

Curriculum Vitae

Name: Genadi Tvauri

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Marital status: Married, have a daughter.



Education

2009 - 2010: Professional Certificate in management, The Open University, UK Distance Learning course, Tbilisi, Georgia.

1989: Ph.D. Physics and Mathematics, thesis title: "The Calorimetric investigation of hydration of plasma and nuclear membranes isolated from normal and tumor cells", Tbilisi, Georgia.

1981 - 1983: Postgraduate student, Institute of Physics. Department of Physics of Biological Systems. Tbilisi, Georgia.

1980 - 1981: Invited fellow, the Institute of Molecular Biology of Academy of Science of USSR, Thesis title: "Selection of conditions of gel-electrophoresis of biological macromolecules on example of histone proteins". Moscow, USSR.

1976 - 1981: Tbilisi State University, Physics Department, specialty: Biophysics, qualification: Physics teacher, Tbilisi, Georgia.

Professional Employment

2018 - present: Affiliated, Assistant Professor, course title: Introduction to Biophysics, Medical Physics. European University. Tbilisi, Georgia

2013 - 2017: Lecturer, invited professor, laboratory course title: Computer Control Systems Engineering, Department of Natural Sciences, Tbilisi State University.

2018-present: Research worker: Department of Physics of biological systems, Institute of Physics, Tbilisi State University

2017- 2018: Engineer, Department of Physics of Biological Systems, Institute of Physics, Tbilisi State University, Tbilisi, Georgia

2009-2017 present: Research worker, Department of Physics of Biological Systems, Institute of Physics, Tbilisi State University, Tbilisi, Georgia.

2007 - present: Senior research worker, Space Research Center, Institute of Geophysics, Tbilisi State University. Tbilisi, Georgia.

2006 - present: Georgian Learning Center, teacher of Physics, Natural Sciences, IT manager.

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| 2004 - 2006: | Specialist, Georgian Space Agency, Department of Informational Technologies, Tbilisi, Georgia. |
| 1996 – 1999 | Georgian Learning Center, teacher of Physics, Biology, Chemistry |
| 1989 - 2006: | Research worker, Department of Physics of Biological Systems, Institute of Physics, Tbilisi State University, Tbilisi, Georgia. |
| 1983 - 1989: | Junior research worker, Department of Physics of Biological Systems, Institute of Physics, Tbilisi State University, Tbilisi, Georgia. |

Professional Experience

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| Biophysics: | Biochemical analysis of biological macromolecules, DNA, proteins, biological membranes. The Calorimetric investigation of thermal properties and hydration of biological macromolecules; Construction and design of differential scanning micro calorimeter, computer modeling of parameters of micro calorimeter. |
| Remote sensing of the Earth | Satellite remote sensing data handling and processing. |
| Languages: | Russian: fluent, English: good, Georgian: native |
| Programming Languages: | Pascal, Labview, C++. |
| Computer literacy: | Experienced user, experience of OS (Windows, Linux), MS-office, some experience of network administration. Basic knowledge of HTML language and principles of web design. Pascal, C++ and Labview programming experience, GIS and satellite image processing software. |
| Hobbies and interests: | Chinese language, Android mobile OS and software, the Beatles, Queen, Pink Floyd, soccer, tennis, hiking. |

Participation in research project grants

1. FR/500/6-130/13 2014–2017. Shota Rustaveli National Science Foundation Grant. „Development of the Differential Calorimetry“ - Assistant Personnel
2. FR/586/9-110/13 2014 -2017. Shota Rustaveli National Science Foundation Grant Study of Glaciers of Georgia on the basis of satellite data. Main staff
3. GNSF/CNSF 09/559 2010-2011. Shota Rustaveli National Science Foundation Grant. The satellite based precipitation analysis for time-dependent landslide hazard assessment. ხელმძღვანელი
4. GNSF/St08/5-432 2009-2011/ Shota Rustaveli National Science Foundation Grant Creation of the System of Implementation of Satellite Information for the Provision of the Safety of Marine Transportation and Ecology in Georgia - Main staff
5. GNSF #07_618_6-230 2007-2009. Application of calorimetric methods for investigation of Ni bacterial cells in different growth conditions. Assistant Personnel

Patents:

