

Europass Curriculum Vitae



Personal information

First name(s) / Surname(s)	Hejmanowska Beata Joanna		
Address(es)	ul. Przemyska 4/10, 31-059 Kraków, Poland		
Telephone(s)	+48126173826	Mobile:	+48605061510
E-mail	galia@agh.edu.pl		
Nationality	Polish		
Date of birth	28.05.1962		
Gender	Female		

Desired employment / Occupational field

Work experience

Dates	30.10.1986 until now		
Occupation or position held	at the beginning: assistant, then: assistant professor, Vice-Dean for Science, Cooperation and Development (2008-2009, 2012-2016) now: Head of Department of Photogrammetry Remote Sensing of Environment and Spatial Engineering		
Main activities and responsibilities	Education, scientific research		
Name and address of employer	AGH - University of Science and Technology al. Mickiewicza 30, 30-059 Kraków, Poland		
Type of business or sector	University		
Dates	1.10.2012-31.09.2017		
Occupation or position held	professor		
Main activities and responsibilities	Education, scientific research		
Name and address of employer	Kielce University of Technology aleja Tysiąclecia Państwa Polskiego 7, 25-314 Kielce, Poland		
Type of business or sector	University		
Dates	16.10.2009 -15.10.2011		
Occupation or position held	Geomatics specialis, GH40 (grantholder 40, senior scientist)		
Main activities and responsibilities	monitoring and high spatial resolution information extraction for agricultural resources		
Name and address of employer	European Commission Directorate General, Joint Research Centre Via Enrico Fermi, 2749, 21027 Ispra VA, Italy		
Type of business or sector	EC		
Dates	10.05.-31.05.1996		
Occupation or position held	CEEPUS fellowship		
Main activities and responsibilities	Education, PhD Thesis completion		
Name and address of employer	Graz University of Technology, Institute of Geodesy, Inffeldgasse 16a, 8010 Graz, Austria		

Type of business or sector	University										
Dates	01.01.1991 – 30.06.1992										
Occupation or position held	Visiting researcher										
Main activities and responsibilities	scientific research										
Name and address of employer	TU Clausthal Institut für Erdöl- und Erdgastechnik Agricolastraße 10, 38678 Clausthal-Zellerfeld										
Type of business or sector	University										
Education and training											
Dates	9 th of February 2017										
Title of qualification awarded	Title of full professor										
Principal subjects/occupational skills covered	Scientific title given for academic and education purposes to university staff										
Name and type of organisation providing education and training	President of Polish Republic										
Level in national or international classification	The highest national scientific level										
Dates	2006 postdoctoral examination – Photogrammetry, Remote Sensing and GIS										
Title of qualification awarded											
Principal subjects/occupational skills covered	Dissertation: "Data Quality Effect on Risk of Decision Processes Supported by GIS Analyses" (in Polish)										
Name and type of organisation providing education and training	AGH - University of Science and Technology al. Mickiewicza 30, 30-059 Kraków, Poland										
Level in national or international classification	Professor, exam to qualify for lecturing and independent research										
Dates	1997 PhD examination										
Title of qualification awarded	PhD Photogrammetry and Remote Sensing										
Principal subjects/occupational skills covered	PhD dissertation: "Thermal inertia modelling for soil moisture assessment based on remotely sensed data" (in Polish), supervisor: prof. Z. Sitek										
Name and type of organisation providing education and training	AGH - University of Science and Technology al. Mickiewicza 30, 30-059 Kraków, Poland										
Level in national or international classification	PhD										
Dates	1981-1986										
Title of qualification awarded	MSc Eng Geodesy and Cartography, Environmental monitoring										
Principal subjects/occupational skills covered	MSc thesis: „Thermovison measurements of laboratory prepared soil samples” (in Polish), supervisor: prof. S.Mularz										
Name and type of organisation providing education and training	AGH - University of Science and Technology al. Mickiewicza 30, 30-059 Kraków, Poland										
Level in national or international classification	MSc Eng										
Personal skills and competences											
Mother tongue(s)	Polish										
Other language(s)	English, German, French, Russian, Italian										
Self-assessment	Understanding				Speaking				Writing		
<i>European level (*)</i>	Listening		Reading		Spoken interaction		Spoken production				
English	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	B2	Independent user	

