

Wykaz wybranych publikacji zespołu dr. hab. Pawła Zarzyckiego, prof. PK

A. INTERNATIONALLY REFEREED JOURNALS - EXPERIMENTAL PAPERS

1. K. Piaskowski, P.K. Zarzycki; "Carbon-Based Nanomaterials as Promising Material for Wastewater Treatment Processes", *Int. J. Environ. Res. Public Health* 2020, 17, 5862; doi:10.3390/ijerph17165862 (14 pages).
2. P.K. Zarzycki, J. Katzer; "A proposition for a lunar aggregate and its simulant", *Advances in Space Research*, 65 (2020) 2894-2901 <https://doi.org/10.1016/j.asr.2020.03.032>
3. A. Kaleniecka, P.K. Zarzycki; "Degradation Studies of Selected Bisphenols in the Presence of β -Cyclodextrin and/or Duckweed Water Plant", *Journal of AOAC International*, Vol. 103, 2020, p. 1-10; DOI: <https://doi.org/10.5740/jaoacint.19-0267>; Guest edited as a special report on "Extraction, Microextraction, and Smart Sample Collection Systems" by Paweł K. Zarzycki.
4. J.C. Pereira, P.K. Zarzycki; "Smart Sampling and Probing: Are You Getting All the Relevant Information?" *Journal of AOAC International* Vol. 103, Issue 2, 2020, p.456-469; DOI: <https://doi.org/10.5740/jaoacint.19-0269> in Guest edited as a special report on "Extraction, Microextraction, and Smart Sample Collection Systems" by Paweł K. Zarzycki.
5. J. Kobaka, J. Katzer, P.K. Zarzycki; "Pilbara Craton Soil as A Possible Lunar Soil Simulant for Civil Engineering Applications"; *Materials*, 2019, 12, 3871-3881; doi:10.3390/ma12233871
6. P.K. Zarzycki, J. Katzer; "Multivariate Comparison of Lunar Soil Simulants"; *J. Aerosp. Eng.*, 2019, 32(5): 06019005-1/06019005-6; DOI: 10.1061/(ASCE)AS.1943-5525.0001075.
7. A. Kaleniecka, P.K. Zarzycki, "Analysis of Selected Endocrine Disrupters Fraction Including Bisphenols Extracted from Daily Products, Food Packaging and Treated Wastewater Using Optimized Solid-Phase Extraction and Temperature-Dependent Inclusion Chromatography", *Molecules* 2019, 24, 1285; doi:10.3390/molecules24071285; Invited paper that belongs to the Special Issue Recent Advances in Studies of Food and Beverages, Guest Editors Jacek Namieśnik and Justyna Płotka-Wasyłka.
8. J.C. Pereira, J.M.C. Marques, E. Włodarczyk, B. Fenert, P.K. Zarzycki; "Towards the understanding of micro-TLC behavior of various dyes on silica and cellulose stationary phases using a data mining approach"; Invited manuscript for topical JAOAC issue; Special Guest Editor Section, *Journal of AOAC International*; Vol. 101, No. 5, (2018) 1-11. DOI: <https://doi.org/10.5740/jaoacint.18-0061>
