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Academic positions

- 2022 - **University of Oslo - post-doctoral researcher.**
present Department of Chemistry, Atmospheric Chemistry Group, supervisor prof. A. Wisthaler
- 2019 - **Gdańsk University of Technology - Assistant professor (adiunkt).**
present Department of Analytical Chemistry
- 2019 **Gdańsk University of Technology - Research and teaching fellow.**
Department of Analytical Chemistry

Education

- 2015–2019 **Gdańsk University of Technology - PhD with summa cum laude in Chemistry.**
Department of Analytical Chemistry, supervisor prof. J. Namieśnik†, prof. B. Zabiegała
- 2013–2015 **Nanjing University - China Studies.**
School for Overseas Students Education
- 2012–2013 **Gdańsk University of Technology - MSc. in Chemical technology.**
Department of Chemical Technology, supervisor dr. R. Aranowski
- 2009–2012 **Gdańsk University of Technology - BSc. in Chemical technology.**
Department of Chemical and Process Engineering, supervisor dr. D. Konopacka-Łyskawa

Academic Internships and research stays

- 2021 **Fraunhofer Institute for Process Engineering and Packaging IVV - Visiting researcher.**
The use of PTR-ToF-MS and GCxGC-ToF-MS for analysis of VOCs, supervisor dr. J. Beauchamp
- 2018-2019 **Massachusetts Institute of Technology - Academic internship.**
Singapore-MIT Alliance for Research and Technology, Center for Environmental Sensing and Modeling, supervisor prof. L. Norford, prof. A.J. Whittle
- 2018 **University of Balearic Islands - Academic internship.**
Department of Analytical Chemistry, supervisor prof. M. Miró

Industry Internships

- 2012 **Olicon LLC.**
- 2011 **LOTOS Oil Refinery.**
Internship at the Bureau of Technology and at the Bureau of Environmental Protection

Research grants

- 2019-2021 National Science Center PRELUDIUM 16, 2018/31/N/ST4/00809, "Complementary use of GCxGC-MS and PTR-MS for real-time monitoring of the emission of volatile organic compounds during FDM 3D printing"; supervisor: prof. B. Zabiegała; role: head of the research project, lead principal investigator.
- 2020-2021 GUT COMBATING CORONAVIRUS, 4/2020/IDUB/I.3/CC, "Smart virucidal UV-C system for universal coffer luminaires"; role: head of the research project.

Scholarships and Awards

- 2020 Award of the Polish Chemical Society for best doctoral dissertations defended in 2019
- 2020 Award for best doctoral dissertations defended at the Faculty of Chemistry of Gdańsk Tech
- since 2019 Member of the International Society for Olfaction and Chemical Sensing
- 2018 Minister of Science and Higher Education Scholarship for Outstanding Scientific Achievements
- 2017-2019 National Centre for Research and Development Scholarship for Interdisciplinary, International PhD Studies
- since 2017 Member of the Polish Chemical Society
- 2016-2019 Ministry of Science and Higher Education Scholarship for Best PhD Students
- 2016-2019 GUT Rector's Scholarship for Best PhD Students
- 2013-2015 Chinese Government Scholarship for Foreign Students

Certificates

- AutoCAD, Inventor advanced level certificate (Autodesk Inc.)
- ISO22000 internal auditor (BTCH Ltd.)
- Certificate for handling of technical gasses (Linde Gas)
- Finite element analysis and computational fluid dynamics in ANSYS - engineering simulations (Cornell University)

Languages

- English - fluent (C2)
- Polish - native
- Chinese - intermediate (B1)
- Python

Academic Interests

- Electronic olfaction
- Chemometrics
- Interdisciplinary research
- Headspace analysis
- PTR-MS
- Emissions associated with 3D printing
- Atmospheric pollution
- Indoor air

Skills

- Computational fluid dynamics
- Supervised and unsupervised pattern recognition, machine learning
- CAD, CAM: Inventor, AutoCAD, F360
- 3D printing
- Multivariate statistics

Hobbies and Interests

- History
- Photography [link]
- Literature
- Target shooting

Publications in JCR listed journals

- [1] M.Marć, W.Wojnowski, F.Pena-Pereira, M.Tobiszewski, A.Martín-Esteban, AGREEMIP: The Analytical Greenness Assessment Tool for Molecularly Imprinted Polymers Synthesis, *ACS Sustainable Chemistry & Engineering* (2024).
- [2] W.Wojnowski, A.Yang, T.Mikoviny, A.Wisthaler, K.Thunshelle, Exposure to cooking emitted volatile organic compounds with recirculating and extracting ventilation solutions, *Bulding and Environment* (2024), 261,

111743.

