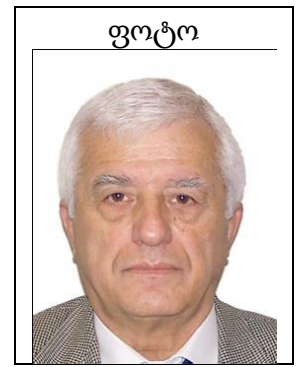




# Georgian National Academy of Sciences



## Personal Data (CV)

<b>Surname</b>	Levan	<b>First Name</b>	Japaridze
<b>Address (work, home)</b>	7, Mindeli str. Tbilisi, Georgia, 64, Paliashvili str. Tbilisi	<b>Date and place of birth</b>	14.11.1936, Tbilisi
<b>Citizenship</b>	Georgian	<b>Telephone number(s)</b>	232 58 31; 599 58 40 70.
<b>E-mail</b>	levanjafaridze@yahoo.com		

### 3. Education

Education	Institution	Learning Time
Secondary	School #6, Tbilisi	1943-1954
Higher	Georgian Polytechnic Institute	1954-1961
Postgraduate study, doctoral candidacy	Leningrad Institute of Mining Geomechanics (VNIMI)	1965-1968

### 4. Knowledge of Languages

Foreign languages	Level of language proficiency (fluent, intermediate, beginning with the help of a dictionary)
Georgian	fluent
Russian	fluent
English	intermediate

### 5. Scientific or Academic Degree and Rank

	Title of the thesis	Date of conferment
Ph.D. thesis	Main problems of static calculation of shaft support.	1968 Moscow Mining Institute
Doctoral thesis	Problems of the calculation of underground structures on limiting states.	1978 Moscow Mining Institute
Academician Doctor		
Professor		1983 Georgian Polytechnic Institute
Corresponding Member of Georgian National Academy of Sciences		1997

Member of Georgian National Academy of Sciences		2018
Member of Georgian Academy of Engineer Sciences		1994
Member of Russian Academy of Engineer Sciences		1996
Member of Russian Academy of Mining Sciences		1994

## 6. Work Experience

Date	Institution	Position
1962-1965	Georgian Institute of designing of mines	Engineer
1968-1984	Georgian G.Tsulukidze Mining Institute	Research officer ; Head of laboratory
1984-2004	Georgian G.Tsulukidze Mining Institute	Director
1994-2004	Department of Science and Technology of Georgia	Chairman
2004	Georgian G.Tsulukidze Mining Institute	Head of Department; Chairmen of Scientific Council

### 6.1 Teaching Activity

Date	Institution	Position
1970-1993	Georgian Polytechnic Institute	Docent; Professor

### 6.2 Work Abroad

Form of activity	Date	Place and Institution
<b>Delivering a course of lectures at foreign higher education institutions</b>		
<b>Long-term academic mission to research institutions</b>	1965 - 1968	Leningrad; Institute of Mining Geomechanics (VNIMI)
<b>Other</b>		

## 7. Sphere of Scientific Interests

Rock mechanics; Mechanics of underground structures
Calculation of Underground structures on the static and dynamic impact of the gravitational, technological, seismic and other factors
Scientific-Technological problems of the fiscal and mechanical properties of the natural and composite materials
Analytical and numerical methods for the calculation of the mining, hydro technical, transport and special underground structures.
Scientific-Technological problems of the effective mining of the mineral deposits
Development and usage of the geotechnical methods of the slopes stability ensuring against of gravitational and seismic impacts

## 8. Publications (Total number, indicating the Citation Index (*number*))

Total number over 130 publications. 25 citations in Scopus

### 8.1 Monographs

Years	
1975	L.A.Japaridze. Calculation of metal support of mine excavations (in Russian). "Nedra", Moscow
1984	L.A.Japaridze. Mechanics of Underground Structures. (in Georgian). "Ganatileba". Tbilisi.
1990	L.A.Japaridze. Calculation of underground structures for static and seismic impacts. (in Russian). "Metsniereba", Tbilisi.
1991	L.A.Japaridze. Calculation of the supports of capital and preparatory tunnels of the mines of Georgia (in Georgian). "Metsniereba", Tbilisi.
1991	L.A.Japaridze. Calculation of extended mine excavations support by limit States". (in Russian). Nedra",

