Curriculum Vitae

Name: **Geladze George Shalva**

Born: March 13, 1944 in Tbilisi

Citizenship: Georgia

Permanent address (Home): 23, Pirosmani St.. 0164, Tbilisi, Georgia

Mailing address (Office): I.Vekua Institute of Applied Mathematics of Tbilisi State University. 2, University St. 0186, Tbilisi Georgia
Tel.: (+99532) 18 73 79 (of.), (+99532) 96 84 87 (h.)
E-mail: givi-geladze@rambler.ru

Education:

Tbilisi State University, Georgia(1961-1967)

physics (**Specialty**), physicist (**Academic Degree**);

Postgraduete study (Academy of Georgian Sciences), (1967-1970), physics (**Specialty**);

Candidate of Physics and mathematics (TSU), Physics of Atmospere-hydrosphere (**Specialty**), 1981.

Position Held:

1969-70; junior scientist ; The departament of mathematical simulation of Inst. of kibernetics of Georgian Acad. of sciences.
1970-86; junior scientist; departament of numerical methods Institute of Applied Mathematics of Tbilisisi State University.
1986-88; scientist ; The departament of numerical methods methods of Institute of Applied Mathematics of TSU.
1988-90; senior; The departament of numerical methods methods of Institute of Applied Mathematics of TSU.
1990-2007; leader scientist; The departament of numerical methods methods of Institute of Applied Mathematics of TSU.
2003-2005; The senior lecturer; The faculty of cybernetics and the applied mathematics of TSU (0.5 staff).

2007-2008 ; researcher; The departament of numerical methods of Institute of Applied Mathematics of TSU.
2008-present ; The laboratorian; The faculty of exact and natural sciences of TSU.

Field of research: Numerical modelling, meteorology, ecology, hydrology, nonlinear equations, weather forecast.

Languages spoken: Georgian (Native), Russian, German, , English.

Grants:
1997, (Researcher), The mathematical simulation of Georgian ecological rejime, Grant of Government scientifical-technological program.
2001, (Researcher), The mathematical simulation of city atmosphere pollution, Scientific grant of Georgian Universities.
2004, (Researcher), Assesment and control of environmental impacts resulting from oil and gas pipelines in the Southen Caucasus region (aproved without funding),
ISTC project (G-1024).
2005, (Researcher), The mathematical and numerical simulation of unordinary hydrometeorological processes and surrounding pollution. N 1.01.81,
Georgian Ministry of Education and Science.
2009-2010, (Researcher), The estimation of risks-factors of extreme failures and possible environmental contamination on petrol and gas pipelines by means of mathematical modelling, 09 614 5-210, N 1-5/100,
Georgia national science foundation

The list of scientific works

1) G. Sh. Geladze, G. A. Robitashvili, G. K. Sulakvelidze. The criterion of a hurricane stability .Bulletin of the Academy of Sciences of the Georgia SSR, v.60, N1, 1970, 77-80.
2) G. Sh. Geladze, G. A. Robitashvili, G. K. Sulakvelidze. About the theory of tropical hurricane.The third scientific session of Institute of applied mathematics of Tbilisi state university.Tbilisi, 26-30 April, 1971, p.p. 41. The theses of reports.
3) G. Sh. Geladze, G. A. Robitashvili, G. K. Sulakvelidze. The mathematical theory of tropical hurricane. The third scientific session of Institute of applied mathematics of Tbilisi state university.Tbilisi, 26-30 April, 1971, p.p. 43. The theses of reports.

