



Tamar Tsamalashvili

Position

Researcher in Aleksandre Janelidze Institute of Geology, Department of Regional Geology and Tectonics

Scientific/academic degree, title

MSC in GIS and Geo hazard, MSC in Geology.

Contact information

Phone: +995 577 133068

Email: tamar.tsamalashvili@tsu.ge

Education

- 1995-1999 – Bachelor in Geology. Ivane Javakishvili Tbilisi State University. Geology (Geological Methods of Raw Materials Research).
- 1999-2001 – Ivane Javakishvili Tbilisi State University. Geology and Prospecting Master degree in Geology and Prospecting, MSC.
- 2007-2008 – ITC (International Institute of Geo-Information Science and Earth Observation), Netherlands, Geo-Information Science and Earth Observation, Geo-hazard. Post-Graduate Diploma courses in Geo-hazard.
- 2009-2011 – University of Twente (ITC). Enschede, Netherlands. Geo-Information Science and Earth Observation. Specialization Flood modeling, flood hazard and risk assessment. (case study Rioni River), MSC.

Employment history

- 1999-2000 – M. Nodia Institute of Geophysics of Georgian Academy of Sciences. Researcher.
- 2005-2008 – Seismic Monitoring Centre of Georgia of Ilia State University, Researcher.
- 2008-2009 – Institute of Basilicata, Department of the Engineering and Environment. Potenza, Italy. GIS & Geo-hazard specialist.
- 2013-2014 – Art Studio – (Tbilisi Georgia) GIS- specialist 2012 - 2013 NGO “CENN”. Geo-hazard and GIS specialist.
- 2012-till now – Aleksandre Janelidze Institute of Geology Ivane Javakishvili Tbilisi State University. Department of Regional Geology and Tectonics. Researcher.

Research interests

GIS, Modeling, Flood hazard and risk assessment, Landslide hazard and risk assessment, Tectonics, Geology.

Publications

1. Z. Tchelidze, N. Varamashvili, T. Chelidze, T. Kiria, **T. Tsamalashvili** (2021). Automatic Telemetric Monitoring/Early Warning Systems, with Multi-task Sensor, Applied to Mass Movements. Springer, Dordrecht: Building Knowledge for Geohazard Assessment and Management in the Caucasus and other Orogenic Regions, 429-442 pp.
2. Amiranashvili A., Chelidze T., Svanadze D., **Tsamalashvili T.**, Tvauri G. (2021) On the Representativeness of Data from Meteorological Stations in Georgia for Annual and Semi-Annual Sum of Atmospheric Precipitation Around of These Stations. Proceedings of International Scientific Conference „Natural Disasters in the 21st Century: Monitoring, Prevention, Mitigation“. Tbilisi state University, ISBN 978-9941-491-52-8, pp. 79-83.
3. Amiranashvili, A. A. , L. Chelidze, T., Dalakishvili, L. I. , T. Svanadze, D. , N. **Tsamalashvili, T.**, A. Tvauri, G. (2020). Preliminary Results of a Study of the Relationship Between the Monthly Mean Sum of Atmospheric Precipitation and Landslide Cases in Georgia. *Journal of the Georgian Geophysical Society*, 23(2). <https://doi.org/10.48614/ggs2320202726>
4. I. Gamkrelidze, D. Shengelia, G. Chichinadze, T. Tsutsunava, G. Beridze, **T. Tsamalashvili, K. Tedliashvili, I. Javakhishvili** (2018) Petrology, Geochemistry and Formation Conditions of Pre-Alpine Metabasites of the Loki Crystalline Massif (the Caucasus). *Bulletin of the Georgian National Academy of Sciences*, 2018, 12(4):78-86.
5. T. Chelidze, V. Abashidze, T. Machavariani, T. Tsuguria, **T. Tsamalashvili, A. Amiranashvili, N. Zhukova, Z. Chelidze, N. Varamashvili** (2016). Geodynamical Hazards of High Dams. *Journal of Georgian Geophysical Association*. v. 19A:3-34
6. I. Gamkrelidze, M. Fruidze, M. Gamkrelidze, M. Loladze, **T. Tsamalashvili** (2015). New tectonic map of Georgia. *Bulletin of the Georgian National Academy of Sciences*. v. 9(1) pp. 111-116
7. Dr. C.J. van Westen, Nana Janashia, Dr. M.W. Straatsma, Dr. Ulan Turdukulov, W.F. Feringa, Koert Sijmons, Kakha Bakhtadze, Tchichiko Janelidze, Nino Kheladze, Levan Natsvlishvili, Nodar Tkhelidze, George Gaprindashvili, Irakli Megrelidze, Gigi Geladze, Vakhtang Gloveli, Lasha Sukhishvili, Mikheil Elashvili, **Tamar Tsamalashvili, Irvin T. Feliciano**. (2012). “Atlas of natural hazards and risks of Georgia. CENN.
8. **T. Tsamalashvili** (2010). Flood Risk Assessment and Mitigation Measure for Rioni River. University of Twente Faculty of Geo-Information and Earth Observation (ITC):74 p.
9. V. Tramutoli, C. Aliano, C. Filizzola, N. Genzano, M. Lisi, V. Lanorte, **T. Tsamalashvili** (2009). Assessing of the robust satellite techniques (RST) in areas with moderate seismicity Conference: Proceedings of Fifth International Workshop on the Analysis of Multi-Temporal Remote Sensing Images 2009 (MultiTemp 2009).
10. V. Tramutoli, C. Aliano, C. Filizzola, N. Genzano, M. Lisi, V. Lanorte, **T. Tsamalashvili** (2009). Abrupt change in greenhouse gases emission rate as a possible genetic model of TIR anomalies observed from satellite in Earthquake active regions. Proceedings, 33rd International Symposium on Remote Sensing of Environment, ISRSE, 2009.
11. V. Tramutoli, C. Aliano, C. Filizzola, N. Genzano, M. Lisi, V. Lanorte, **T. Tsamalashvili** (2009). Abrupt change in greenhouse gases emission rate as a possible genetic model of TIR anomalies observed from satellite in Earthquake active regions. Proceedings, 33rd International Symposium on Remote Sensing of Environment, ISRSE, 2009.