9. R. Świdarska-Dąbrowska, K. Piaskowski, P.K. Zarzycki; "Preliminary studies of synthetic dyes adsorption on iron sludge and activated carbons"; Invited manuscript for topical JAOAC issue; Special Guest Editor Section, *Journal of AOAC International*; Vol. 101, No. 5, (2018) 1-8. DOI: <https://doi.org/10.5740/jaoacint.18-0060>
10. P.K. Zarzycki; "Screening of macrocycles retention for microplanar analytical devices involving host-guest interactions and silica or octadecylsilica adsorbents"; Invited paper prepared for Annual Special Issue on Thin Layer Chromatography (TLC) of the *Journal of Liquid Chromatography & Related Technologies (JLC&RT)*. Vol. 41 No. 6 (2018) 315–323 <https://doi.org/10.1080/10826076.2018.1448687>
11. L. Lewandowska, E. Włodarczyk, B. Fenert, A. Kaleniecka, P.K. Zarzycki; "A Preliminary Study for the Fast Prototyping of Simple Electroplanar Separation Systems Based on Various Natural Polymers and Planar Chromatographic Stationary Phases"; Invited paper for JPC – *Journal of Planar Chromatography – Modern TLC*; the special issue of the journal devoted to the late Professor Edward Soczewiński; 30 (2017) 5, 440-452; DOI: 10.1556/1006.2017.30.5.15.
12. P.K. Zarzycki, J. Katzer, J. Domski; "Fast classification of fibres for concrete based on multivariate statistics"; *Computers and Concrete*, Vol. 20, No. 1 (2017) 23-29; DOI: <https://doi.org/10.12989/cac.2017.20.1.023>
13. M.M. Ślęczka-Wilk, E. Włodarczyk, M.J. Baran, A. Kaleniecka, P.K. Zarzycki; "Miniaturized Temperature-controlled Planar Chromatography (micro-TLC) as a Versatile Technique for Fast Screening of Micropollutants and Biomarkers Derived from Surface Water Ecosystems and During Wastewater Technological Processes"; Invited manuscript for topical JAOAC issue; Vol 100, No4 (2017) 935-949. DOI: 10.5740/jaoacint.17-0168
14. E. Włodarczyk, P.K. Zarzycki; "Chromatographic behaviour of selected dyes on micro-TLC plates under NP and RP conditions - potential application as the internal standards substances for chromatographic and/or microfluidic systems"; Invited paper prepared for Annual Special Issue on Thin Layer Chromatography (TLC) of the *Journal of Liquid Chromatography & Related Technologies (JLC&RT)*. 40, 5-6 (2017) 259-281; <http://dx.doi.org/10.1080/10826076.2017.1298028>.

