


PERSONAL INFORMATION

Emilia Tcherkezova



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-  etch91[at]geophys.bas.bg, eti2015[at]abv.bg
-  www.niggg.bas.bg
-  Replace with type of IM service none

Sex female | Date of birth 1963 | Nationality Bulgarian

JOB APPLIED FOR
POSITION
PREFERRED JOB
STUDIES APPLIED FOR

WORK EXPERIENCE

Replace with dates (from - to)
Since 10 May, 2016

Associate professor

National Institute of Geophysics, Geodesy and Geography at Bulgarian Academy of Sciences (NIGGG-BAS), Acad. G. Bonchev str. bl. 3, 1113 Sofia, Bulgaria

- Scientific research
- Business or sector** Geographic Information Systems and their applications (geomorphology, landscape development, geoarchaeology, landscape changes, thematic cartography), remote sensing, spatial modelling

Replace with dates (from - to)
3rd May 2012 – 10 May 2016

Assistant professor

National Institute of Geophysics, Geodesy and Geography at Bulgarian Academy of Sciences (NIGGG-BAS), Acad. G. Bonchev str. bl 3, 1113 Sofia, Bulgaria

- Scientific research
- Business or sector** Geographic Information Systems and their applications in geomorphology, physical geography, landscape development, geoarchaeology, landscape changes, thematic cartography, remote sensing, spatial geodatabase development

Replace with dates (from - to)
1st February - 3rd May, 2012

Scientific researcher-Geographer

National Institute of Geophysics, Geodesy and Geography at Bulgarian Academy of Sciences (NIGGG-BAS), Acad. G. Bonchev str. bl 3, 1113 Sofia, Bulgaria

- Scientific research
- Business or sector** Geographic Information Systems and their applications (geomorphology, physical geography, landscape development, geoarchaeology, geophysics and seismology), remote sensing, spatial geodatabase development,

Replace with dates (from - to)
1st Aug. 2008 – 1st Febr. 2011

CEO

Business or sector Geographic Information Science (GIS, remote sensing, geodatabase development and administration, geostatistics, spatial modelling) and GIS applications in geography, geomorphology, landscape development, geoarchaeology

Replace with dates (from - to)
2002-2005

Senior Scientific Researcher (BAT IIa – Wissenschaftliche Angestellte)

Institute for Landscape Planning and Ecology (ILPOE), Stuttgart Universität, 11 Kepler Str., 70174 Stuttgart, Germany

- GIS-Expert (GIS, Database design and administration)
- Business or sector** Geographic Information Science (GIS, remote sensing, geodatabase design and development, geostatistics), geography, geomorphology, landscape planning and ecology

Replace with dates (from - to) **Scientific researcher**
 1990-1993
 University Research Centre / Department of Geology and Geography (Unit: Geomorphology and Cartography), "St. Kl. Ohridski" University Sofia, 15, Zar Osvoboditel Blvd., 1504 Sofia, Bulgaria

- Scientific Research, GIS/Database/GIS-Analysis, geomorphologic mapping, thematic cartography. Project: "Building up of a Geographic Information System for Public Administration and Nature Conservation on Example of Tryavna Municipality (Bulgaria)."

Business or sector GIS, Geodatabase, Geography, Geomorphology, Cartography, Environment

EDUCATION AND TRAINING

Replace with dates (from - to) **Doctor in Natural Sciences** High level
 1997-2002
 Technical University of Berlin, Faculty VI, Geographical Institute/ Institute of Landscape architecture and Environmental Planning, 145, 17 June Str., Berlin 10623, Germany

- Geoinformation sciences (GIS and remote sensing, geostatistics, spatial modelling, geomorphology, coastal management)

Replace with dates (from - to) **Training**
 2008, 2007, 2000 -2001, 1997
 Technical University of Berlin, Foreign relations, 145, 17 June Str., Berlin 10623, Germany

- International Management,
- Quality Management,
- International Team Training,
- Innovation Management,
- European Research Support.

