

Curriculum Vitae

Tea Godoladze, Dr. Prof.

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Education:

BSL, UC Berkeley, Postdoctoral research in Seismology, 2012-2013

Georgian National Academy of Sciences, PHD degree in physics and mathematics, 2006

Tsukuba, Japan, IISEE, Master degree in seismology, 1999-2000

Tbilisi State University, Bachelor Degree in Mathematics, 1992-1997

Work Experience:

- **Institute of Earth Science and NSMC at Ilia State University**, Acting Director, 2013 – present
- **Institute of Earth Science at Ilia State University**, Deputy Director 2010 – 2013
- **Seismic Monitoring Center**, Department of Seismology, Head of Science Council 2006 – 2008
- **Academy of Sciences of Georgia, Institute of Geophysics**, United National Survey of Seismic protection of Georgia, Senior Geophysicist 2003 – 2006
- **Institute of Geophysics, Academy of Sciences of Georgia**, Department of Regional Seismology, Seismologist 1995 – 2003

Trainings:

- Using Ambient Vibration Array Techniques for Site Characterization and Seismic Micro zonation. TUBITAK, Istanbul, Turkey, 2008
- Structural analyse of the earthquakes. LLNL, CA, USA Prof Laurence Hutchings, 2005
- Moment tensor Inversion. ESC XXIX, Potsdam, Germany, 2004
- Analyse of Historical Earthquakes. SISMOS project. INGV, Roma, Italy, 2004
- Analyze of teleseismic data. ESC XXXIII, Genoa, Italy, 2002
- Earthquake source process. Furie University, Grenoble. Prof. Michael Bouson, 2002
- Seismology, Seismic Hazard Assessment. GFZ (German Research Centre for Geosciences) Potsdam, Germany, 2000
- Seismology. BRI, IISEE Tsukuba JAPAN, 1999 – 2000

Projects Participated/Leaded:

- **Shota Rustaveli National Science Foundation of Georgia**, Crustal Structure of Georgia. Principal, 2024. Project PI
- **Shota Rustaveli National Science Foundation of Georgia**, From Science to Safety: Meeting Engineering needs with Earth Science, Principal, 2024. Project PI
- **STCU**, Seismic Network Expansion in the Caucasus and Central Asia, PI, 2019-2023
- **Shota Rustaveli National Science Foundation of Georgia**, Regional Rapid Moment Tensor Solutions in Georgia, PI, 2017-2023
- **STCU**, The Uplift and Seismic Structure of the Greater Caucasus, Principal, PI, 2017-2020.
- **Shota Rustaveli National Science Foundation**, Study of seismic code subsidence and local magnitude in Georgia, Researcher, 2016-2019
- **LLNL, USA**, Material Support for Strong and Weak motion Network Equipment, PI, 2016-2017
- **LLNL, USA**, Probabilistic Seismic Hazard Assessment (PSHA) in the Caucasus, PI, 2015-2017
- **USAID, NAS, USA**, Active Geodynamics of the Caucasus Region, PI, 2014-2016
- **Shota Rustaveli National Science Foundation of Georgia**, Seismic Hazard Assessment of the Caucasus, PI, 2013 – 2016
- **Georgian National Science Foundation**, Building a Seismotectonic Model for the Tbilisi Region, PI, 2009 – 2010
- **NATO, SFP-983284**, Caucasus Seismic Emergency Response, Expert, 2008 – 2011
- **BAA, USA**, Lithospheric Velocity structure of the Anatolian plateau-Caucasus-Caspian region, Scientist, 2008 – 2010
- **ISTC A-1418**, Open network of scientific Centers for mitigation risk of natural hazards in the Southern Caucasus and Central Asia, Scientist, 2007 – 2010
- **BAA, USA**, Survey of Moho surface of Caucasus region by surface wave analysis, expert, 2006-2008
- **Shota Rustaveli National Science Foundation**, Triggering and Synchronizing Seismic and Acoustic Phenomena Without Weak Force Modes: Use for Earthquake Prediction, Scientist, 2006-2008
- **Georgian Research and Development Fund - GEG2-3334-TB-03**, Modernization of Georgian seismic network, Scientist, 2005-2006
- **GRDF GEG3334-TB**, Establishment of Digital Seismic Network in Tbilisi Metropolitan Area, Scientist, 2005-2006
- **Government of Italy**, Italy, Seismic Hazard Assessment of Tbilisi Territory (SETA), Researcher, 2003-2006
- **ISTS GA-651**, Caucasus Seismic Information Network for Hazard and Risk Assessment, Scientist, 2002 – 2005
- **GTZ (German Society for Technical Cooperation)**, Germany, Modernization of seismic stations in Georgia, Scientist, 2002-2005
- **NATO SFP 974320**, Seismic Risk in large Cities of Caucasus. Tools for Risk Management. (SeRiCiCau), Scientist, 2001 – 2005