## 8.2 Principal Papers (no more than 50)

Years	
1967	On uneven loading of deformable support of mine shafts. (in Russian). VNIMI, vol. 67, Leningrad
1967	On the static calculation of the support of a vertical shaft of circular cross-section loaded with an unevenly distributed external load. (in Russian). VNIMI, vol. 67, Leningrad.
1967	Calculation method of lining shafts with a pliable filling in the clamping space. (in Russian). "Design and construction of coal enterprises". No. 7 (103), Moscow (co-author - A. M. Kozel)
1969	Influence of tangential contact stresses on the stress state of the ring support of underground structures. (in Russian). Georgian Academy of Sciences, 53, №3, Tbilisi.
1971	Stress calculation in a cylindrical specimen during tensile testing of materials. (in Russian). Georgian Academy of Sciences, 62, №3, Tbilisi.
1972	Tensile testing of cylindrical specimens by the cleavage method. Journal of Mining Science. Springer International Publishing AG. Volume 8, Issue 3, May-June, 1972. Pp.331-334. <a href="https://link.springer.com/article/10.1007/BF02505722">https://link.springer.com/article/10.1007/BF02505722</a>
1973	The calculation of circular lining of underground structures with a ductile filling of over support space in an elastic-creeping rock mass. (in Russian). «Rock Pressure in Capital Tunnels», Mining Institute, Novosibirsk. Chapter in the book.
1974	The problems of calculation of the lining of underground structures on limit state. (in Russian). "Physics of rocks and processes", Moscow Mining Institute. Chapter in the book.
1975	Calculation of metal support of mine excavations (in Russian). "Nedra", Moscow
1983	The use of calculation methods on the limiting States in the design of underground structures. (in Russian). Journal «Shakhtnoe Stroitelstvo», №3, Moscow.
1984	Mechanics of Underground Structures. (in Georgian). "Ganatleba". Tbilisi.
1987	The method of determining the optimal shape of the cross section of the excavation. (in Russian). Journal «Shakhtnoe Stroitelstvo», №4, Moscow.
1988	The determination of the settlement of the dimensions of the limit arch of equilibrium in brittle-destructible rocks (in Russian). Journal «Shakhtnoe Stroitelstvo», №12, Moscow
1989	Basic Geomechanical Parameters of Rock Massifs Necessary for Underground Constructions' Calculation. Works of Soviet-Sweden seminar, Stockholm
1989	Criteria for the best structural solution and basic layout of an underground construction. Journal of Mining Science. Springer International Publishing. Springer International Publishing AG. July 1989, Volume 25, Issue 4, pp 387–395. <a href="https://link.springer.com/article/10.1007/BF02505722">https://link.springer.com/article/10.1007/BF02505722</a>
1989	Optimality criteria of design solutions of capital and preparatory excavations in the conditions of arching (in Russian). «Mining Journal», №3, 1989, Moscow.
1990	Calculation of underground structures for static and seismic impacts. (In Russian). "Metsniereba", Tbilisi
1991	Calculation of the supports of capital and preparatory tunnels of the mines of Georgia (in Georgian). "Metsniereba", Tbilisi.
1990	Shock-Wave Deformation of Tungsten-Nickel-Iron Alloy with Rise of Temperature. Materials of International Conference on High Pressures in Materials. San Diego (USA), 1990, (co-author - A.Peikrishvili)
1990	Расчет подземных сооружений на статические и сейсмические воздействия. Изд. «Мецниереба», г.Тбилиси
1991	Расчет крепи протяженных горных выработок по предельным состояниям. Изд. «Недра», г.Москва
1994	Shock-Wave Coating of Steel Surface with Solid Material. Materials of 8 <sup>th</sup> International Congress on Ceramic and New Materials, Florence (Italy), (Co-authors-Peikrishvili A.B., Chikhradze N.M.)
1996	Hot Shock Wave Compacting Heavy and Hard Alloy Pouders. In book (proceeding) of World Congress – "Advances in Powder Metallurgy &Particulate Materials". Washington, D.C. (Co-authors – A.Peikrishvili et.al.)
1997	Proceeding of 5 Th International Conference on Mechanical and Physical Behavior Of Materials under Dynamic Loading. Toledo (Spain), (Co-authors – A.Peikrishvili et.al.).
2000	Explosive Compaction of Clad Graphite Powders and Obtaining of Coatings on Their Base. In the book "Shock-Eave and High-Strain-Rate Phenomena". Ed.by K.P.Staudhammer, L.E.Murr and M.A.Meyers, Elsevier C.32, pages 249-258, 2000. (Co-authors - A.Peikrishvili, F.D.S.Marquis, K.P.Staudhammer et al.)
2001	Calculations of the Stress Tensor Under Symmetric Cylindrical Shock Wave Loading. (Co-autors – N.Chikhradze, I.Lomidze, F.Marquis, K.P.Staudhammer, A.Peikrishvili). Book "Pouder Materials: Current research Industrial Practices", edited by F.D.S.Marques, N Thadhany and E.V.Barrera TMS (The Minerals & Materials Society).
2001	Calculations of the Stress Tensor Under Symmetric Cylindrical Shock Wave Loading. (Co-autors – N.Chikhradze, I.Lomidze. Book "Pouder Materials: Current research Industrial Practices", edited by F.D.S.Marques, N Thadhany and E.V.Barrera TMS (The Minerals & Materials Society),, F.Marquis, K.P.Staudhammer, A.Peikrishvili).
2002	International conference -"Advances in Powder Metallurgy & Particulate Materials".Theoretical calculations of the