Replace with dates (from - to) **Postgraduate funded by DAAD, Germany**
 1995-1996
 Technical University of Berlin, Faculty VI, Geographical Institute, 145, 17 June Str., Berlin 10623, Germany

- Geographic Information Science – Geographic Information Systems and Remote Sensing

Replace with dates (from - to) **PhD-Student**
 1994-1995
 Department of Geology and Geography (Unit: Geomorphology and Cartography), "St. Kl. Ohridski" University Sofia, 15, Zar Osvoboditel Blvd., 1504 Sofia, Bulgaria

- Geomorphology and palaeogeography, Geographic Information Systems (GIS)

Replace with dates (from - to) **Master's degree in Geography (physical geography, geomorphology and cartography, educator – geography and history)**
 1983-1988
 Department of Geology and Geography (Unit: Geomorphology and Cartography), "St. Kl. Ohridski" University Sofia, 15, Zar Osvoboditel Blvd., 1504 Sofia, Bulgaria

- geography (physical geography, geomorphology and palaeogeography, cartography, educator – geography and history)

Replace with dates (from - to) **Journalistic**
 1985-1988
 "St. Kl. Ohridski" University Sofia, 15, Zar Osvoboditel Blvd., 1504 Sofia, Bulgaria

- Journalist-correspondent

PERSONAL SKILLS

Mother tongue(s) български

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
German	C1/2	C1/2	C1/2	C1/2	C1/2
Въведете име на езиковия сертификат и ниво, ако е приложимо.					
English	C1/2	C1/2	B1/2	B1/2	C1/2
Въведете име на езиковия сертификат и ниво, ако е приложимо.					
Russian	C1/2	C1/2	C1/2	C1/2	B1/2

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Communication skills ▪ good communication skills gained through my professional experience as researcher, WP-leader

Organisational skills ▪ leadership (as senior researcher I was responsible for a team of 15 people from 9 EU-countries and Ukraine)
 ▪ I work purposefully and independently.
 ▪ I have leadership experience as a team- and project-leader.
 ▪ I have acquired these skills and competences at the Universities where I studied and worked, during the following trainings: International Management, International Team Training, Innovation Management as well as during the work in different interdisciplinary and international projects

Computer skills ▪ good command of Microsoft Office™ tools
 ▪ GIS Software: ArcGIS 9.x, 10.,x, Free and Open Source GIS (GRASS GIS, SAGA, ILWIS, uDig, PostGIS, Quantum GIS, OpenJUMP, GeoServer)
 Remote Sensing Software: SNAP Desktop, SCP-QGIS
 HTML and -XML (Basic knowledge)
 Database: PostgreSQL/PostGIS, SpatialLite, MySQL
 ▪ Geodatabase software: PostgreSQL/PostGIS, SpatialLite
 ▪ Inkscape, Gimp, Adobe Acrobat, FreeMind and others

Driving licence ▪ B

ADDITIONAL INFORMATION

Book **Tcherkezova, E.** 2004. GIS-gestützte geomorphologische Untersuchungen an Beispielen aus dem nördlichen Teil der Bucht von Burgas (Schwarzmeerküste, Bulgarien). – Berliner Geographische Studien. Band 52. D 83. Berlin. 191 Seiten mit CD-Rom. ISBN 3 7983 1945 6. PhD Thesis.

Articles (selected) Yotova, G., Varbanov, M., **Tcherkezova, E.**, Tsakovski, St. 2021. Water quality assessment of a river catchment by the composite water quality index and self-organizing maps. – Ecological Indicators, Volume 120, Elsevier, 2021, ISSN 1470-160X, DOI:<https://doi.org/10.1016/j.ecolind.2020.106872>, 1-10, SJR (Scopus):1.33, JCR-IF (Web of Science):4.229.