4) G. Sh. Geladze, G. A. Robitashvili, G. K. Sulakvelidze. The axial symmetrical model of tropical hurrican. Proceedings of Hydro-meteorological institute of the Academy of sciences of the Georgia SSR, 1971, vol.41(47), p.p.36-49.
5) G. Sh. Geladze, G. A. Robitashvili, G. K. Sulakvelidze. A calculation of the velocity of up-currents in tropical hurricanes.Bulletin of the Academy of Sciences of the Georgia SSR, vol.62, N1, 1971, 53-56.
6) Geladze G. Sh., Mdinaradze D. A., Robitashvili G. A. The nonstationary axial symmetrical model of cumulus cloud. Proceedings of young scientific workers of Tbilisi state university, Issue Physico-mathematial and natural sciences. 1974 , vol.2, 163-170.
7) G. Sh. Geladze, D. A. Mdinaradze, G. A. Robitashvili, G. K. Sulakvelidze. The melting of hail, when falling bellow of zero isoline in cumulus clouds. Proceedings of Hydro-meteorological institute of the Academy of sciences of the Georgia SSR, vol. 55(61), 1974, p.p.74-78.
8) 8) G. Sh. Geladze. The numerical model of boundary layer of atmosphere. Conference of young scientifics of Institute of applied mathematics of Tbilisi state university. Tbilisi, 22-26 April 1974. p.p. 35-36.
9) G. Sh. Geladze. Towards a numerical model of the meso-scale boundary layer of the atmosphere. Bulletin of the Academy of Sciences of the Georgia SSR, v.77, N1, 1975, 69-72.
10) G. Sh. Geladze, G. A. Robitashvili, G. K. Sulakvelidze. About the theory of tropical hurricane. Proceedings of I. N. Vekya Institute of applied mathematics of Tbilisi state university. Tbilisi, vol.4, 1975, p.p. 320-329.
11) G. Sh. Geladze, G. A. Robitashvili, G. K. Sulakvelidze. The mathematical theory of tropical hurricane. Proceedings of I. N. Vekya Institute of applied mathematics of Tbilisi state university. Tbilisi, vol.4, 1975, p.p. 311-317.
12) Geladze G., Amirov A., Perov V. The taking into account of phase transformation in some problems of mesometeorology. Proceedings of West-Siberian Hydro-Meteorological Institute of Siberian departament of the Academy of sciences of USSR. 1975, vol. 14, p.p. 5-17.
13) G. Sh. Geladze, B. A. Mishveladze, G. K. Sulakvelidze. Numerical simulation of aerosol propagation in the meso-scale boundary layer Bulletin of the Academy of Sciences of the Georgia SSR, v.83, N3, 1976, 605-608.
14) G. Sh. Geladze, B. A. Mishveladze. The numerical model of pollutant diffusion in the meso-scale boundary layer of atmosphere taking into account of humidity processes. Conference of young

scientifics about mathematics and mechanics of Institute of applied mathematics of Tbilisi state university. Tbilisi, 28-29 / June 1976. (Collection of articles) p.p. 27-29.
15) G. Sh. Geladze. About the diffusion of aerosol in the meso-scale boundary layer of atmosphere. Conference of young scientifics about mathematics and mechanics of Institute of applied mathematics of Tbilisi state university. Tbilisi, 28-29 / June 1976. (Collection of articles) p.p. 30.
16) Geladze G., Gunia S., Mishveladze B. The numerical model of aerosol diffusion from a point instantaneous source in atmosphere. Proceedings of Hydro-meteorological institute of the Academy of sciences of the Georgia SSR, 1978, vol.67(73), p.p.39-42.
17) G. Sh. Geladze . The influence of stratification on the propagation of aerosol in the meso-scale boundary layer. Proceedings of young scientific workers of Tbilisi state university, Issue Physico-mathematial and natural sciences. 1982, vol. 8, 50-58.
18) Geladze G. , Davitashvili T. Injgia R., Mdinaradze J., Sulakvelidze G., Sulakvelidze I., Ter-mkrtchan G., Khvedelidze Z. A multiple regression scheme for points in prognostic problems. Proceedings of Tbilisi state university, Physics, Tbilisi, 1983, v. 242, p.p.29-35.
19) G. Sh. Geladze. Physical investigation of the meso-scale boundary layer of the atmosphere. Bulletin of the Academy of Sciences of the Georgia SSR, v.119, N3, 1985, 510-512.
20) G. Sh. Geladze. The formation of cloud and fog over periodical heat “island”. Proceedings of I. N. Vekya Institute of applied mathematics of Tbilisi state university. v. 15, 1985,p.p.38 -45.
21) G. Sh. Geladze. The turbulence diffusion of aerosol in the mesometeorological boundary layer of atmosphere. Proceedings of I. N. Vekya Institute of applied mathematics of Tbilisi state university. v. 15, 1985, p.p.46-61.
22) G. Sh. Geladze. The numerical simulation of artificial influence on the fog. Proceedings of I. N. Vekya Institute of applied mathematics of Tbilisi state university. Tbilisi, vol. 25 , 1988, 72-80.
23) Geladze G. Sh. Numerical model of artificial influence on a fog by a descending airflow. Reports of enlarged sessions of the seminar of I. Vekua institute of applied mathematics. vol.6 , N3, 1991, 45-48
24) Geladze G. An artificial influence on the fog by numerical simulation. Reports of enlarged sessions of the seminar of I. Vekua institute of applied mathematics. vol. 12, N1-3, 1997, p.p. 16-19.
25) Geladze G. The numerical simulation of artificial influence on the humidity processes. Journal of Georgian Geophysical Socieity. Issue

