

# Curriculum Vitae

<b>Personal Information</b>	<b>Name</b>	Maciej Manecki	<b>Gender</b>	Male	
	<b>Academic Title</b>	professor			
	<b>College</b>	AGH University of Science and Technology			
	<b>Discipline</b>	Earth and Environmental Sciences			
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<b>Educational Background</b>	<p>2009 habilitation in applied geochemistry, AGH Krakow</p> <p>1999 PhD in geochemistry (mineral-water interaction, Kent State University, Kent, Ohio, USA)</p> <p>1989 MSc in chemistry (inorganic and analytical chemistry, Jagiellonian University, Krakow),</p> <p>1985 MSc in geology (applied mineralogy, AGH Krakow),</p>				
<b>Working Experience</b>	<p>2019 -&gt; researcher, Department of Earth Sciences, <i>Mineralogy, Petrology and Tectonics</i>, Uppsala University, Uppsala</p> <p>2010 -&gt; Professor, Department of Mineralogy, Petrography and Geochemistry, AGH University of Science and Technology, Kraków, Poland.</p> <p>1999 – 2009 Assistant Professor, Department of Mineralogy, Petrography and Geochemistry, AGH University of Science and Technology, Kraków, Poland.</p> <p>1999 – 2006 Visiting Professor, Department of Environmental Engineering, International School of Technology, Kraków, Poland (collaboration effort of AGH Kraków and Illinois Institute of Technology, Chicago, IL)</p> <p>2005 Sturgeon Visiting Professor, Department of Geological Sciences, Ohio University, Athens, OH, USA</p> <p>2004 Research Scientist, Department of Civil Engineering and Geological Sciences, University of Notre Dame, South Bend, IN, USA</p> <p>2000 – 2001 Post-doctoral Research Scientist, University of Notre Dame, South Bend, IN, USA</p> <p>1993 – 1999 PhD position, Kent State University, Kent, Ohio, USA</p> <p>1986 – 2018 field geologist, Geological Polar Expeditions to Spitsbergen (15 summer field seasons)</p>				
<b>Research Interests</b>	<p>Applied and experimental mineralogy</p> <p>Mineral-water interactions and structure of apatites, particularly Pb and As apatites</p> <p>Mineralogy of REE, REE recovery and extraction</p> <p>Bio-mineralogy, interaction of Pb-apatites with bacteria</p> <p>Environmental pollution with Pb and As</p> <p>Geology of Polar regions, geochronology of crystalline basement of Svalbard Archipelago, Arctic</p>				
<b>Major Publications*</b>	<p>Gabriela PIECZARA, Maciej MANECKI, Grzegorz RZEPA, Olaf Borkiewicz, Adam GAWEL. 2020. Thermal stability and decomposition products of P-doped ferrihydrite. <i>Materials</i>. ISSN 1996-1944. — 2020 vol. 13 iss. 18 art. no. 4113, s.</p>				