Articles (selected)

- Jordanova, N., Jordanova, D., **Tcherkezova, E.**, Popov, H., Mokreva, A., Georgiev, P., Stoychev, R. 2020. Identification and Classification of Archeological Materials from Bronze Age Gold Mining Site Ada Tepe (Bulgaria) Using Rock Magnetism. *Geochemistry, Geophysics, Geosystems*, 21, 12, American Geophysical Union - Wiley, 2020, DOI:10.1029/2020GC009374, e2020GC009. SJR (Scopus):1.933, JCR-IF (Web of Science):3.28
- Tcherkezova, E.**, Kotsev, Ts., Zhelezov, G., Stoyanova, V. 2020. Applying UAV Photogrammetry Data for High-resolution Geomorphological Mapping of a Part of the Lom River Valley near the Village of Vasilovtsi (Bulgaria). – International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM, 2020, ISSN 1314-2704, DOI:10.5593/sgem2020/2.2/s10.022, 183-190. SJR (Scopus):0.23
SJR 2019: 0,23,
<https://www.scimagojr.com/journalsearch.php?q=21100274701&tip=sid&clean=0>
- Stoyanova, V., Kotsev, Ts., **Tcherkezova, E.**, Zhelezov, G., Koleva, N. 2020. Land Cover Changes in the Ogosta Valley for the Period 1993-2019. – International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM, 20, 2.2, 2020, ISSN 1314-2704, DOI:10.5593/sgem2020/2.2/s10.028, 233-240. SJR (Scopus):0.23
SJR 2019: 0,23,
<https://www.scimagojr.com/journalsearch.php?q=21100274701&tip=sid&clean=0>
- Stoyanova, V., Kotsev, Ts., **Tcherkezova, E.** 2020. GIS-based Assessment of the Hazard of Heavy Metal Pollution of Soil by Flooding from Danube in the Ostrovska Lowland. In Bandrova, T. Konečný, M. (Eds.) *Proceedings Vol. 1. 8th International Conference on Cartography and GIS.*, 1, Bulgarian Cartographic Association, 2020, ISSN 1314-0604, 267-277
- Tcherkezova, E.**, Stoyanova, V., Kotsev, Ts. 2019. A Concept of an Integrated Geodatabase for Surface Water, Soil and Groundwater Pollution with Arsenic in the Upper Part of Ogosta Valley, Northwestern Bulgaria. – *European Journal of Geography*, 10, 3, EUROGEO - The European Association of Geographers, 2019, ISSN 1792-1341, 6-23. SJR (Scopus):0.286
SCOPUS Q3, <https://www.scopus.com/sourceid/21100301417>, SJR SCOPUS 2019: 0.272
- Tchorbadjieff, A., Kotsev, T., Stoyanova, V., **Tcherkezova, E.** 2019. K-means clustering of a soil sampling scheme with data on the morphography of the Ogosta valley, NW Bulgaria. – *European Journal of Geography*, 10, 2, 2019, ISSN 1792-1341, 27-41. SJR (Scopus):0.286
- Antonov, D. Kotsev, Ts., Benderev, A., van Meir, N., Gerginov, P., Stoyanova, V., Tcherkezova, E. 2019. Estimating the Moisture Regime in Variably-Saturated Arsenic Contaminated Alluvial Sediments by Using Hydrus-1D with Daily Meteorological Data. *European Journal of Geography*, 10, 2, 2019, ISSN 1792-1341, 42-55. SJR (Scopus):0.286
- Guiomar, N., Godinhoa, S., Pinto-Correia, T., Almeida, M., Bartolini, F., Bezák, P., Biró, M., Bjørkhaug, H., Bojnec, Š., Brunori, G., Corazzin, M., Czekaj, M., Davidova, S., Kania, J., Kristensen, S., Marraccini, E., Molnár, Zs., Niedermayr, J., O'Rourke, E., Ortiz-Miranda, D., Redman, M., Sipiläinen, T., Sooväli-Sepping, H., Šūmane, S., Surová, D., Sutherland, L.A.,
- Tcherkezova, E.**, Tisenkopfs, T., Tsiligiridis, T., Tudor, M.M., Wagner, K., Wästfelt, A.. 2018. Typology and distribution of small farms in Europe: Towards a better picture. *Land Use Policy*, 75, Elsevier Ltd., ISSN 0264-8377, DOI:<https://doi.org/10.1016/j.landusepol.2018.04.012>, 784-798. SJR:1.348, ISI IF:3.194
- Tcherkezova, E.** 2018. Analysis and assessment of the Land Cover in the Area of the Krumovitsa River Basin, Eastern Rhodopes. *Problems of Geography*, 1-2, BAS, ISSN 0204-7109, 125-138
- Simeonov, S., Solakov, D., Georgiev, I., Vatsava, V., Dimitrov, D., Stefanov, D., Simeonova, S., Trifonova, P., Vatsava, E., Tcherkezova, E., Aleksandrova, I., Kaneva, A., Varbanov, M., Metodiev, M., Raykova, P., Dinkov, D. 2018. Methodic for analysis, assessment and mapping of the seismic risk in R. Bulgaria, MRRB Byuletin „Building and architecture“, 5, Publishing House „Itus'98“, 132 pages (in Bulgarian)
- Tcherkezova, E.**, Ilieva, G., Ilieva, N., Genchev, S., Ravnachka, A. 2017. Development of a Spatial Database for Physio-Geographical Information for the Territory of Bulgaria. *Proceeding Papers Fifth International Scientific Conference "Geographical Sciences and Education"*, 4-5 November 2016, Shumen, 46-48
- Tcherkezova, E.** 2015. Development of Spatial Database of Archaeological Object “Ada Tepe” (Krumovgrad Municipality). *Proceeding Papers of National Scientific-Technical Conference "Mineral resources and sustainable development"*, Scientific and Technical Union of Mining, Geology and Metallurgy, 25 Nov. 2015, ISBN: 978-954-92738-0-9, 145-151