German	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	B1	Independent user
French	B2	Independent user	B1	Independent user	A2	Basic user	A2	Basic user	A1	Basic user
Russian	B2	Independent user	B1	Independent user	A1	Basic user	A1	Basic user	A1	Basic user
Italian	A2	Basic user	A2	Basic user	A2	Basic user	A2	Basic user	A2	Basic user

Social skills and competences	team spirit good ability to adapt to multicultural environments, gained through my work experience abroad and international projects good communication skills gained through my experience as university teacher
Organisational skills and competences	good experience in project management and scientific research as a tutor of 5 PhD students (all after final examination), PRINCE2® Foundation Certificate in Project Management, 2019, number: GR656109702BH
Technical skills and competences	
Computer skills and competences	good command of Office software (word, excel), CAD (Microstation), GIS (ArcGIS, Geomedia, Idrisi, Ilwis, SAGA), Remote Sensing software (PCI Geomatics, Envi, Idrisi, Ilwis, SAGA, SNAP ESA), Postgres, PostGIS, Python, machine learning
Other skills and competences	
Driving licence	Category B

1. Kramarczyk P, Hejmanowska B., 2023 - UNET NEURAL NETWORK IN AGRICULTURAL LAND COVER CLASSIFICATION USING SENTINEL-2, *Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci.*, XLVIII-1/W3-2023, 85–90, <https://doi.org/10.5194/isprs-archives-XLVIII-1-W3-2023-85-2023>, 2023
2. Malczewska, A., Malczewski, J., and Hejmanowska, B.: CHALLENGES IN PREPARING DATASETS FOR SUPER-RESOLUTION ON THE EXAMPLE OF SENTINEL-2 AND PLANET SCOPE IMAGES, *Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci.*, XLVIII-1/W3-2023, 91–98, <https://doi.org/10.5194/isprs-archives-XLVIII-1-W3-2023-91-2023>, 2023.
3. Sobura, S., Hejmanowska, B., Widlak, M., & Muszyńska, J. (2022). The Application of Remote Sensing Techniques and Spectral Analyses to Assess the Content of Heavy Metals in Soil – A Case Study of Barania Góra Reserve, Poland. *Geomatics and Environmental Engineering*, 16(4), 187–213. <https://doi.org/10.7494/geom.2022.16.4.187>
4. Hejmanowska, B.; Kramarczyk P. (2022). [Crop Identification Using One-Shot Airborne Hyperspectral Images](#), 12th EARSeL Workshop on Imaging Spectroscopy in Potsdam
5. Hejmanowska, B.; Kramarczyk, P.; Głowienka, E.; Mikrut, S. (2021). Reliable Crops Classification Using Limited Number of Sentinel-2 and Sentinel-1 Images. *Remote Sens.* 2021, 13, 3176. <https://doi.org/10.3390/rs13163176>
6. Hejmanowska, B., Twardowski, M., & Żądło, A. (2021). An Application of the “Traffic Lights” Idea to Crop Control in Integrated Administration Control System. *Geomatics and Environmental Engineering*, 15(4), 129–152. <https://doi.org/10.7494/geom.2021.15.4.129>
7. Hejmanowska B. Wężyk P., 2021 (red.) Satellite data for public administration (in Polish), Polska Agencja Kosmiczna, © Copyright by Polska Agencja Kosmiczna 2020