15. H. Ohta, E. Włodarczyk, K. Piaskowski, A. Kaleniecka, L. Lewandowska, M.J. Baran, M. Wojnicz, K. Jinno, Y. Saito, P.K. Zarzycki; "Unexpected differences between planar and column liquid chromatographic retention of 1-acenaphthenol enantiomers controlled by supramolecular interactions involving β -cyclodextrin at subambient temperatures" *Anal. Bioanal. Chem.* 409 (2017) 3695-3706 (Springer) DOI: 10.1007/s00216-017-0313-y

B. INTERNATIONALLY REFEREED JOURNALS - FEATURE ARTICLES, COMMENTARIES, EDITORIALS and REVIEWS, MONOGRAPHS, CHAPTERS IN BOOKS.

1. P.K. Zarzycki, Editor, *Pure and Functionalized Carbon Based Nanomaterials Analytical, Biomedical, Civil and Environmental Engineering Application*, 1st Edition, 382 pages, Boca Raton, FL 33487-2742, CRC Press, Taylor & Francis Group, 2020; ISBN (Hardback) -13:978-1-138-49169-4; eBook Published 2 July 2020; DOI <https://doi.org/10.1201/9781351032308>; eBook ISBN 9781351032308
2. S. Seitzl, P. Miarka, I. Rozsypalová, K. Pokorná, Z. Keršner, J. Katzer, P.K. Zarzycki, "Mechanical fracture properties of concrete with lunar aggregate simulant", *MATEC Web of Conferences* 323, 01014 (2020); (10th International Conference of Advanced Models and New Concepts in Concrete and Masonry Structures; AMCM 2020); 8 pages; <https://doi.org/10.1051/mateconf/202032301014>; https://www.matec-conferences.org/articles/mateconf/abs/2020/19/mateconf_amcm2020_01014/mateconf_amcm2020_01014.html
3. P.K. Zarzycki, Editorial note (Preface) for *Pure and Functionalized Carbon Based Nanomaterials Analytical, Biomedical, Civil and Environmental Engineering Application*, Edited By Pawel K. Zarzycki, pages iii-v; 1st Edition, Boca Raton, FL 33487-2742, CRC Press, Taylor & Francis Group, 2020; ISBN (Hardback) -13:978-1-138-49169-4; eBook Published 2 July 2020; DOI <https://doi.org/10.1201/9781351032308>; eBook ISBN 9781351032308
4. P.K. Zarzycki, Renata Świdarska-Dąbrowska, Krzysztof Piaskowski, Lucyna Lewandowska, Bożena Fenert, Katarzyna A. Mitura and Michał J. Baran, "Carbon-based and related nanomaterials as active media for analytical, biomedical and wastewater processing applications"; Chapter 14 (pages 326-363) in *Pure and Functionalized Carbon Based Nanomaterials Analytical, Biomedical, Civil and Environmental Engineering Application*, Edited By Pawel K. Zarzycki; 1st Edition, Boca Raton, FL 33487-2742, CRC Press, Taylor & Francis Group, 2020; ISBN (Hardback) -13:978-1-138-49169-4; eBook Published 2 July 2020; DOI <https://doi.org/10.1201/9781351032308>; eBook ISBN 9781351032308
5. P.K. Zarzycki, "Extraction, Microextraction, and Smart Sample Collection Systems"; *Journal of AOAC International* Vol. 103, 2019, p1-2; DOI: <https://doi.org/10.5740/jaoacint.19-0250>; Special Guest Editor Section "Extraction, Microextraction, and Smart Sample Collection Systems" by Pawel K. Zarzycki.
6. P.K. Zarzycki, J. Katzer. "Assessment of lunar soil simulants based on multivariate statistics"; *Proceedings of ASCE Earth and Space Conference 2018 at Missouri University of Science and Technology*, 2018, pp. 1-8; Published by American Society of Civil Engineers; www.asce.org/publications/ascelibrary.org, <https://doi.org/10.1061/9780784481899.001>
7. P.K. Zarzycki; "Analysis and applications of colorants and optical sensing markers"; Editorial note for *Journal of AOAC International*; Special Guest Editor Section, Vol. 101, No. 5, (2018) 1-2. DOI: <https://doi.org/10.5740/jaoacint.18-0047>
8. K. Piaskowski, R. Świdarska-Dąbrowska, P.K. Zarzycki; "Dyes removal from water and wastewater using various physical, chemical and biological processes"; Invited manuscript for *Journal of AOAC International*; Special Guest Editor Section, Vol. 101, No. 5, (2018) 1-14. DOI: <https://doi.org/10.5740/jaoacint.18-0051>
9. A. M. Grumezescu (Editor), *Handbook of Food Bioengineering*, Volume 19; Role of Material Science in Food Bioengineering; Chapter 3, pp 73-107: K. Mitura, P.K. Zarzycki; *Biocompatibility and Toxicity of Allotropic Forms of Carbon in Food Packaging*; Academic Press/Elsevier 2018, ISBN: 978-0-12-811448-3; PII: B978-0-12-811448-3.00003-6; DOI: <http://dx.doi.org/10.1016/B978-0-12-811448-3.00003-6>
10. A. M. Grumezescu, A. M. Holban (Editors), *Handbook of Food Bioengineering*, Volume 4; Ingredients Extraction by Physico-Chemical Method in Food; Chapter 3, pp 107-189: E. Włodarczyk, P.K. Zarzycki; *Advances in Extraction, Fractionation and Purification of Low-Molecular Mass Compounds from Food and Biological Samples*; Academic Press/Elsevier 2017, London, United Kingdom. ISBN: 978-0-12-811521-3; PII: B978-0-12-811521-3.00003-6; DOI: <http://dx.doi.org/10.1016/B978-0-12-811521-3.00003-6>