Articles (selected)

Tcherkezova, E., Sarafov, A. 2015. Applying GIS and Erosion Response Units Concept to Derive Erosion Processes in the Tsaparevska River Watershed, Bulgaria. Comptes rendus de l'Académie bulgare des Sciences, 68, 12, Publishing House "Prof. Marin Drinov" Bulgarian Academy of Sciences, 2015, ISSN 1310-1331 (Print), ISSN (online) 2367-5535, 1559-1568. SJR (Scopus):0.21, JCR-IF (Web of Science): 0.233

Tcherkezova, E. 2015. GIS-based Delineation and Regionalization of Geomorphographic Units in the Floodplain of Ogosta River between the Settlement Gavril Genova and the "Ogosta" Reservoir (NW-Bulgaria). Problems of Geography, 1-2, BAS, ISSN 0204-7209, 114-122.

Tcherkezova, E., Popov, H., Jockenhövel, A. 2014. LiDAR-Daten zur Unterstützung der montanarchäologischen Untersuchungen am spätbronzezeitlichen Goldbergwerk Ada Tepe (Stadt Krumovgrad, Rhodopen/Südostbulgarien). Smolnik, R. (Hrsg.). ArcheoMontan 2013. Krušna krajina. Erz(gebirgs)landschaft-Ore Landscape., 28, Landesamt für Archäologie Sachsen-Dresden – Freistaat Sachsen, ISBN:978-3-943770-14-8, 209-221

Vatseva, R., D. Solakov, **Tcherkezova, E.,** Simeonova, S., Trifonova, P. 2013. Applying GIS in seismic hazard assessment and data integration for disaster management. – In: Zlatanova, S., Peters, R., Dilo, A., Scholten, H., (Eds.): Intelligent Systems for Crisis Management, Lecture Notes in Geoinformation and Cartography, DOI: 10.1007/978-3-642-33218-0_13, Springer-Verlag Berlin Heidelberg. ISBN 978-3-642-33218-0.

Nedkov, S., **Tcherkezova, E.** 2013. GIS database – an important component of hazard assessment. In: Zhelezov, G. [ed.]. Hazard assessment and mitigation in the Danube floodplain (Calafat-Vidin – Tumu Magurele-Nikopol Sector). Technical guide. TerArT, Sofia. 24-53.