12. *I. Gamkrelidze, G. Nadareishvili, T. Tsamalashvili, L. Basheishvili, S. Nadareishvili* (2008). On genesis of Tbilisi olistostroms. Proceedings of Al. Janelidze Institute of Geology. New ser. v. 124. pp. 24-29.
13. *I. Gamkrelidze, T. Tsamalashvili, E. Nikolaeva, T. Godoladze, Z. Javakhishvili, M. Elashvili* (2008). Tbilisi fault and seismic activity of Tbilisi environs (Georgia). Proceedings of Al. Janelidze Institute of Geology. New ser. v. 124. pp 30-35.

Citation index

Web of Science: 18, h-index-2; Google scholar: - 61, h-index-4; Scopus - 27, h-index-2.

Participation in scientific events

1. On the Representativeness of Data from Meteorological Stations in Georgia for Annual and Semi-Annual Sum of Atmospheric Precipitation around of These Stations. Amiranashvili A., Chelidze T., Svanadze D., **Tsamalashvili T.**, Tvauri G. International Scientific Conference „Natural Disasters in the 21st Century: Monitoring, Prevention, Mitigation“, Tbilisi, 2021, 20-22 December.
2. Preliminary Results of a Study of the Relationship between the Variability of the Mean Annual Sum of Atmospheric Precipitation and Landslide Processes in Georgia. Amiranashvili, A. A., L. Chelidze, T., Dalakishvili, L. I., T. Svanadze, D., N. **Tsamalashvili, T.**, A. Tvauri, G. International Scientific Conference „Modern Problems of Ecology. Iv. Javakhishvili Tbilisi State University. Tbilisi Georgia. 2020. 26-28 September.
3. Digital Geological Map of the Loki Crystalline Massif (the Caucasus) and its multi-informative Explanatory note. I. Gamkrelidze, D. Shengelia, G. Chichinadze, T. Tsutsunava, G. Beridze, **T. Tsamalashvili**, K. Tedliashvili, I. Javakhishvili. World Academy of Sciences and Technology. Conference proceedings. 2019, 14-15 May, p. 438.
4. Tramutoli V., Carolina A., Corrado R., Filizzola C., Genzano N., Lisi M., Lanorte V., **T. Tsamalashvili**. Abrupt change in greenhouse gases emission rate as a possible genetic model of TIR anomalies observed from satellite in Earthquake active regions. Proceedings, 33rd International Symposium on Remote Sensing of Environment: sustaining the millenium development goals. Università degli Studi della Basilicata. Stresa, Italy 2009, 4-9 May.

Grant projects

2006-2007 – Digital "Tectonic Map of Georgia". Scale 1:500 000. GIS Specialist.
 2007-2009 – INTAS, Stress related to Geohazards in South Caucasus. Main participant.
 2009-2012 – “MATRA”, Project - “Institutional building for natural disaster risk reduction (DRR) in Georgia”. Main participant.
 2009-2010 – Determination and correction of Geological Hazards using GIS technologies. Shota Rustaveli National Science Foundation, Project manager.
 NATO SFP983038 - Seismic Hazard and Risk Assessment for Southern Caucasus-Eastern Turkey Energy Corridors (SHRAP). Main participant.
 2011-2012 – Climate Change Adaptation and Natural Disaster Mitigation (CCADM) (USAID). (Flood mitigation and modeling). Main participant.
 2012-2013 – Digital "Geological map of Georgia“. Scale 1:500 000. GIS Specialist.
 Pan-European and nation-wide landslide susceptibility assessment (EU-foundation. Manager of Georgian site). Main participant.

- 2013-2014 – USAID 3G. Urban Plan Strategy of Self-Governing City of Rustavi (USAID’s Good Governance in Georgia (G3) program. Main participant.
- 2013-2015 – Anti – flood early warning and prevention systems in Georgia: special focus on Kabali and Duruji rivers – 224PPR2014/M”. Project coordinator.
- 2016-2017 – „Study of hydraulic modeling against floods – 2nd stage, support to the competence and readiness of Georgian institutions – 128/2016/M”. Project coordinator.
- 2018-2020 – “Risk assessment of six natural hazards on the district level in Tajikistan”-43-2018-RFP-UNDP-DRMP; Between UNDP-and Asian Institute of Technology (AIT). International Consultant and GIS expert and Deputy Team Leader.
- 2019-2021 – “ZEWSGES – Zero Waste Strategy for Good Environmental Status – BSB257”. Marine Environment Coordinator.
- 2017 – ”Piloting water allocation modeling using WEAP in the Aragvi River Basin” – Governing for Growth (G4G) in Georgia USAID RFA#2016-017. Participant.
- 2019-დღეგდღე – "Scaling up Multi-Hazard Early Warning System and the Use of Climate Information in Georgia” N 00098463. Nea, flood modeling expert.
- 2020 – UN individual contractor ESCAP Training Centre ICT. ICT and DRM Expert-training.