Emilia Tcherkezova Associate Professor

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Research interests (key words):

Geographic Information science and GIS-systems (geodatabase development, spatial analysis and modeling, remote sensing, cartography), geomorphology and palaeogeography, geoarchaeology.

Education:

2003	Ph.D. (Dr.rer.nat). Recognized in Bulgaria – BAS, December 2011 г. 4.4. Earth Sciences, 01.08.03 Geomorphology and palaeogeography
1995/1996	Scientific specialization "Remote sensing and Geographic Information Science" (founded by DAAD, Germany) – Technical University of Berlin
1989-1990	Scientific specialization "100 years Sofia University" in the scientific field "Geomorphology and palaeohydrology". "St. Kliment Ohridski" University, Sofia, Faculty of Geology and Geography, Department "Geomorphology and Cartography"
1988	Master (MA) of Geography, Geomorphology and Cartography. "St. Kliment Ohridski" University, Sofia, Faculty of Geology and Geography, Department "Geomorphology and Cartography"

Professional experience:

2016 –	Associate Professor at National Institute of Geophysics, Geodesy and Geography – Bulgarian Academy of Sciences (BAS).
2012 – 2016	Assistant Professor at National Institute of Geophysics, Geodesy and Geography – Bulgarian Academy of Sciences (BAS).
2011 – 2012	Researcher (Ph.D.) at National Institute of Geophysics, Geodesy and Geography – Bulgarian Academy of Sciences (BAS).
2008 - 2011	Company manager, Bulgaria
2002 – 2005	Assistant Professor, Ph.D., BATIIa) at Institute of Landscape Planning and Ecology, University of Stuttgart, Germany
1990-1993	Research Fellow, NIS, "St. Kliment Ohridski" University,

Recent projects (last 5 years):

Arsenic fate in riverine environment: linking river and groundwater dynamics with arsenic mobilization in contaminated river floodplain. 2016-2019.

ASCOR – Arsenic contamination of Ogosta river: Linking biogeochemical processes in floodplain soils with river system dynamics. IZEBZO-142978, Bulgarian-Swiss research programme. 2011-2016.

Draft of a Geographic Database and an Expert-Based System for the Purpose of Geo-Archaeological Studies on Example of the archaeological object "Ada Tepe" and Krumovitsa valley. 2015-2017.

Subsistence Economy and Land Use in the Late Bronze Age, Iron age and the Roman Period in Southeastern Bulgaria: bio-archaeological perspectives. 2015-2017.

Digital Terrain Model of Bulgaria in scale 1:600 000. 2015-2016.

Comparative Assessment of Land Use Practices in Sensitive Areas in Bulgaria and Czech Republic. 2014-2016.

Arsenic Fluxes in the System of Floodplain Soil-Groundwater-River Water: Impact on Surface and Ground Water Quality. 2016.

Romanian – Bulgarian Cross-Border Joint Natural and Technological Hazards Assessment in the Danube Floodplain. The Calafat-Vidin - Turnu Măgurele-Nikopole Sector (ROBUHAZ-DUN). Ref. No. 2(4i)-2.2-5, MIS ETC 350. 2012-2013.

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.

Framework Agreement for Financing and Realization of Research Work between the National Archaeological Institute and Museum (BAS) and Balkan Mineral and Mining EAD. Rescue archeological excavations in the Ada Tepe Area. (Krumovgrad Municipality). 2010-2014.

Selected publications (last 5 years):

Tcherkezova, E., Metodieva, G., Ilieva, N., Genchev, St., Ravnacka, Al. (Accepted 2016). Development of a spatial database for common physico-geographic information on example on Bulgaria. –Proceedings of the Fifth International Conference "Geographical Sciences and Education", Shumen, 4-5 November 2016 Sarafov, A. **Tcherkezova, E.** (Accepted 2016). Soil-Geographic Study of

Sarafov, A. **Tcherkezova, E.** (Accepted 2016). Soil-Geographic Study of Sanctuary (Iron Age) and Middle-Age Old Settlement in the Area of the Railroad Kapitan Andreevo. – Proceedings on the occasion of the 60th Anniversary of prof. A. Popov", "St. Kliment Ohridski", University, Sofia.

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, 2015, ISSN: 1310-1331, 1559-1568. SJR:0.21, ISI IF:0.233.

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

Mokreva, A., **Tcherkezova, E.,** Jordanova N. (2015). Preliminary results of integrated magnetic and geomorphologic studies of the archaeological object "Ada Tepe" (Eastern Rhodopes). –7th National Conference on Geophysics, CD-Rom, S6-P1.

Stoyanova, V., **Tcherkezova, E**., Mitreva, A. (2015). Indicators characterizing the migration of arsenic in the Ogosta floodplain between the settlement Martinovo and Ogosta Reservoar. –Proceedings of Fourth international conference "Geographic sciences and education", Shumen. ISBN: 978-619-201-105-5, 64-70.

Tcherkezova, E. (2015). Geomorphometric analysis of Central and Southeastern Bulgaria. –Problems of Geography, 3-4, ISSN: 0204-7209, 115-126, incl. fig. 3 and fig. 4.

Tcherkezova, E. (2015). Development of spatial database of archaeological object "Ada Tepe" (Krumovgrad municipality). —Сборник с доклади национална научно-техническа конференция "Минералните ресурси и устойчивото развитие", Научно-технически съюз по минно дело, геология и металургия, ISBN:978-954-92738-0-9, 145-151.

Tcherkezova E., Kaleyna P., Mukhtarov Pl. (2013). Modelling spatial distribution of Global Total Column Ozone in QGIS and GRASS GIS Environment. Bulgarian Geophysical Journal, 39, 2013, 28-39.

Vatseva, R., Solakov, D., **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. & H. Scholten [Eds]. Intelligent Systems for Crisis Management. Geo-information for Disaster Management (gi4DM) 2012. Springer. ISBN 978-3-642-33217-3. 171-185.