- [3] N.Manousi, W.Wojnowski, J.Płotka-Wasyłka, V.Samanidou, Blue applicability grade index (BAGI) and software: a new tool for the evaluation of method practicality, *Green Chemistry* (2023), 19, 7598-7604.
- [4] K.Kalinowska, W.Wojnowski, M.Tobiszewski, Simple analytical method for total biogenic amines content determination in wine using a smartphone, *Analytical Methods* (2023), 15, 1395-1401.
- [5] J.Badach, W.Wojnowski, J.Gębicki, Spatial aspects of urban air quality management: Estimating the impact of micro-scale urban form on pollution dispersion, *Computers, Environment and Urban Systems* (2023), 99, 101890.
- [6] M.Fabjanowicz, V.Simeonov, M.Frankowski, W.Wojnowski, J.Płotka-Wasyłka, Multivariate Statistical Analysis for Mutual Dependence Assessment of Selected Polyphenols, Organic Acids and Metals in Cool-Climate Wines, *Molecules* (2022), 27, 6566.
- [7] Wiesław Wojnowski, A.Konitz, Wojciech Wojnowski, The contribution of Hans von Wartenberg to the development of the Czochralski method, *Journal of Crystal Growth* (2022), 594, 126787.
- [8] F.Pena-Pereira, M.Tobiszewski, W.Wojnowski, E.Psillakis, A Tutorial on AGREEprep an Analytical Greenness Metric for Sample Preparation, *Advances in Sample Preparation* (2022), 100025.
- [9] W.Wojnowski, M.Marc, K.Kalinowska, P.Kosmela, B.Zabiegała, Emission Profiles of Volatiles during 3D Printing with ABS, ASA, Nylon, and PETG Polymer Filaments, *Molecules* (2022), 27, 3814.
- [10] W.Wojnowski, M.Tobiszewski, F.Pena-Pereira, E.Psillakis, AGREEprep–analytical greenness metric for sample preparation, *TrAC Trends in Analytical Chemistry* (2022), 116553.
- [11] K.Nalazek-Rudnicka, W.Wojnowski, A.Wasik, Occurrence and Levels of Biogenic Amines in Beers Produced by Different Methods, *Foods* 10 (2021), 2902.
- [12] J.Płotka-Wasyłka, W.Wojnowski, Complementary green analytical procedure index (ComplexGAPI) and software, *Green Chemistry* 23 (2021) 8657-8665.
- [13] W.Wojnowski, K.Kalinowska, T.Majchrzak, B.Zabiegała, Real-time monitoring of the emission of volatile organic compounds from polylactide 3D printing filaments, *Science of the Total Environment* 805 (2022) 150181.
- [14] T.Majchrzak, W.Wojnowski, A.Wasik, Revealing dynamic changes of the volatile profile of food samples using PTR–MS, *Food Chemistry* 364 (2021) 130404.
- [15] W.Wojnowski, S.Wei, W.Li, T.Yin, XX.Li, G.L.F.Ow, M.L.M.Yusof, A.J.Whittle, Comparison of absorbed and intercepted fractions of PAR for individual trees based on radiative transfer model simulations, *Remote Sensing* 13 (2021) 1069.
- [16] K.Kalinowska, W.Wojnowski, M.Tobiszewski, Smartphones as tools for equitable food quality assessment, *Trends in Food Science and Technology* 111 (2021) 271-279.
- [17] N.Melnyk, K.Pawłowska, M.Ziaja, W.Wojnowski, O.Koshovyi, S.Granica, A.Bazylo, Characterization of herbal teas containing lime flowers – *Tiliae flos* by HPTLC method with chemometric analysis, *Food Chemistry* 346 (2021) 128929.
- [18] T.Majchrzak, W.Wojnowski, M.Głowacz-Różyńska, A.Wasik, On-line assessment of oil quality during deep frying using an electronic nose and proton transfer reaction mass spectrometry, *Food Control* 121 (2021) 107659.
- [19] W.Wojnowski, K.Kalinowska, J.Gębicki, B.Zabiegała, Monitoring the BTEX Volatiles during 3D Printing with Acrylonitrile Butadiene Styrene (ABS) Using Electronic Nose and Proton Transfer Reaction Mass Spectrometry, *Sensors* 20 (2020) 5531.