	stress-deformed state of materials
2003	Explosive consolidation and jacketing tungsten base alloys at elevated temperatures. USA (Co-authors: A. Peikrishvili, L. Kecskes, A. Dgebuadze). Proceeding of 2003 conference of powder metallurgy and particulate materials, June 8-12, 2003, Las-Vegas
2004	Hot Explosive Consolidation of Clad W-Cu Composition Powders. (Co-authors: L.Kecskes, N.Chikhradze, M.Tsiklaury, N.Dalakishvili). Proceedings of World Congress & Exhibition of Powder Metallurgy, October 17-21, 2004, Vienna, Austria
2007	Problems of Calculation of Underground Construction. Proceedings of ACUUS conference: "Underground Space Expanding the Frontiers", September 10-13, 2007, Athens, Greece.
2008	Problems of Calculation of Underground Construction on Limiting States of Service Ability. Proceedings of ITA-AITES World Tunnel Congress & 34 <sup>th</sup> General Assembly, September 19-25, 2008, Agra, Indi
2010	Polymer Based Composite and Hybrid Materials for Wind Power Generation. (Co-authors: N.M.Chikhradze, F.D.Marcuis, G.S.Abashidze, and L.M.Okujava). Material Science Forum. Vols. 654-656(2010) pp 2612-2615(2010) Trans Tech. Publications, Switzerland.
2014	Static Analysis of a Double-Chamber Tunnel built Using Cut and Cover Construction. Bulletin of Georgia National Academy of Sciences, vol. 8, no. 1
2015	Stress-deformed state of cylindrical specimens during indirect tensile strength testing. International Journal of Rock Mechanics and Geotechnical Engineering Vol 7, issue 5, October
2016	Shear Stresses in the Indirect Test of Tensile Strength of Rocks and Other Hard Materials. Bulletin of Georgia National Academy of Sciences, vol. 10, no. 3
2017	The possibility of use of modern technologies on Tkibuli-Shaori deposit (in Georgian). #1(724), pp.76-86, Tbilisi.
2018	Analysis of the Internal Forces Caused by Seismic P and S Waves and Geostatic Load in a Circular Tunnel. Bulletin of Georgia National Academy of Sciences, vol. 12, no. 1, 2018.

