

Curriculum Vitae

Personal Information	Name	Dariusz Więclaw	Gender	Male	
	Academic Title	Professor			
	College	AGH University of Science and Technology			
	Discipline	Earth Sciences			
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Educational Background	AGH University of Science and Technology - MSc. Eng. chemical technology, 1992 AGH University of Science and Technology - PhD, Earth Sciences, Geology, 2002 AGH University of Science and Technology - Habilitation, Earth Sciences, Geology, 2013				
Working Experience	<p>1992 - 1996 Junior Researcher, AGH University of Science and Technology</p> <p>1996 - 1997 Engineer, AGH University of Science and Technology</p> <p>1997 – 1998 Assistant, AGH University of Science and Technology</p> <p>1998 – 2003 Specialist, AGH University of Science and Technology</p> <p>2003 – 2019 Assistant Professor, AGH University of Science and Technology</p> <p>2019 – present Professor, AGH University of Science and Technology</p>				
Research Interests	<ol style="list-style-type: none"> petroleum geochemistry: establishing correlations between oil, gas and dispersed organic matter (biomarkers, stable isotopes, elemental composition), processes related to the maturation of organic matter: hydrocarbon generation, thermal cracking and interactions between organic matter and mineral matrix methods of simulation of the organic matter transformation (Rock-Eval, hydrous pyrolysis): evaluation of kinetic parameters, role of sulphur in kerogen transformation self-heating and self-ignition of coal wastes: conditions, kinetics and products (environmental impact) 				
Major Publications*	<p>Więclaw D., 2016. Habitat and hydrocarbon potential of the Kimmeridgian strata in the central part of the Polish Lowlands. <i>Geological Quarterly</i>, 60, 192–210.</p> <p>Kotarba M.J., Więclaw D., Bilkiewicz E., Dziadzio P., Kowalski A., 2017. Genetic correlation of source rocks and natural gas in the Polish Outer Carpathians and Paleozoic–Mesozoic basement east of Kraków (southern Poland). <i>Geological Quarterly</i>, 61, 795–824.</p> <p>Kosakowski P., Kotarba M.J., Piestrzyński A., Shagenova A., Więclaw D., 2017. Petroleum source rock evaluation of the Alum and Dictyonema Shales (Upper Cambrian–Lower Ordovician) in the Baltic Basin and Podlasie Depression (eastern Poland). <i>International Journal of Earth Sciences</i>, 106, 743–761.</p> <p>Słowakiewicz, M., Blumenberg, M., Więclaw, D., Rohling, H.G., Scheeder, G., Hindenberg, K., Leśniak, A., Idiz, E.F., Tucker, M.E., Pancost, R.D., Kotarba, M.J., Gerling, J.P., 2018. Zechstein main Dolomite oil characteristics in the Southern Permian Basin: I. Polish and German sectors. <i>Marine and Petroleum Geology</i>, 93, 356-375.</p>				