8. Hejmanowska B., Głowienka E., Michałowska K., Mikrut S., Kramarczyk P., Opaliński P., Twardowski M., Guidi G., Gonizzi Barsanti S., Micoli L., Shafqat Malik U., Gonzalez-Aguilera D., Sanchez-Aparicio L.J., Rodríguez-Gonzálvez P.R., Muñoz-Nieto A.L., Mills J., Peppas M.V., 2019 - “The Comparison of the Web GIS Applications Relevant for 4D Models Sharing” - *IOP Earth and Environmental Sciences*
9. Hejmanowska B., Mikrut S., Struś A., Głowienka E., Michałowska K., - 2018 - “4D models in World Wide Web”, 2018 Baltic Geodetic Congress : 21–23 June 2018, Olsztyn: IEEE, cop. 2018. — e-ISBN: 978-1-5386-4898-8.DOI:10.1109/BGC-Geomatics.2018.00007
10. de Kok R., Wężyk P., Hejmanowska B., J. Książek J., 2018 - “Distance to neighbour calculations among OBIA primitives as an innovation to urban mapping techniques” *International Journal of Image and Data Fusion* ; ISSN 1947-9832. — 2018 vol. 9 iss. 1, pp 21–42
11. Rodríguez-Gonzálvez P., Muñoz-Nieto A.L, del Pozo S., Sanchez-Aparicio L.J, Gonzalez-Aguilera D., Micoli L., Barsanti S.G, Guidi G., Mills J., Fieber K., Haynes J., Hejmanowska B. 2017 - “4D reconstruction and visualization of cultural heritage: Analyzing our legacy through time”, *The International Archives of Photogrammetry, Remote Sensing and Spatial Information Sciences*, Vol. 42, Copernicus GmbH
12. Głowienka E., Hejmanowska B., Mikrut S., Kramarczyk P., Struś A., Michałowska K., Opaliński P., 2017, “4D Reconstruction and Visualisation of Krakow Fortress,” 2017, Baltic Geodetic Congress (BGC Geomatics), Gdansk, 2017, pp. 1-5, IEEE, DOI: 10.1109/BGC.Geomatics.2017.83
13. Michałowska K., Głowienka E., Hejmanowska B., 2017- “Remote Sensing Methods in the Study of the Impact of Long-Term Process of Sulphur Mining on Environmental Changes of the Carpathian Foreland,” 2017 Baltic Geodetic Congress (BGC Geomatics), Gdansk, 2017, pp. 292-296. doi: 10.1109/BGC.Geomatics.2017.80
14. Głowienka E., Michałowska K., Opaliński P., Hejmanowska B., Mikrut S., Kramarczyk P., 2017 - “Use of LIDAR data in the 3D/4D analyses of the Krakow fortress objects” / *IOP Conference Series: Materials Science and Engineering* ; ISSN 1757-8981. — 2017 vol. 245 art. no. 042080, doi:10.1088/1757-8981/245/4/042080
15. Hejmanowska B., Głowienka E., Michałowska K., 2016, -“Free Satellite Imagery for Monitoring Reclaimed Sulphur Mining Region Tarnobrzeg”, Poland, Geodetic Congress (Geomatics), Baltic, Publisher: IEEE, DOI: 10.1109/BGC.Geomatics.2016.32
16. Hejmanowska B. Głowienka E., Florek-paszowski, 2016, On-line GIS analysis and image processing for geoportal Kielce/Poland development, *int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci.*, XLI-B2, 197-200, 2016
17. Głowienka, E., Michałowska, K., Pekala, A., Hejmanowska, B., 2016 - “Application of GIS and Remote Sensing Techniques in Multi-temporal Analyses of Soil Properties in the Foreland of the Carpathians.” *IOP Conference Series: Earth and Environmental Science (EES) - World Multidisciplinary Earth Sciences Symposium, WMES*, 2015 : 5–9 September 2016, Prague,