- [20] M.Glinka, W.Wojnowski, A.Wasik, Determination of aminoglycoside antibiotics: current status and future trends, *TrAC Trends Anal. Chem.*, DOI:10.1016/j.trac.2020.116034
- [21] F.Pena-Pereira, W.Wojnowski, M.Tobiszewski, AGREE—Analytical GREENess Metric Approach and Software, *Anal. Chem.* 94 (2020) 10076–10082.
- [22] T.Majchrzak, W.Wojnowski, M.Rutkowska, A.Wasik, Real-Time Volatilomics: A Novel Approach for Analyzing Biological Samples, *Trends Plant Sci.* 3 (2020) 302-313.
- [23] T.Majchrzak, W.Wojnowski, A.Wasik, Proton Transfer Reaction Mass Spectrometry for Plant Metabolomics, *Trends Plant Sci.* 3 (2020) 313-314.
- [24] W.Wojnowski, K.Kalinowska, T.Majchrzak, J.Płotka-Wasyłka, J.Namieśnik, Prediction of the Biogenic Amines Index of poultry meat using an electronic nose, *Sensors.* 19 (2019) 1580.
- [25] M.Rutkowska, J.Płotka-Wasyłka, T.Majchrzak, W.Wojnowski, H.Mazur-Marzec, J.Namieśnik, Recent trends in determination of neurotoxins in aquatic environmental samples, *TrAC Trends Anal. Chem.* 112 (2019) 112–122.
- [26] W.Wojnowski, J.Namieśnik, J.Płotka-Wasyłka, Dispersive liquid-liquid microextraction combined with gas chromatography–mass spectrometry for in situ determination of biogenic amines in meat: Estimation of meat's freshness, *Microchem. J.* 145 (2019) 130–138.
- [27] T.Majchrzak, W.Wojnowski, T.Dymerski, J.Gębicki, J.Namieśnik, A new method for real-time monitoring of volatiles in frying fumes using proton transfer reaction mass spectrometry with time-of-flight analyser, *Monatshefte Fur Chemie.* 149 (2018) 1549-1554.
- [28] T.Majchrzak, W.Wojnowski, M.Lubinska-Szczygeł, A.Różańska, J.Namieśnik, T.Dymerski, PTR-MS and GC-MS as complementary techniques for analysis of volatiles: A tutorial review, *Anal. Chim. Acta* 1035 (2018) 1-13.
- [29] T.Majchrzak, W.Wojnowski, G.Piotrowicz, J.Gębicki, J.Namieśnik, Sample preparation and recent trends in volatilomics for diagnosing gastrointestinal diseases, *TrAC Trends Anal. Chem.* 108 (2018) 38–49.
- [30] W.Wojnowski, J.Płotka-Wasyłka, K.Kalinowska, T.Majchrzak, T.Dymerski, P.Szweda, J.Namieśnik, Direct determination of cadaverine in the volatile fraction of aerobically stored chicken breast samples, *Monatshefte Fur Chemie.* 149 (2018) 1521-1525.
- [31] T.Majchrzak, W.Wojnowski, T.Dymerski, J.Gębicki, J.Namieśnik, Complementary Use of Multi-dimensional Gas Chromatography and Proton Transfer Reaction Mass Spectrometry for Identification of Rapeseed Oil Quality Indicators, *Food Anal. Methods.* 11 (2018) 3417-3424.
- [32] W.Wojnowski, T.Majchrzak, P.Szweda, T.Dymerski, J.Gębicki, J.Namieśnik, Rapid Evaluation of Poultry Meat Shelf Life Using PTR-MS, *Food Anal. Methods.* 11 (2018) 2085-2092.
- [33] T.Majchrzak, W.Wojnowski, J.Płotka-Wasyłka, Classification of Polish wines by application of ultra-fast gas chromatography, *Eur. Food Res. Technol.* 8 (2018) 1463-1471.
- [34] J.Badach, P.Kolasińska, M.Paciorek, W.Wojnowski, T.Dymerski, J.Gębicki, J.Namieśnik, A case study of odour nuisance evaluation in the context of integrated urban planning, *J. Environ. Manage.* 213 (2018) 417-424.
- [35] T.Majchrzak, W.Wojnowski, T.Dymerski, J.Gębicki, J.Namieśnik, Electronic noses in classification and quality control of edible oils: A review, *Food Chem.* 246 (2018) 192–201.
- [36] W.Wojnowski, T.Dymerski, J.Gębicki, J.Namieśnik, Electronic Noses in Medical Diagnostics, *Curr. Med. Chem.* (2018) doi: 10.2174/0929867324666171004164636