1. P2011 5235B, Georgia, Sakpatent, N.Bakradze, E.Kiziria, G.Tvauri, L.Keshelashvili.

2009. National Center of Intellectual Property. Sakpatent. Agricultural production Freeze-Drying Equipment

Participation in International conferences

1. UNESCO-UIGS-IGSP 610 Fourth Plenary Conference „From the Caspian to Mediterranean: Environmental Change and Human Response during the Quaternary (2013-2017): “Research of Glaciers Variation Dynamics in East Georgia under the Impact of modern Climate Change.“. Georgian National Academy of Sciences, Georgia, Tbilisi 2016, 2-9 October.
2. Institute of Hydrometeorology, Georgian Technical University. Scientific Seminar. „Impact of modern Climate change on the small glaciers of the East Georgia“. 2016. 4 March.
3. Institute of Hydrometeorology, Georgian Technical University. Scientific Seminar. Demonstration day of Shota Rustaveli National Science Foundation Grant FR/586/9-110/13 “Study of Glaciers of Georgia on the basis of satellite data” second year annual report, Tbilisi, 2016. 8 of April
4. EUMETSAT Workshop– Information Day for Eastern European and Caucasian countries. Results of remote sensing of certain glaciers of Georgia. Tbilisi, Georgia, 2015 22-23 April.
5. ICAE2015–International Conference “Applied ecology: Problems, Innovations”. “Research of Devdoraki Glacier Based on Satellite Remote Sensing Data and Devdoraki Glacier Falls in Historical Context.“. I. Javakhishvili Tbilisi State University. Tbilisi-Batumi 2015, 7-10 May.
6. International Conference on Research and Innovation for Sustainable Soil Management, Satellite remote sensing outputs of the certain glaciers in the territory of East Georgia.. 2014. 27-29 November, Egypt, Hurghada
7. International Conference "Pressing Problems of Hydrometeorology and Ecology", “Study of the Area of Separate Glaciers of the Caucasus Using Satellite data on the Background of Contemporary Climate Change“. Georgia. Tbilisi, Institute of Hydrometeorology at the Georgian Technical University 2013. 28-30 May.
8. International Conference "Pressing Problems of Hydrometeorology and Ecology". Investigation of Caucasian Glaciers by Satellite Data.“ Institute of Hydrometeorology at the Georgian Technical University 2013. 28-30 May.
9. International Conference "Marine Research Horizon" Application of Argo Drifter data for Quality control of SST received from Remote Sensing. Bulgaria, Varna, 2013, 17-20 September.
10. International Conference "Pressing Problems of Hydrometeorology and Ecology", Application of the Satellite Data for the Creation of Operational Numerical Forecasting Technological line of the Black Sea conditions, Tbilisi, Georgia, 2011, 27-29 September.
11. International Symposium on Kaz Mountains and Edremit - Global Change in Mediterranean Region “Forecast of the Conditions of Black Sea Based on the Remote Sensing“. Turkey, Edremit-Balikesir, 2011 5-7 May.
12. ISTC - Kazakhstan Innovation Investment Forum, “Installation of sublimation of Agricultural products.“ Almaty, Kazakhstan, 2011 29 September

Publications

1. G. I. Kordzakhia, L. D. Shengelia, G. A. Tvauri, M. Sh. Dzadzamia, “The Climate Change impact on the Glaciers of Georgia”, Word Science, № 4(44) Vol.1, April 2019, pp. 29–32.
2. G. I. Kordzakhia, L. D. Shengelia, G. A. Tvauri, M. Sh. Dzadzamia, The Ongoing Climate change impact on the large glaciers of Georgia. Geography, Development of Science and Education. Collective monography of LXXII Science practical conference “Gertsenovskie Chtenia” 18-21, April 18-21, 2019, Russia, St Peterburg.

