Kyziół, "Advances in Polymers and Fibers", vol. "Biopolymer Grafting: Applications", chapter 4: "Surface functionalization with biopolymers via plasma-assisted surface grafting and plasma-induced graft polymerization", *Published by Elsevier*, ed. V.K. Thakur, 2018, p. 115-151
- 2) **K. Kyziół**, Ł. Kaczmarek, A. Kyziół, "Handbook of Composite from Renewable Materials", 4 Vol *Functionalization*, *Published by Wiley-Scrivener*, ed. Vijay Kumar Thakur, Manju Kumari Thakur, Michael R. Kessler, 2017, p. 457-490
- 3) **K. Kyziół**, "Functional Coatings Deposited in Plasma Conditions", Vol. 123, Papers of the Commission on Ceramic Science, Polish Ceramic Bulletin, *Monograph*, Cracow, 2016

Since the beginning of my professional work, I also established numerous cooperation with industry, transferring acquired knowledge into the realization of technological solutions in companies, including Innowacja Polska sp. z o.o. and EC Grupa sp. z o.o.

My academic achievements consist of 47 published scientific articles, including 21 from the base of **Journal Citation Reports (including 20 which were published after gaining my** doctoral degree), the total IF of which (according to the year of publishing) is **34.730**. According to the base **SCOPUS** my Hirsch index **is 7**. The results of my research were presented at 41 scientific conferences (including 30 international ones). I am a co-author of one patent (**PL – 221932 B1**, 2016) concerning a method of improving the mechanical properties of Al alloys and one patent application (**P – 410079**, 2014), which includes the use of a plasma chemical method to modify onlays for bumpers. Furthermore, I have been the head of the Laboratory of Vapour Deposited Materials (WIMiC, AGH) since January 2015.

It is worth mentioning that, while conducting my research, **I have cooperated with many academic centers** including the Faculty of Chemistry Jagiellonian University (the team of Prof. Ph.D. Grażyna Stochel), Institute of Materials Science and Engineering Lodz University of Technology (the team of Ph.D Eng. Łukasz Kaczmarek, Prof. PŁ), Technical University of Kosice (Slovakia) and University of Zaragoza (Spain), as well as companies that operate in the field of surface material engineering.