Publications:

- **Compilation of a Comprehensive Earthquake Catalog and Relocations in the Caucasus Region.** Tea Godoladze; Rengin Gök; Tuna Onur; Irakli Gunia; Manana Dzmanashvili; Giorgi Boichenko; Albert Buzaladze; István Bondár; Lana Ratiani; Tinatin Rostomashvili; John Nabelek; Zurab Javakhishvili; Gurban Yetirmishli; Eric Sandvol; Filiz Tuba Kadirioğlu; Andrea Chiang. *GeoScienceWorld: Seismological Research Letters*. January, 2024.
- **Seismicity and Tectonics of the Caucasus Region Revisited, XXVIII General Assembly of the International Union of Geodesy and Geophysics.** Bondár, I., Godoladze, T., Cowgill, E., Yetirmishli, G., Myers, S., Onur, T., Gunia, I., Buzaladze, A., Gök, R., Chiang, A. *Helmolt-Zentrum Postdam*. 2023.
- **Relocation of the Seismicity of the Caucasus Region.** István Bondár; Tea Godoladze; Eric Cowgill; Gurban Yetirmishli; Stephen C. Myers; Irakli Gunia; Albert Buzaladze; Barbara Czece; Tuna Onur; Rengin Gök; Andrea Chiang. *Bulletin of the Seismological Society of America*. November, 2023.
- **Episodic evolution of a protracted convergent margin revealed by detrital zircon geochronology in the Greater Caucasus.** Dylan A. Vasey, Leslie Garcia, Eric Cowgill, Charles C. Trexler, Tea Godoladze. *Basin research*. 2023
- **Recent Surface Rupturing Earthquakes along the South Flank of the Greater Caucasus near Tbilisi, Georgia.** Stahl TA., Cowgill E., Boichenko G., Vasey DA. and Godoladze T. (2022) *Bulletin of the Seismological Society of America* 112(4): 2170-2188. <http://dx.doi.org/10.1785/0120210267>.
- **Ground motion prediction equations based on shallow crustal earthquakes in Georgia and the surrounding Caucasus.** Nato Jorjiashvili, Ia Shengelia, Tea Godoladze, Irakli Gunia, Dimitri Akubardia. *Earthquake Science*. Volume 35, Issue 6, December 2022, Pages 497-50
- **Low variability runoff inhibits coupling of climate, tectonics, and topography in the Greater Caucasus.** Forte, A.M., Leonard, J.S., Rossi, M.W., ... Godoladze, T., Kadirov, F. *Earth and Planetary Science Letters* [this link is disabled](#), 2022, 584, 117525
- **Tectonostratigraphy and major structures of the Georgian Greater Caucasus: Implications for structural architecture, along-strike continuity, and orogen evolution.** Trexler, C.C., Cowgill, E., Niemi, N.A., Vasey, D.A., Godoladze T. *Geosphere.*, 18(1), 211–240, 2022
- **Active deformation and Plio-Pleistocene fluvial reorganization of the western Kura fold-thrust belt, Georgia: Implications for the evolution of the Greater Caucasus Mountains.** Sukhishvili, L., Forte, A.M., Merebashvili, G., ... Heimsat, A., Godoladze, T. *Geological Magazine*, 158(4) 583–597, 2021
- **Rate of active shortening across the southern thrust front of the Greater Caucasus in western Georgia from kinematic modeling of folded river terraces above a listric thrust.** C. C. Trexler, E. Cowgill, J.Q.G. Spencer, T. Godoladze *Earth and Planetary Science Letters*, 544(293), 2020
- **Probabilistic Seismic Hazard Assessment Using Legacy Data in Georgia.** T. Onur, R. Gok, T. Godoladze, I. Gunia, G. Boichenko, A. Buzaladze, N. Tumanova, M. Dzmanashvili. *Seismological Research letters*. Vol 91,N3. 2020