11. P.K. Zarzycki; "Detection and analysis of microbes, bioanalytes and micropollutants focusing on food and environmental samples, using nanoparticles based detection systems, microfluidic analytical devices and related techniques"; Editorial note for Journal of AOAC International; Special Guest Editor Section, Vol. 100, No. 4, (2017) 893-894. DOI: 10.5740/jaoacint.17-0162
12. K. Piaskowski, R. Świdorska-Dabrowska, A. Kaleniecka, P.K. Zarzycki; "Advances in the Analysis of Water and Wastewater Samples Using Various Sensing Protocols and Microfluidic Devices based on PADs and μ TAS Systems"; Invited manuscript for topical JAOAC issue Vol 100 N04 (2017) 962- 970. DOI: 10.5740/jaoacint.17-0170
13. Atta-ur-Rahman (Editor) Studies in Natural Product Chemistry (Bioactive Natural Products), Volume 54, Chapter 3, Pages 87-107: "Hopanoids in Cyanobacteria Biomass and Related Samples" by P.K. Zarzycki, A. Kaleniecka, B. Fenert, M.B. Zarzycka; Elsevier Science Publishers, Amsterdam, the Netherlands, 2017. <http://dx.doi.org/10.1016/B978-0-444-63929-5.00003-6>
14. P.K. Zarzycki; Application of multivariate statistical techniques in chromatographic and spectroscopic fingerprinting of complex food and environmental samples; Editorial note for Journal of AOAC International; Special Guest Editor Section, Vol. 100, No 2, (2017) 313-314, DOI: 10.5740/jaoacint.16-0406
15. A. M. Grumezescu (Editor), Food Packaging, Nanotechnology in the Agri-Food Industry, Volume 7; Chapter 9: "Bioactive food packaging with nanodiamond particles manufactured by detonation and plasma-chemical methods" by K. Mitura, K. Wyřębski, P.K. Zarzycki; pages 295-328, Elsevier 2017; ISBN: 978-0-12-804302-8.
16. J. Katzer, P.K. Zarzycki; "Harnessing Multivariate Statistics for Assessment of Lunar Soil Simulants"; European Space Research Technology Centre (ESTEC); Workshop: Towards the Use of Lunar Resources; 3-5 July 2018,; Noordwijk, the Netherlands.
17. Paweł K. Zarzycki, Jacek Katzer; "Assessment of Lunar Soil Simulants Based on Multivariate Statistics"; ASCE Earth and Space Conference (The Aerospace Division of the American Society of Civil Engineers); April 9-12, 2018, Cleveland, Ohio, USA. Oral presentation at Symposium 1: Granular Materials in Space Exploration, Extraterrestrial Simulants.
18. P.K. Zarzycki, J. Katzer; "A concept of magnetic composite for building various objects working in liquid environments of solar sytem moons or extrasolar planets" XIXth Annual meeting of the Polish Hyperbaric Medicine and Technology Society, 16-19 November 2017, Jastrzębia Góra, Poland.
19. P.K. Zarzycki, A. Kaleniecka, E. Włodarczyk, "Development of new protocols for monitoring of micropollutants and biomarkers in surface water ecosystems: chromatographic analysis of bisphenols" XIXth Annual meeting of the Polish Hyperbaric Medicine and Technology Society, 16-19 November 2017, Jastrzębia Góra, Poland.
20. P.K. Zarzycki, L. Lewandowska, B. Fenert, A. Kaleniecka; "Electronic nose on small sailing yacht" XIXth Annual meeting of the Polish Hyperbaric Medicine and Technology Society, 16-19 November 2017, Jastrzębia Góra, Poland.
21. P.K. Zarzycki, L. Lewandowska, A. Kaleniecka, B. Fenert, K. Piaskowski, E. Włodarczyk, M.J. Baran, M. Wojnicz, R. Świdorska-Dąbrowska, H. Ohta, Y. Saito, K. Jinno; "Development of new protocols for monitoring of micropollutants and biomarkers in surface water ecosystems: hybrid electoplanar separation of dyes and micro-TLC analysis of host-guest supramolecular complexes" XIXth Annual meeting of the Polish Hyperbaric Medicine and Technology Society, 16-19 November 2017, Jastrzębia Góra, Poland.
22. P.K. Zarzycki, J. Katzer, J. Domski, "Fast classification of fibres for concretebased on multivariate statistics". The 2017 World Congress on Advances in Structural Engineering and Mechanics (ASEM17), Seoul, Korea, August 28 - September 1, 2017.