3. L. D. Shengelia, G. I. Kordzakhia, G. A. Tvauri, M. Sh. Dzadzamia, "Retreat of some Large glaciers of Georgia and determination of complete melting on the background of the Contemporary Climate Change." „Metsniereba da Technologiebi“, 2019, #2 (731), გვ. 9-26, ed. Technical University of Georgia, Tbilisi
4. L. D. Shengelia, G. I. Kordzakhia, G. A. Tvauri, M. Sh. Dzadzamia, "Retreat of some Large glaciers of Georgia and determination of complete melting on the background of the Contemporary Climate Change." 2019. Pr. Of Institute of Hydrometeorology, Technical University of Georgia. In press
5. M. Nadareishvili, E. Kiziria, V.Sokhadze, **G. Tvauri**. "The problem of high heating rate in Differential Calorimetry", Proceedings of the 13th European Conference on Innovations in Technical and Natural Sciences. <<East West>> Association for Advanced Studies and Higher Education GmbH. Vienna, 2017.p 149-152.
6. M,Nadareishvili, E.Kiziria, V.Sokhadze, **G.Tvauri**, S.Tsakadze, "Differential calorimeter of a new type", Austrian journal of technical and natural sciences. #1-2, p.114, 2017 (ISSN) https://yadi.sk/d/DIF9Y_2f3GM9hf
7. M,Nadareishvili, E.Kiziria, V.Sokhadze, **G.Tvauri**, S.Tsakadze, "New method of differential calorimetry". European Science Review, # 1-2, p.253, 2017. (IF 0.296) https://yadi.sk/d/DIF9Y_2f3GM9hf
8. V. M. Sokhadze, E.N. Namchevadze, E.L. Kiziria, L.V. Tabatadze, L.V. Lejava, S.M. Gogichaishvili, **G.A.Tvauri**, M.K. Abuladze. "The Study of Time-Course Toxic Impact of Ni on the Thermostability of the Soil *Arthrobacter Oxydans* Bacterial Cell Culture", has been accepted for the publication in Annals of Agrarian Science (Vol. 15, # 2, 2017).
9. Kordzakhia G. Shengelia **L.Tvauri** G. Dzadzamia M. Impact of Modern Climate Change on Glaciers in East Georgia. (2016) Bulletin of the Georgian National Academy of Sciences. Vol. 10, #4 in press.
10. **Tvauri G.**, Lomidze N, Jinjolia T., Koridze K, Application of MODIS LST and surface air temperature data for snow cover analysis in Georgia (2016), The Journal of the Georgian Geophysical Society, Issue (B), Physics of Atmosphere, Ocean, and Space Plasma. v. 19 .In press.
11. Kordzakhia G. Shengelia **L.Tvauri G.** Dzadzamia M. Research into glacier variation dynamics in East Georgia under the impact of modern climate change, Proceedings of IGCP 610 Fourth Plenary Conference and Field Trip. Tbilisi, Georgia 2-9 October, 2016
12. Kordzakhia G. Shengelia **L.Tvauri G.** Dzadzamia M, Georgian glacier change Negative tendencies on the background of contemporary climate change. (2016) „Metsniereba da Technologiebi“ (Science and Technologies”) N 3 (723), pp. 29-35
13. Kordzakhia G. Shengelia **L.Tvauri G.** Dzadzamia M. Impact of modern Climate change on the small glaciers of the East Georgia (2016) „Metsniereba da Technologiebi“ (Science and Technologies”) N1 (721), pp. 9-14 (<http://publishhouse.gtu.ge/ge/index/26>)
14. Kordzakhia G., Shengelia L., **Tvauri G.**, Dzadzamia M. Research of Devdoraki Glacier Based on Satellite Remote Sensing Data and Devdoraki Glacier Falls in Historical Context. (2015) American Journal of Environmental Protection, Volume 4, Issue 3, May, 2015, Pages: 14-21
15. Kordzakhia G., Shengelia L., **Tvauri G.**, Tsomaia V., Dzadzamia M. The Satellite remote sensing outputs of the certain glaciers on the territory of East Georgia, (2015) The Egyptian Journal of Remote Sensing and Space Sciences., Volume 18, Issue 1, pp 1-7
16. Lomidze N., Jinjolia T., Koridze K., **Tvauri G.**, Zilpimiani D. Application of Remote sensing and GIS technologies for study of seasonal snow cover in Georgia, (2014) The Journal of the Georgian Geophysical Society, Issue (B), Physics of Atmosphere, Ocean, and Space Plasma, v. 17, pp. 106-110