- **Intrinsic and scattering attenuations in the crust of the Racha Region, Georgia.** *I.Shengelia, N. Jorjiashvili, T.Godoladze, Z. Javakhshvili, N. Tumanova. Journal of Earthquake and Tsunami. Vol.14, No.02. 2020*
- **Probabilistic seismic hazard assessment for Georgia.** *T. Onur, R. Gok, T. Godoladze, I. Gunia, G. Boichenko. Osti.gov. 2019*
- **Attenuation in the Javakheti plateau (Georgia) using different coda methods.** *Shengelia, I., Chelidze, T., Jorjiashvili, N., Godoladze, T., Tumanova, N. Bulletin of the Georgian National Academy of Sciences, 64–68, 2019*
- **Active convergence between the Lesser and Greater Caucasus in Georgia: Constraints on the tectonic evolution of the Lesser-Greater Caucasus continental collision.** *G.Sokhadze, M.Floyd, T.Godoladze, G. Hahubia, R. Reilinger. Earth and Planetary Science Letters 481. 154-161. 2018*
- **Relict basin closure and crustal shortening budgets during continental collision: An example from Caucasus sediment provenance.** *E. Cowgill, AM Forte, N Niemi, B Avdeev, A Tye, C Trexler, Z Javakhishvili, M Elashvili, T Godoladze. Tectonics, volum 35, isuure 12, p. 2918-2947. 2016*
- **Moment magnitudes of local/regional events from 1D coda calibrations in the broader middle east region.** *Bulletin of the Seismological Society of America 106(5). 1926-1938. 2016*
- **Late Miocene to Pliocene stratigraphy of the kura basin, a subbasin of the south Caspian basin: Implications for the diachroneity of stage boundaries.** *A.M. Forte, D.Y. Sumner, E. Cowgill, T. Godoladze, Z. Javakhishvili. Basin Research 27(3); 247-271, 2015*
- **Deep Earthquakes beneath the Northern Caucasus: Evidence of active or Recent Subduction in Western Asia.** *R.J. Mellors; J.Jackson; S. Myers; R. Gok; K.Priestley, g.Yetirmishli, N.Turkelli, T.Godoladze. Bulletin of the Seismological Society of America, April, 102: 862-866, 2012*
- **Pg Attenuation Tomography within the Middle East.** *X. Bao, E. Sandvol, E.Zor, S.Sakin, R.Mohamad, R.Gok,R.Mellors, T.Godoladze,, G.Yetimishli, N.Turkelli, Bulletin of the Seismological Society of America, 101:1496-1506, 2011*
- **Lithospheric velocity structure of the Anatolian plateau-Caucasus-Caspian region.** *R. Gök; R. J. Mellors; E. Sandvol; M. Pasyanos; T. Hauk; R. Takedatsu; G. Yetirmishli; U. Teoman and N. Turkelli; T. Godoladze; Z. Javakishvirli. JOURNAL OF GEOPHYSICAL RESEARCH, VOL. 116, XXXXXX, 14 PP, 2011*
- **Seismic hazard assessments for the Tbilisi test area (Eastern Georgia).** *Slejško D., Z. Javakhishvili, A. Rebez, M. Santulin, M. Elashvili, P.L. Bragato, T. Godoladze and J. Garcia Bolletino di geofizika: Teorica ed Applckata. Vol. 49, n. 1, pp. 37-57, 2008*
- **Determination of Earthquake magnitude by Digital Data.** *Shengelia I., T. Chelidze, Z. Javakhishvili, T. Godoladze, M. Gigiberia, 2008. Bulletin of the Georgian National Academy of Sciences vol. 2, no. 1, pp. 80-82*