Czech Republic

18. Michalowska, K., Glowienka, E., Hejmanowska, B. 2016 - "Temporal Satellite Images in The Process of Automatic Efficient Detection of Changes of the Baltic Sea Coastal Zone". IOP Conference Series: Earth and Environmental Science (EES) - World Multidisciplinary Earth Sciences Symposium, WMES 2015 : 5–9 September 2016, Prague, Czech Republic
19. Hejmanowska B., Kamiński W., Przyborski M., Pyka K., Pырchla J., 2015 - "Modern remote sensing and the challenges facing education systems in terms of its teaching ", Edulearn Proceedings
20. Hejmanowska B., 2013 - "Zastosowanie rozkładu Laplace'a do określania niepewności danych przestrzennych na przykładzie NMT i systemu IACS", Wydawnictwa AGH, Kraków, ISBN 978-83- 7464-649-9
21. Zhu Q. , Hejmanowska B., 2013 - "Analysis of GIS - based spatial variability and risk assessment", Journal of Chemical and Pharmaceutical Research, 2013, 5(9):372-380
22. Zhu Q., Chen J., Ma D., Hejmanowska B., 2012 - "Land suitability evaluation and shelters planning for cities and towns disaster prevention", China Science and Technology Press, 159 pp, ISBN: 978-7-5046- 6028-2
23. Hejmanowska B., Loudjani P., Luckau C., Ganisheva K., 2012 "Maussane study on GNSS measurements: preliminary results", 17th Conference GEOCAP – Tallinn 23-24-25 November 2011 'Geomatics in support of the CAP: towards a sound management of rural land areas', ISBN 978-92-79-26644-7
24. Taşdemir K., Loudjani P., Angileri V., Hejmanowska B, Lucku C., Milenov P., Wirthardt C., Pizzoli P., 2010 – red. JRC Monograph, Geomatics in support of the Common Agricultural Policy, Proceedings of the 16th GeoCAP Annual Conference, 2010, Centro Congressi Giovanni, XXIII, Bergamo 24th-26th November 2010
25. Hejmanowska, B., Drzewiecki W. Wróbel A., 2008 - ISO5725-2 standard application to verification of orthophoto-based impervious surface area and imperviousness factor determination, The International Archives of the Photogrammetry, Remote sensing and Spatial Information Science, Vol. XXXVII, ISSN 1682-1750
26. Hejmanowska B., 2005 – „Wpływ jakości danych na ryzyko procesów decyzyjnych wspieranych analizami GIS”, ISSN 0867-6631, Uczelniane Wydawnictwa Naukowo-Dydaktyczne AGH, Kraków
27. Hejmanowska B., Glowienka E. 2004 - "Hyperspectral remote sensing - a new tool in soil degradation monitoring ", Interdisciplinary International Journal Agribusiness landscape and environment management, Udine, Italy, 2003
28. Hejmanowska B., Glowienka E. – 2003 „Application of GIS (Geographical Information System) in wide-spread publishing of environmental database for increasing consciousness of citizen”, Archiviare Centro Studi di Estimo ed Economia Territoriale, Cagliari , Italy 2003,
29. Hejmanowska B. 2003, - „Application of remote sensing imagery for environmental changes”, 4Geokinematisher Tag 15-16 Mai 2003 Freiberg, Verlag Gluckauf, Essen, Germany
30. Hejmanowska B. , 2003 – „Data inaccuracy in Geographical Information System - propagation of DTM and orthophotomap errors in the spatial analysis”, Geodesy 40: "Geodesy, Photogrammetry and Monitoring of Environment", wydawnictwa PAN, Kraków 2003
31. Hejmanowska B. Mularz S. , 2000, - „Integration of multispectral ERS.2 SAR and Landsat TM data for soil moisture assessment” - Int. Archives of Photogrammetry and Remote sensing XVIII ISPRS Congress , Amsterdam, Holland
32. Hejmanowska B., 1998, " Removal of topographical effect from remote sensing data for thermal inertia modeling" WG IV/1, ISPRS Commission IV Symposium: "GIS – Between Vision and Application", September 7-10, 1998, Stuttgart, Germany
33. Hejmanowska B., Mularz S., 1996 „Thermal inertia modelling for soil moisture assessment based on remotely sensed data” Int. Archives of Photogrammetry and Remote sensing XVII ISPRS Congress , Vienna, Austria
34. Hejmanowska B., 1992 "Topographic correction of the remote sensing data". XVII Congress, ISPRS Washington, Commission II, 43-51
35. Mularz S.C., Hejmanowska B., 1990 "Digital processing of remotely sensed data for thermal inertia mapping" - in International Archives of Photogrammetry and Remote Sensing, International Symp. Com. III of ISPRS, „Progress in data analysis”, Wuhan, China, May 20-24.
36. Hejmanowska B., 1995 „Beseitigung des topographisches Effektes - praktische Ergebnisse”, Vortrage 15. Wissenschaftlich-Technische Jahrestagung der DGPF Hannover, Deutschland, 4-6 October 1995,
37. Hejmanowska B., 1989 „Attempt for modeling of soil thermal inertia „ 6th Conference on Thermogrammetry and Thermal Engineering, Budapest, Hungary, 31 May - 2 June 1989,
38. Mularz S., Hejmanowska B., 1987 „ Laboratory tests of specially prepared soil samples using