26) Geladze G. Sh. The numerical model of the advection fog. Reports of enlarged sessions of the seminar of I. Vekua institute of applied mathematics. v. 14, N3, 1999, 49-52
27) Geladze G., Gvelesiani A. On the numerical model of the advection fog. Journal of Georgian Geophysical Socieity. Issue B. Physics of Atmosphere, Ocean and Cosmic Rays. Vol. 4B, 1999, p.p. 73-76.
28) G. Geladze. The numerical model of mesometeorological humidity processes. International union of geodesy and geophysics (IUGG), XXII General Assambly, Birmingham, United Kingdom, 19 - 24 / VII, 1999, A.260.
29) G. Geladze The numerical simulation of some mesometeorological processes. European Geophysical Society (EGS), XXY General Assambly, Nice, France, 25- 29 / IV, 2000.
30) G. Sh. Geladze. The numerical model of atmosphere mesoboundary layer taking into account of humidity and aerosol diffusion processes. The Third congress of Georgian mathematicians. Tbilisi, 11-13 /X, 2001, p.p. 25. Thesises of reports.
31) G. Geladze Some problems of the artificial influence on the mesometeorological humidity processes. Reports of enlarged sessions of the seminar of I. Vekua institute of applied mathematics. v. 17, N3, 2002, 86-90.
32) G. Geladze. Some problems of numerical simulation of mesoboundary layer of atmosphere pollution. Reports of enlarged sessions of the seminar of I. Vekua institute of applied mathematics. v. 17, N3, 2002, 91-96.
33) Geladze G., Mdinaradze J., DaviTashvili T., Vachnadze J. About independent meteorological datas for Colchida lowland. Reports of Institute of Geographics of the Academy of sciences of Georgia. v.21, 2003, p.p. 156-159.
34) Geladze G., Davitashvili T., Mdinaradze J. About humidity fields counting in mesometeorological numerical models. Journalof Geophysical Society. Issue B. Physics of atmosphere, ocean and cosmic rays. v.9B, 2004, p.23-27.
35) Geladze G., Mdinaradze J. The methods of humidity fields countings in mesometeorological models. . Reports of enlarged sessions of the seminar of I. Vekua institute of applied mathematics. vol. 19, N1, 2004, p.p. 32-37.
36) Geladze G., Davitashvili T., The numerical model of the atmospheric mesoboundary layer with taking into account of an inversion