17. L.Shengelia, G.Kordzakhia, **G.Tvauri**, M.Dzadzamia. Satellite Remote sensing and GIS study of small Glaciers of East Georgia. (2015) Monthly Scientific-Reviewed Magazine of Georgian National Academy of Sciences, „Metsniereba da Technologiebi” (Science and Technologies”) N3 (719), pp. 9-28 (<http://publishhouse.gtu.ge/ge/index/18>)
18. Shengelia, G.Kordzakhia, **G.Tvauri**, V. Tsomaia, M.Dzadzamia. Satellite Remote sensing study of Small Glaciers of East Georgia. (2015 Transactions of the Georgian Institute of Hydrometeorology at the Georgian Technical University, v. 121, pp. 104-111.
19. Shengelia, G.Kordzakhia, **G.Tvauri**, V. Tsomaia. Results of Satellite remote sensing study of Suatsi Glacier (2014) Transactions of the Georgian Institute of Hydrometeorology at the Georgian Technical University, v 120, pp 52-56.
20. L. Shengelia, **G. Tvauri**, R. Chelidze, B. Cignadze, L. Meladze, N. Khvedelidze, N. Matskepladze, G. Beradze, Study of the Area of Separate Claciers of the Caucasus Using Satellite data on the Background of contemporary Climate Change. Papers of International Conference "Pressing Problems of Hydrometeorology and Ecology", Transactions of the Institute of Hydrometeorology at the Georgian Technical University, №119, 2013.
21. G.Kordzakhia, L.Shengelia, **G.Tvauri**. Investigation of Caucasian Glaciers by Satellite Data. Papers of International Conference "Pressing Problems of Hydrometeorology and Ecology" Transactions of the Institute of Hydrometeorology at the Georgian Technical University, 2013. №119, pp. 187-190
22. L.Shengelia, G.Kordzakhia, **G.Tvauri**, T.Davitashvili, N. Begalishvili. Possibilities of the Use of Remote Sensing Technologies for the Estimation of Contemporary Climate Change Impact on the Caucasus Glaciers. 2012. Tbilisi: Monthly Scientific-Reviewed Magazine of Georgian National Academy of Sciences, „Metsniereba da Technologiebi” (Science and Technologies”), №4, p 6.
23. George Kordzakhia, Larisa Shengelia, **Genadi Tvauri**. The Use of Satellite Information for the Black Sea Surface Temperature Determination. Monograph, Georgia Publishing House „UNIVERSAL“, Tbilisi, 2011, 102 p
24. Kordzakhia G., Shengelia L., **Tvauri G.**, Chitanava R Application of the Satellite Data for the Creation of Operational Numerical Forecasting Technological line of the Black Sea conditions Tbilisi: Transactions of the Georgian Institute of Hydrometeorology at the Georgian Technical University, 2011, v. 117, pp. 59-61.
25. G. Kordzakhia, L. Shengelia, **G. Tvauri**. The Use of the Remote Sensing for the Determination of the Black Sea Surface Temperature Proceedings of 3rd Bi-annual BS Scientific Conference and UP-GRADE BS-SCENE Project Joint Conference., 1 October – 4 November, 2011, Book of Abstract. pp 93-94, (http://www.blacksea-commission.org/_3BSCConf.asp#BookOfAbstracts)
26. G.Kordzakhia, L. Shengelia, **G.Tvauri**, D. Demetrashvili. Forecast of the Black Sea Conditions Based on the Remote Sensing. Proceeding & Abstracts IKES2011, International Symposium on Kazdaglari (Mount Ida) and Edremit - Global Change in Mediterranean Region, May 5-7, 2011. PP. 222.
27. G. Kordzakhia, L. Shengelia, **G. Tvauri**. The Use of Satellite Information for the Black Sea Surface Temperature Determination. Monograph, Georgia Publishing House „UNIVERSAL“, Tbilisi, 2011, 102 p.
28. G. Kordzakhia, L. Shengelia, **G. Tvauri**, M. Tatishvili, I. Mkurnalidze: (2011) Remote Sensing for Early Warning of Natural Meteorological and Hydrological Disasters and Provision of Transportation Safety over the Black Sea in Georgia. Papers The 2nd International Geography Symposium GEOMED2010, June 2-5 2010 Kemer-Antalya, Turkey. Procedia, Social and Behavioral Sciences, Available online at (<http://www.sciencedirect.com/science/article/pii/S187704281101281X>).