Additional information

Projects (selected):

1. 01.07.2021 – 31.12.2023 Inteligentny system detekcji i monitoringu wyrobisk górnictwa z wykorzystaniem systemów satelitarnych i GIS (MineSens), współfinansowany przez Unię Europejską ze środków: Europejskiego Funduszu Rozwoju Regionalnego w ramach Programu Operacyjnego Inteligentny Rozwój. Projekt realizowany w ramach konkursu Narodowego Centrum Badań i Rozwoju: 6/1.1.1/2020 Szybka ścieżka, nr umowy POIR.01.01.01-00-1465/20-00, ekspert
2. 01.10.2020 - 30.06.2023 Zautomatyzowany system precyzyjnych pomiarów objętościowych – VolumeMonit, Narodowe Centrum Badań i Rozwoju, POIR.04.01.04-00-0108/19, ekspert
3. 2020-2022 [Integracja danych teledetekcyjnych na potrzeby kontroli w systemie dopłat bezpośrednich do rolnictwa \(IACS\)](#), [Inicjatywa Doskonałości – Uczelnia Badawcza – AGH](#), kierownik projektu
4. 15.06.2019 – 15.12.2019 [The application of hyper-spectral data in the monitoring of agricultural activities of the beneficiaries of the Agency for Restructuring and Modernization of Agriculture \(ARMA\) and supporting its business processes](#) (access need password) Agency for Restructuring and Modernisation of Agriculture (ARMA) project, expert
5. 15.06.2018 – 15.12.2018 [Requirements for expertise in the use of Sentinel 1 and 2 imagery to monitor the agricultural activity of the ARMA beneficiaries](#), (access need password) Agency for Restructuring and Modernisation of Agriculture (ARMA) project, expert
6. 01.01.2018 – 31.03.2019 [AMMER: Automated Method for Measuring Eutrophication of Inland Water Using Remote Sensing](#), ESA project, team leader
7. 2014-2017 - [RID - Development of road innovations, modern methods of soil identification in road engineering](#), NCBIR (National Center for Research and Development), (in Polish)
8. 12.02 – 30.06.2017 - External quality control under digitalisation of land parcel identification system, Turkey - Agrotec S.p.A. as Senior LPIS Expert
9. 12.06.2016-30.06.2018 - [CHT2 - Cultural Heritage Through Time](#), project no 013/DSAP-JG/HERITAGEPLUS/2016, Joint Programming Initiative on Cultural Heritage and Global Change: a new challenge for Europe HERITAGE PLUS Call, team leader
10. 30-08.2012 – 31.01.2016 - Sustainable Land and Water Management of Reservoir Catchments (SaLMaR) – Polish German cooperation, team leader
11. 31.07.2007 – 30.11.2007 [Processing airborne data to Digital Surface Model and Digital Terrain Model](#), Joint Research Centre, Ispra, Italy, team leader
12. 22.11.2006 – 31.03.2007 Estimation of the measurement error of parcel areas measured on VHR SAR data, Joint Research Centre, Ispra, Italy, team leader
13. 15.09-15.11.2005 [Validation of methods for measurement of land parcel areas – near-VHR imagery](#) supplementary study to the service contract No 22581-2004-12F1SC ISP PL, Joint Research Centre, Ispra, Italy, team leader
14. 30.03.2005 – 30.06.2005 [Validation of methods for measurement of land parcel areas UE](#) no 22581-2004-12 F1SC ISP PL, Joint Research Centre, Ispra, Italy, team leader
15. 2002 [Airborne spectrometry for abandoned mine site classification and environmental monitoring at the Machów sulphur mine district in Poland](#) – UE project HS2002-PL4, DLR, Germany (in Polish), team leader
16. 2001 Elaboration of assumptions for building up of National Land Parcel Identification System (LPIS) as an element of Integrated Administration and Control System (IACS)", Samecki 5 – PHARE – PL – PAO/AGR, expert : photogrammetry and GIS