Vatseva, R., **Tcherkezova, E.** 2013. Natural and technological hazard mapping. In: Zhelezov, G. [ed.]. Hazard assessment and mitigation in the Danube floodplain (Calafat-Vidin – Tumu Magurele-Nikopol Sector). Technical guide. 53-6

Tcherkezova, E., Vatseva, R. 2012. Urban areas automatic classification using remote sensing data and open source software: Sofia case study, Bulgaria. In: Bandrova, T., Konecny, M., Zhelezov, G. (Eds.) Proceedings of the 4th International Conference on Cartography and GIS. June 18-22, 2012, Albena, Bulgaria, Bulgarian Cartographic Association, 2012, ISSN1314-0604, 391-400

Tcherkezova, E., Kenderova, R., Baltakova, A. 2011. Geomorphologische Untersuchungen von archäologischen Objekten in der Umgebung von Kapitan Andreevo und Dolno Cherkoviste (Südostbulgarien). In: Nikolov, V., Bacvarov, K., Popov, H. [Hrsg.] Interdisziplinäre Forschungen zum Kulturerbe auf der Balkanhalbinsel. Beiträge des Humboldt-Kollegs. Sofia, S. 229-253. ISBN 978-954-8587-07-5

Projects (selected)

National Scientific Program (NNP) "Environmental Protection and Reduction of Impossible Physics and Natural Disadvantages", Work package.I.3. Water quality (surface and groundwater). Sub-package "Surface water quality", DSD-4 / 25.02.2019, (2019-2022)

Monograph "Geography of Bulgaria" (2020-2022)

Bulgarian Scientific Periodicals Competition - 2021, Problems of Geography, NSF, (2020-2021)

Relationship of the spatial distribution of heavy metals in the soil with the morphology of contaminated river floodplains (TOPOMET), FSI, (2018-2021)

Migration of arsenic near the river zones: connection of dynamics of river and ground waters with mobilization of arsenic in polluted river terraces. ARSENT, FSI, ДН 04/3 13.12.2016, 2016-2020 (BG)

Bulgarian Scientific Periodicals Competition - 2021, Problems of Geography, NSF, (2020-2021)

Significant Bulgarian Geographers, NIGGG-BAS, (2018-2020) (BG)

Bulgarian Scientific Periodicals Competition - 2019, Problems of Geography, NSF, (2019-2020)

- Projects (selected)
- Methods for analysis, assessment and mapping of the seismic risk in Republic of Bulgaria. PД-02-29-79/08.04.16 (2016-2017) (BG)
 - Subsistence economy and land use in the Late Bronze Age, Iron Age and the Roman Period (1600 BC-400 AD) in Southeastern Bulgaria: bio-archaeological perspectives. BAS and Flemish Scientific Fund of Belgium. (2015-2017).
 - Design of an integrated GIS and expert-based system for geoarchaeological investigations on the example of Ada Tepe and Krumovitsa Valley. NIGGG-BAS (2015-2017). (BG)
 - Arsenic contamination of Ogosta River: Linking biogeochemical processes in floodplain soils with river system dynamics. IZEBZO-142978 ASCOR (2012-2016).
 - Supporting the young people at the University of Forestry. Operational Program "Human Resources Development", BG051PO001-3.3.06-0056 (2015) (BG)
 - Financial contracts between the National Archaeological Institute with Museum (Bulgarian Academy of Sciences) and Dundee Precious Metals Ltd. (Krumovgrad) for Ada Tepe Rescue archaeological surveys during the campaigns 2010-2013 and 2015
 - Comparative assessment of land use practices in vulnerable model areas in Bulgaria and the Czech Republic. EBR (2014-2016)
 - Balkan GEO Network – Towards Inclusion of Balkan Countries into Global Earth Observation (BalkanGEONet), FP7, Ref./Contract No.: 265176 (2010-2013)
 - Cross-border system for Earthquakes Alert – DACEA, (2010-2013)

Teaching
GIS in Education Centre of
Bulgarian Academy of
Sciences

Introduction in free and open source GIS (FOSS GIS). Introduction in QGIS.

Membership in scientific
organizations

- Bulgarian Cartographic Association? International Cartographic Association
- Association of Geomorphologists in Bulgaria/ International Association of Geomorphologists
- Bulgarian Geographic Society
- Working Group on Geoarchaeology (Deutsche Gesellschaft für Geographie (DGfG), Germany)
- Working Group on Natural Hazards and Risks (Deutsche Gesellschaft für Geographie (DGfG), Germany)