37) Geladze G., Davitashvili T. Study of variations of meteorological fields on human healts. Reports of enlarged sessions of VIAM. v. 20, N 2., 2005.
38) Geladze G., Davitashvili T. On the mathematical model describing of Georgian territory possible pollution from the hot points dispersed in the northern Caucasus. Reports of enlarged sessions of VIAM. v. 20, N 2., 2005.
39) Geladze G. Numerical Model of Cloud with Account of Some Moments of Solar Radiation. . Reports of enlarged sessions of VIAM. v. 20, N 2., 2005.
40) Geladze G. Including of the Elements of Microphysics in the Numerical Model of Cloud. Reports of enlarged sessions of the seminar of I. Vekua institute of applied mathematics. vol. 21, N3, 2006.
41) Geladze G. On One 3D Numerical Model of Harmful Substances Transfer with account of Composite Orography. Reports of enlarged sessions of the seminar of I. Vekua institute of applied mathematics. vol. 21, N3, 2006.
42) Geladze G. Mathematical Modeling of Soil Pollution by Oil for City Conditions. Reports of enlarged sessions of the seminar of I. Vekua institute of applied mathematics. vol. 21, N3, 2006.
43) Geladze G. On one numerical 3D model of soil pollution by oil under high pressure.. Reports of enlarged sessions of the seminar of I. Vekua institute of applied mathematics. vol. 21, N3, 2006.
44) Geladze G., Gordeziani D., Davitashvili T., Sharikadze M. Investigation of the Circumstance of the Light-signals at the Streets' Crossing Point Influence Upon the Harmful Substances' Concentrations Distribution by Numerical Modeling. Book of Abstracts of International Conference on "Modern Problems in Applied Mathematics"dedicated to the 90-th anniversary of Iv. Javakhishvili Tbilisi State University (TSU) and 40-th anniversary of I. Vekua Institute of Applied Mathematics (VIAM) of TSU, September, 26-28 and October, 7-9, 2008 , Tbilisi, Georgia, p.p. 76.
45) Geladze G., Davitashvili T., Gordeziani D., Sharikadze M. Investigation of the Circumstance of the Light-signals at the Streets' Crossing Point Influence Upon the Harmful Substances' Concentrations Distribution by Numerical Modeling, Journal Applied Mathematics, Informatics And Mechanics Vol.13, No. 2, 2008, p.p.57-61.
46) Geladze G. , Davitashvili T., Sharikadze M. The numerical model of mesoboundary layer of atmosphere with the account of some

elements of frontal processes. The enlarged sessions of the seminar of I. Vekua institute of applied mathematics, 22 April, 2008.
47) Geladze G. A numerical model of humidity processes and the artificial influence on fogs. International conference “Mesoscale meteorology and air pollution”, 15-17 September 2008, Odessa, Ukraine, p. 28.
48) Geladze G. and others. Mathematical modelling of possible accidental situations related with transportation and storing of oil products (The Kulevi terminal). Institute of hydrometeorology, 2009, 111 p.
49) Geladze G. The numerical simulation of stratus clouds at constant heating of a heat ‘island’. Transactions of the Georgia Institute of Hydrometeorology, v.114, 2010, p.p. 26-31.
50) Geladze G. The simulation of cloud- and fogformation in mesocale boundary layer of atmosphere . Transactions of the Georgia Institute of Hydrometeorology, v.114, 2010, p.p. 44-49.
51) Geladze G. and others. On numerical modeling of spilling oil distribution inshore waters of the Black sea. First international conference book of abstracts, Batumi, September 12-19, 2010, p.p. 66.
52) Geladze G. Turbulence role in formation of some not ordinary mesoprocesses of atmosphere. First international conference book of abstracts, Batumi, September 12-19, 2010, p.p. 79
53) Geladze G. Numerical modelling of some processes of mesoboundary layer of atmosphere. First international conference book of abstracts, Batumi, September 12-19, 2010, p.p. 79.
54) Geladze G. Numerical simulation of some processes of mesoboundary layer of atmosphere. The annual third international conference “the education and the development”. Gori, October 1-2, 2010.
55) Geladze G., Begalishvili N., Davitashvili T. About distribution of a thermal wave in mesoprocesses of an atmosphere. 57-th Scientific conference of Georgia Institute of Hydrometeorology, May 20-21, 2010.
56) Geladze G., Begalishvili N., Davitashvili T. Modelling of some abnormal mesometeoprocesses. 57-th Scientific conference of Georgia Institute of Hydrometeorology, May 20-21, 2010.