	<p>1–16.</p> <p>Maciej MANECKI, Monika KWAŚNIAK-KOMINEK, Jarosław M. MAJKA, John Rakovan. 2020. Model of interface-coupled dissolution-precipitation mechanism of pseudomorphic replacement reaction in aqueous solutions based on the system of cerussite <math>PbCO_3</math>– pyromorphite <math>Pb_5(PO_4)_3Cl</math>. <i>Geochimica et Cosmochimica Acta : Journal of The Geochemical Society and The Meteoritical Society</i> ; ISSN 0016-7037. — 2020 vol. 289, s. 1–13.</p> <p>Edyta WALUŚ, Maciej MANECKI, Grzegorz CIOS. 2020. Synthesis and characterization of <math>Cu_2FeSn_4</math>–<math>Cu_2MnSn_4</math> solid solution microspheres. <i>Materials</i>; ISSN 1996-1944. — 2020 vol. 13 iss. 19 art. no. 4440, s. 1–18.</p> <p>Julia Sordyl, Bartosz PUZIO, Maciej MANECKI, Olaf Borkiewicz, Justyna TOPOLSKA, Sylwia ZELEK-POGUDZ. 2020. Structural assessment of fluorine, chlorine, bromine, iodine, and hydroxide substitutions in lead arsenate apatites (mimetites)–<math>Pb_5(AsO_4)_3X</math>. <i>Minerals</i>; ISSN 2075-163X. — 2020 vol. 10 iss. 6 art. no. 494, s. 1–19.</p> <p>Karol Faehnrich, Jarosław MAJKA, David Schneider, Stanisław Mazur, Maciej MANECKI, Grzegorz ZIEMNIAK, Virginia T. Wala, Justin V. Strauss. 2020. Geochronological constraints on Caledonian strike-slip displacement in Svalbard, with implications for the evolution of the Arctic. <i>Terra Nova</i> ; ISSN 0954-4879. — 2020 vol. 32 iss. 4, s. 290–299. — Bibliogr. s. 297-298</p> <p>Karolina KOŚMIŃSKA, Frank S. Spear, Jarosław MAJKA, Karol Faehnrich, Maciej MANECKI, Karsten Piepjohn, Winfried K. Dallmann. 2020. Deciphering late Devonian-early Carboniferous <math>\{P-T-t\}</math> path of mylonitized garnet-mica schists from Prins Karls Forland, Svalbard. <i>Journal of Metamorphic Geology</i> ; ISSN 0263-4929. — 2020 vol. 38 iss. 5, s. 471–493.</p> <p>Tomasz BAJDA, Maciej MANECKI, Marek Matyjasik. 2019. The early stages of mimetite dissolution in EDTA studied with atomic force microscopy and scanning electron microscopy. <i>Microscopy and Microanalysis</i> ; ISSN 1431-9276. — 2019 vol. 25 iss. 3, s. 810–816.</p> <p>Lempart M., Manecki M., Kwaśniak-Kominek M., Matusik J., Bajda T. 2019. Accommodation of the carbonate ion in lead hydroxyl arsenate (hydroxylmimetite) <math>Pb_5(AsO_4)_3OH</math>. <i>Polyhedron</i> ; ISSN 0277-5387. — 2019 vol. 161, s. 330–337. — Bibliogr. s. 337</p> <p>Bartosz PUZIO, Maciej MANECKI, Monika KWAŚNIAK-KOMINEK. 2018. Transition from endothermic to exothermic dissolution of hydroxyapatite <math>Ca_5(PO_4)_3OH</math>-johnbaumite <math>Ca_5(AsO_4)_3OH</math> solid solution series at temperatures ranging from 5 to 65°C. <i>Minerals</i>; ISSN 2075-163X. — 2018 vol. 8 iss. 7 art. no. 281, s. 1–21.</p> <p>Urszula SOLECKA, Tomasz BAJDA, Justyna TOPOLSKA, Sylwia ZELEK-POGUDZ, Maciej MANECKI. 2018. Raman and Fourier transform infrared spectroscopic study of pyromorphite-vanadinite solid solutions. <i>Spectrochimica Acta. Part A, Molecular and Biomolecular Spectroscopy</i> ; ISSN 1386-1425. — 2018 vol. 190, s. 96–103.</p> <p>Łukasz DREWNIĄK, Aleksandra SKŁODOWSKA, Maciej MANECKI, Tomasz BAJDA. 2017. Solubilization of Pb-bearing apatite <math>Pb_5(PO_4)_3Cl</math> by bacteria isolated from polluted environment. <i>Chemosphere</i> ; ISSN 0045-6535. — 2017 vol. 171, s. 302–307.</p>
<p><b>Research Projects*</b></p>	<ul style="list-style-type: none"> <li>• Polish National Research Centre research grant OPUS18 (2020 – 2023), principal investigator, “Substitutions of rare earth elements and U in lead apatite <math>Pb_5(PO_4)_3Cl</math>”.</li> <li>• Polish-American research grant funded by National Science Centre, Poland, principal investigator on Polish side: “Precise determination of dissolution constant <math>K_{sp}</math> at 5 – 65 °C, <math>\Delta H_f</math>, <math>\Delta G_f</math>, <math>\Delta S</math> and <math>C_p</math> of apatite solid solutions in the series Ca-Pb-P-As-OH-Cl”</li> </ul>

	<ul style="list-style-type: none"> <li>• Polish Ministry of Science and Higher Education Grant “Microbially enhanced dissolution of pyromorphite <math>Pb_5(PO_4)_3Cl</math> – the effect on lead remobilization”</li> <li>• Polish Ministry of Science and Higher Education Grant, principal investigator, “Mechanisms of heavy metals mobilization in soils due to bacteria active scavenging for phosphate”</li> <li>• Polish Ministry of Science and Higher Education Grant for Ph.D. project: “Reduction of bioavailability of Pb and As by precipitation of pyromorphite and mimetite in the presence of bacteria”</li> <li>• Polish Ministry of Science and Higher Education Grant (2006-2009), co-investigator, “Age and character of Torellian unconformity in Wedel Jarlsberg Land, Spitsbergen”</li> <li>• International Polar Year research project – part of the cluster APEX (2007-2008), principal investigator, “Direct study of inorganic and microbial weathering of minerals in the foreland of a glacier retreating due to global warming”, partially funded by AGH-University of Science and Technology</li> </ul>
<b>Professional Membership</b>	<p>Mineralogical Society of Poland</p> <p>Mineralogical Society of America</p> <p>Geochemical Society</p>
<b>Potential Research Projects**</b>	<ul style="list-style-type: none"> <li>- Pb and As immobilization in polluted areas</li> <li>- REE mineralization and extraction from unconventional sources</li> <li>- biomineralogy</li> <li>- synthesis of minerals</li> </ul>

\* 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.