- [37] W.Wojnowski, T.Majchrzak, T.Dymerski, J.Gębicki, J.Namieśnik, Portable Electronic Nose Based on Electrochemical Sensors for Food Quality Assessment, *Sensors*. 17 (2017) 2715.
- [38] B.Szulczyński, T.Wasilewski, W.Wojnowski, T.Majchrzak, T.Dymerski, J.Namieśnik, J.Gębicki, Different ways to apply a measurement instrument of E-nose type to evaluate ambient air quality with respect to odour nuisance in a vicinity of municipal processing plants, *Sensors*. 17 (2017) 2671.
- [39] W.Wojnowski, T.Majchrzak, T.Dymerski, J.Gębicki, J.Namieśnik, Dynamic Headspace Sampling as an Initial Step for Sample Preparation in Chromatographic Analysis, *J. AOAC Int.* 100 (2017) 1559–1606.
- [40] W.Wojnowski, T.Majchrzak, T.Dymerski, J.Gębicki, J.Namieśnik, Electronic noses: Powerful tools in meat quality assessment, *Meat Sci.* 131 (2017) 119–131.
- [41] W.Wojnowski, T.Majchrzak, T.Dymerski, J.Gębicki, J.Namieśnik, Poultry meat freshness evaluation using electronic nose technology and ultra-fast gas chromatography, *Monatshefte Fur Chemie*. 148 (2017) 1631–1637.

Conferences, chapters and peer reviewed articles in non-JCR listed journals

- [1] Wojnowski W., Kalinowska K., Machine Learning and Electronic Noses for Medical Diagnostics, *Springer Nature Reference - Artificial Intelligence in Medicine*, ed. N. Lidströmer and H. Ashrafian (2021)
- [2] Wojnowski W., Marcinkowska R., Zabiegała B., Real-time monitoring of volatiles and particles emitted from thermoplastic filaments during 3D printing, *IOP Conference Series: Materials Science and Engineering* 1150 (2021) 012001
- [3] Wojnowski W., Majchrzak T., Dymerski T., Gębicki J., Namieśnik J., Modular electronic nose for food quality assessment, *18th International Symposium on Olfaction and Electronic Nose*, Fukuoka, Japan, 2019
- [4] Wojnowski W., Majchrzak T., Gębicki J., Dymerski T., Namieśnik J., Comparison of the measurement techniques employed for evaluation of ambient air odour quality, *14th International Conference on Optical and Electronic Sensors*, Gdańsk, Poland, 2016
- [5] Lewkowska P., Byliński H., Wojnowski W., Dymerski T., Gębicki J., Namieśnik J., Comparison of the Measurement Techniques Employed for Evaluation of Ambient Air Odour Quality Influenced by Operation of Industrial Sewage Treatment Plant, *5th International Conference on Environmental Odour Monitoring & Control*, Ischia, Italy, 2016
- [6] Wojnowski W., Majchrzak T., Dymerski T., Namieśnik J., Meat freshness classification using ultra-fast gas chromatography, *12th International Students Conference Modern Analytical Chemistry*, Prague, Czech Republic, 2016
- [7] Majchrzak T., Wojnowski W., Dymerski T., Gębicki J., Namieśnik J., Electronic Noses for Indoor Air Quality Assessment, in: *Electronic Nose Technologies and Advances in Machine Olfaction*, ed. Y. Albastaki, F. Albalooshi, IGI Global, 2018
- [8] Kalinowska K., Wojnowski W., Dymerski T., Namieśnik J., Evaluation of poultry meat shelf life using proton transfer reaction mass spectrometry, *13th International Students Conference Modern Analytical Chemistry*, Prague, Czech Republic, 2017
- [9] Kalinowska K., Wojnowski W., Namieśnik J., Instrumental techniques used in the analysis of exhaled air, *World Scientific News*. 75 (2017) 64–72
- [10] Sówka I., Kolasińska P., Byliński H., Wojnowski W., Miller U., Dymerski T., Gębicki J., Namieśnik J., The assessment of odour concentration in the areas adjacent to selected sources of emission in the Tricity agglomeration using field olfactometry, *The Problems of Air Pollution and Purification Conference*, Kiev, Ukraine, 2016

- [11] Gębicki J., Wojnowski W., Dymerski T., Namieśnik J., Application of the Electronic Nose for Odour Intensity Assessment of Ambient Air, *First international Odours Conference*, Gdańsk, Poland, 2016
- [12] Wojnowski W., Majchrzak T., Gębicki J., Dymerski T., Namieśnik J., Identification of Outdoor Air Pollutants with the Electronic Nose, *First international Odours Conference*, Gdańsk, Poland, 2016