- **Seismic Hazard Assessment of the Caucasus region“** *in the Atlas of GIS based maps of natural disaster hazards for the Southern Caucasus.* Javakhishvili Z., M. Elashvili, T. Godoladze, N. Jorjiashvili, editor T. Chelidze, Tbilisi 2007, 6-13.
- **Structural model for seismic hazard analysis of Tbilisi, Republic of Georgia** Godoladze T., L. Hutchings, B. Foxal, Z. Javakhishvili, 2006, “*Journal of Georgian Geophysical Society. Issue (A) Solid Earth, v. 10a. 2005. 77-82*
- **“The Tbilisi earthquake of April 25, 2002 in the context of the seismic hazard of Tbilisi urban area”** Javakhishvili Z., T. Godoladze, M. Elashvili, T. Mukhadze and I. Timchenko, *Bolletino di geofizika: Teorica ed Applckata. vol 45, n.3, pp. 169-185, September 2004*

Conference contributions:

- **AGU**, Poster: Seismicity of Georgia (The Caucasus) USA, San Francisco, 2017
- **CTBTO** - Technical Meeting on Legacy Data from Nuclear Tests - Analog Data of the Caucasus, Austria, Vienna, 2023
- **CTBT: Science and Technology 2023 Conference (SnT2023)** - Seismic Network Expansion in the Caucasus and Central Asia (SNECCA), Austria, Vienna, 2023
- **CTBT – Hybrid Technical Meeting on the IDC Validation and Acceptance Test Plan - Seismic monitoring system of Georgia**, Austria, Vienna, 2023
- **AGU**, Crustal Structure of the Caucasus, USA, San Francisco, 2019
- **CTBT SCIENCE AND TECHNOLOGY 2019 CONFERENCE**, The Caucasus seismic hazard, Austria, Vienna, 2019
- **EGU**, New earthquake catalogue of the Caucasus; The Caucasus Seismic Network (CNET): Seismic Structure of the Caucasus, Austria, Vienna, 2018
- **CTBT SCIENCE AND TECHNOLOGY 2017 CONFERENCE**, Seismic Hazard Assessment of the Caucasus, Austria, Vienna, 2017
- **EGU**, Convergence between the Georgian Lesser and Greater Caucasus: Implications for seismic risk around Tbilisi, Austria, Vienna, 2017
- **AGU**, Poster: Active shortening and the geological expression of the transition from subduction to continental collision in the western Greater Caucasus, Republic of Georgia; Did the Basement-Involved Main Caucasus Thrust Form during the Cenozoic Arabia-Eurasia Collision? USA, New Orleans, 2017
- **AGU**, Relict basin closure and crustal shortening budgets during continental collision: An example from Caucasus sediment provenance, USA, San Francisco, 2016
- **USAID**, Middle East Research Partnership Forum, Jordan, Amman, 2016
- **EGU**, Late Quaternary river channel migrations of the Kura River in Transcaucasia - tectonic versus climatic causes, Austria, Vienna, 2015
- **AGU fall meeting**, Crustal Structure Improvement for The Caucasus. USA, CA 2012
- **SSA (Seismological Society of America)**, Parameterization of the Active Seismic Source Zones of the Caucasus Region. USA, CA, 2009
- **AGU fall meeting** Seismic Tomography of the Caucasus Region. USA, CA, 2007
- **AGU fall meeting** Structural model for seismic hazard Analyses of Tbilisi, Republic of Georgia. USA, CA, 2005

- **XXXIII General Assembly of the European Seismological Commission**, Earthquake Rupture Imitation, Genoa, Italy, 2004
- **INDR meeting**, Case Study of Tbilisi Earthquake, Austria, 2001

Awards:

- Award of Georgian Geophysical Society and Institute of Geophysics of Georgian Academy of Sciences for Young Scientists.