	<p>Waliczek M., Machowski G., Więclaw D., Konon A., Wandycz P., 2019. Properties of solid bitumen and other organic matter from Oligocene shales of the Fore-Magura Unit in Polish Outer Carpathians: microscopic and geochemical approach. <i>International Journal of Coal Geology</i>, 210, 103206.</p> <p>Kotarba M.J., Więclaw D., Bilkiewicz E., Radkovets N.Y., Koltun Y.V., Kmiecik N., Romanowski T., Kowalski A., 2019. Origin and migration of oil and natural gas in the western part of the Ukrainian Outer Carpathians: Geochemical and geological approach. <i>Mar. Petrol. Geol.</i>, 103, 596-619.</p> <p>Jirman P., Geršlová E., Bubík M., Sachsenhofer R.F., Bechtel A., Więclaw D., 2019. Depositional environment and hydrocarbon potential of the Oligocene Menilite Formation in the Western Carpathians: a case study from the Loučka section (Czech Republic). <i>Marine and Petroleum Geology</i>, 107, 334–350.</p> <p>Kotarba M.J., Więclaw D., Bilkiewicz E., Lillis P.G., Dziadzio P., Kmiecik N., Romanowski T., Kowalski A., 2020. Origin, migration and secondary processes of oil and natural gas in the central part of the Polish Outer Carpathians. <i>Mar. Petrol. Geol.</i>, 121, 104617.</p> <p>Fabiańska M.J., Nádudvari A., Ciesielczuk J., Szram E., Misz-Kennan M., Więclaw D., 2020. Organic contaminants of coal-waste dump water in the Lower- and Upper Silesian Coal Basins (Poland). <i>Applied Geochemistry</i>, 122, 104690.</p> <p>Kotarba M.J., Bilkiewicz E., Więclaw D., Radkovets N.Y., Koltun Y.V., Kowalski A., Kmiecik N., Romanowski T., 2020. Origin and migration of oil and natural gas in the central part of the Ukrainian outer Carpathians: geochemical and geological approach. <i>AAPG Bulletin</i>, 104, 1323–1356.</p> <p>Więclaw D., Bilkiewicz E., Kotarba M.J., Lillis P.G., Dziadzio P.S., Kowalski A., Kmiecik N., Romanowski T., Jurek K., 2020. Origin and secondary processes in petroleum in the eastern part of the Polish Outer Carpathians. <i>International Journal of Earth Sciences</i>, 109, 63–99.</p>
<p>Research Projects*</p>	<p>2013-2017: investigator of project „Blue gas – Polish shale gas” (tasks: „Geochemical-mineralogical-petrophysical method for testing range and resources” and „Methodology of determining sweet spots based on geochemical, petrophysical, geomechanical properties based on correlation of laboratory results with geophysical measurements and 3D generation model”). Cooperation with Polish Oil and Gas Company in Warsaw and Oil and Gas Institute in Krakow</p> <p>2015–2018: investigator of project: ”Genetic oil-natural gas correlation and secondary processes in the Cretaceous-Lower Miocene strata of the Polish and Ukrainian Carpathians in Comparison with Bighorn and Wind River basins (U.S.A., Wyoming-Montana) based on organic geochemistry studies”. Cooperation between the AGH University of Science and Technology in Krakow and U.S. Geological Survey in Denver [American principal investigator: Dr. P.G. Lillis]</p> <p>2017-2020: investigator of project: „Explanation of the mechanisms of generation, migration and mixing of natural gas on the example of accumulation in the Upper Palaeozoic formations of the Upper Silesian and Lublin Basins and the Miocene of the Carpathian Foredeep on the basis of its composition of C, H, N, Ne, He, Ar, Kr and Xe stable isotopes, geochemical characteristics of source rocks (experiments of hydrous pyrolysis and set of analyses) and geological conditions”. Cooperation between the AGH University of Science and Technology in Krakow and the University of Tokyo [Japanese principal investigator: prof. H. Sumino]</p> <p>2018-2021: co-principal investigator of project: „Evaluation of the quantity and chemical composition of pollutants emitted during self-heating processes of coal waste simulated by hydrous and anhydrous pyrolysis and high-temperature oxidation”. Joint grant of University of Silesia in Katowice and the AGH University of Science and Technology in Krakow [principal investigator from University of Silesia: prof. M. Fabiańska]</p>

	2018-2022: investigator of project: "Development of an innovative concept for hydrocarbon exploration in the deep structures of the Outer Carpathians" (principal investigator of task: "Laboratory simulations of gaseous and liquid hydrocarbon generation processes by means of an innovative hydrous pyrolysis (HP) method"). Cooperation with Polish Oil and Gas Company in Warsaw, Polish Geological Institute in Krakow and Oil and Gas Institute in Krakow
Professional Membership	European Association of Geoscientist & Engineers - since 2001 European Association of Organic Geochemists - since 2003 European Association of Geochemistry – since 2011
Potential Research Projects**	<ol style="list-style-type: none"> 1. Application of hydrous pyrolysis and bio- and geochemistry for determination of mechanism of petroleum generation and expulsion from selected Polish and Chinese shale oil/gas complexes. 2. Study on the susceptibility of coal wastes to self-heating: influence of coal rank and mineral matrix composition

* Please list achievements of recent 5 years

** This CV is intended to match Chinese and Polish Scientists within SPUC member universities, and Potential Research Projects is intended to apply for Sino-Polish or EU scientific cooperation projects.