

# Curriculum Vitae

**Olegi Kharshiladze**

Name, Surname

**15.03.1959**

Date of Birth (DD/MM/YYYY)

**Address**

**Iv. Javakhishvili Tbilisi State University**

**+995 599 531 602**

**Institute of Geophysics, Aleksidze str. 1, Tbilisi ,Georgia**

Telephone / Cell

[oleg.kharshiladze@tsu.ge](mailto:oleg.kharshiladze@tsu.ge)

## 1. Academic Degree

Format: Academic degree title, field/qualification/major, Institution, Year (e.g. PhD in Asian and Middle Eastern Studies, University of Cambridge, 2004. )

Doctor of Science, Geophysics and Hydrosphere physics, Institute of Geophysics, Tbilisi State University, Georgia, 2006

PhD., Radio Physics, Tbilisi State University, Georgia, 1988

MSc., Radio Physics, Tbilisi State University, Georgia, 1981

## 2. Work Experience

Format: Years, position, department/unit, institution.

2009- to present, Associate-Professor, Department of Physics, Tbilisi State University, Georgia

2007- to present, Main research scientist, Center of Space Research, Institute of Geophysics, Tbilisi State University, Georgia

2003 – 2006, Deputy Chairman, Georgian Space Agency,

1990 – 2005, Docent, Department of Physics, Tbilisi State University, Georgia

1981- 1990, Assistant, Department of Physics, Tbilisi State University, Georgia

## 3. Participation in Research Projects Related to the Proposal

Format: start and end dates, donor institution, project (grant) number, project title, position in the project.

1. 2013-2016, Rustaveli National Science Foundation, project: *Generation, amplification and nonlinear self-organization of weather forming ultra-low frequency waves in ionospheric shear flows*, Principal investigator
2. 2010-2013, Euro commission within FP7 program, project: *Dissipative structures and kinetic processes in the Earth magnetosphere*, Co-Investigator (Key personnel)

## 4. List of Publications Related to the proposal

Format: authors, publication title, journal title, series, volume issue (publication date): page (s) or, book/monograph title, edition #, series publisher, city, year.

1. **O. Kharshiladze**, Kh. Chargazia, *Numerical model for zonal flow generation by magnetized Rossby waves in the ionosphere with the background shear flow*, Geomagnetism & Aeronomy, **57**, (2017), 207
2. R. Chanishvili, G. Chagelishvili, E. Uchava, **O. Kharshiladze**, *Linear coupling of planetary scale waves in ionospheric zonal shear winds: Generation of fast magnetic waves*, Physics of Plasmas, **23**, (2016), 042109
3. T. Kaladze, **O. Kharshiladze**, *Generation of electrostatic drift zonal flows under the action of mean sheared flows*, Physics of Fluids, **23**, (2016), 122306
4. T. Kaladze, Kh. Chargazia, **O. Kharshiladze**, L. Tsamalashvili, *Generation of zonal flow and magnetic field by planetary waves in the Earth's Ionosphere*, Journal of Applied Mathematics and Physics, **4**, (2016), 487
5. **O. Kharshiladze**, Kh. Chargazia, *Investigation of the strong turbulence in the Geospace environment*, Advances in Radio Science, **13**, (2015), 243

6. **O. Kharshiladze**, Kh. Chargazia, *Weather forming ultra low frequency electromagnetic waves at interaction with local inhomogeneous winds in the Ionosphere*, Sun and Geosphere, **1**, (2014), 8
7. G. Aburjania, Kh. Chargazia, **O. Kharshiladze**, *Shear flow energy redistribution stipulated by the internal-gravity wave structures in the dissipative ionosphere*, Advances in Space Research, **52**, (2013), 177
8. G. Aburjania, **O. Kharshiladze**, Kh. Chargazia, *Linear mechanism of generation and intensification of internal gravity waves in the Ionosphere and their interaction with a nonuniform zonal wind: 1. model of the medium and initial dynamic equations*, Geomagnetism & Aeronomy, **53**, (2013), 362
9. G. Aburjania, **O. Kharshiladze**, Kh. Chargazia, *Linear mechanism of generation and intensification of internal gravity waves in the Ionosphere at their interaction with a nonuniform zonal wind: 2. internal gravity wave generation and intensification during the linear evolution stage*, Geomagnetism & Aeronomy, **52**, (2013), 471
10. G. Aburjania, **O. Kharshiladze**, Kh. Chargazia, *Self-organization of internal gravity wave structures in an inhomogeneous Ionosphere: 2. nonlinear vortex structures*, Geomagnetism & Aeronomy, **53**, (2013), 650

#### 5. Presentations at Scientific Events (Meeting, Conference, Congress etc.) (over the last 5 years)

Format: year, date, venue, host institute, event title, presentation title, authors, webpage

1. 2017, 7-10 Feb., Tbilisi, Georgia, Department of Physics, Tbilisi State University, Conference in Exact and Natural Sciences, “linear transformation of planetary waves in ionospheric zonal flows and nonlinear analysis of satellite data”, **O. Kharshiladze**, <http://conference.ens-2017.tsu.ge/en/page/index>
2. 2016, 28 Feb.-1 March, Beijing, China, The 2<sup>nd</sup> Conference on Astrophysics and Space Science, “Transient growth of ULF electromagnetic structures in the ionospheric shear flow”, **O. Kharshiladze**, [www.engii.org/conf/APSS/2016Feb/](http://www.engii.org/conf/APSS/2016Feb/)
3. 2015, 16-20 Feb., Moscow, Russia, Annual conference on Physics of Plasma in the Solar System, “Generation of the zonal flows by magnetized Rossby waves in the ionospheric shear flow “, **O. Kharshiladze**
4. 2015, 17-22 April, Vienna, Austria, EGU General Assembly, “Transient growth of inertial gravity waves in the ionosphere with non-uniform shear winds”, **O. Kharshiladze**, <http://www.egu2015.eu/>
5. 2014, 29 Sept. -1 Oct, Miltenberg, Germany, U.R.S.I. Landesausschuss in der Bundesrepublik Deutschland e.V. Kleinheubacher Tagung, „Self-organization of ULF electromagnetic wave structures in the shear flow driven dissipative ionosphere”, **O. Kharshiladze**, <http://www.ursi-landesausschuss.de/>
6. 2014, 27 April-02 May, Vienna, Austria, EGU General Meeting, “Internal-gravity wave structures in the ionospheric shear flow”, **O. Kharshiladze**, <http://www.egu2014.eu/>