### 8.3 Textbooks, Additional Manuals, and other Methodological Literature and Training means

Years	
1982	Mining-Technical buildings and construction. (in Georgian). GTU. Tbilisi.
1984	Mechanics of Underground Structures. (in Georgian). "Ganatleba". Tbilisi.

### 8.4 Electronic Publications

Years	Title	Address of Source
1989	L.A.Dzhaparidze. Criteria for the best structural solution and basic layout of an underground construction. Springer International Publishing AG. July 1989, Volume 25, Issue 4, pp 387-395.	<a href="https://link.springer.com/article/10.1007/BF02528561">https://link.springer.com/article/10.1007/BF02528561</a>
1972	L.A.Dzhaparidze. Tensile testing of cylindrical specimens by the cleavage method. Journal of Mining Science. Springer International Publishing AG. Volume 8, Issue 3, May-June, 1972. Pp.331-334.	<a href="https://link.springer.com/article/10.1007/BF02505722">https://link.springer.com/article/10.1007/BF02505722</a>

### 8.5 Participation in Scientific Symposiums, Conferences for the last ten years

Years	Title	Name of Event
2007	Problems of Calculation of Underground Construction	ACUUS conference: "Underground Space: Expanding the Frontiers", September . Athens, Greece.
2008	Problems of Calculation of Underground Construction on Limiting States of Service Ability.	ITA-AITES World Tunnel Congress & 34 <sup>th</sup> General Assembly, September 19-25, Agra, India.
2010	Fatigue of Hybrid Polymeric Composites on Twisting.	Annual Meeting and Exhibition. February 14-18. Seattle Washington, U.S.A.
2010	Polymer Based Composite and Hybrid Materials for Wind Power Generation.	International Conference „Material Science Forum.“ Bern Switzerland.
2012	Composite Materials Reinforced by Basalt and Carbon Hybrid Fibers.	International Conference "Modern Technologies and Methods of Inorganic Materials Science. Tbilisi.
2012	Stabilization and Reinforcing of the Poliefins	International Multidistiplinary scientific Geoconference Albena, Bulgaria.
2017	Dynamic Impact Factor During Test of Cylindrical Shape Sample Under Shock Load	International Symposium on New and Advanced Materials and Technologies for Energy, Environment

	and Sustainable Development. Cancun, Mexico.
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### 9. Organizational Work (Holding of Congresses and Conferences, Editorial Work)

Years	Name

### 10. Inventions (Author's Certificate, Patents)

Years	Name
1973	Pressiometer. Author's certificate №395735, 28.05.1973.
1992	Method of explosive cladding of the inner surface of cylindrical products with refractory and ceramic materials. Author's certificate №1732573, 08.01.92.
1992	A method for producing a material from refractory powders. Author's certificate №1731438, 08.01.92.
1992	Method of hardening of hard alloys by explosion. Author's certificate №1770085, 22.06.92.

### 11. International and Local Scientific grants

Years	Name
1996-97	„Development of shock wave compaction technology of the carbon containing composites“. Scientific-Technical Center in Ukraine (STCU)
2006-08	„Small wind turbine of increased effectiveness with adaptive wings by composite materials“. Scientific-Technical Center in Ukraine (STCU).
2013-15	„Elaboration of new multilayer container for the save and transportation of radioactive materials and isotopes.“ USA Energy Department.

### 12. Scientific-Commercial Activity, author's certificate, Implementation

Years	Name
2008 - 2009	Elaboration of engineering efforts for the stability and the safety of Tschaltubo Cavern operation.
2017 - 2018	Elaboration of recommendations for the stability assurance of potentially landslide areas of Tschneti-Bethania auto road.

### 13. Other Activities

	Name	Years
<b>Supervision of Theses and Masters work</b>	Scientific adviser of over fifteen PhD students	1978 - 1995
<b>Participation in International, State and Regional Programs</b>	1. Stirring committee member of Black Sea Regional Energy Center (BISREC) and participant of its 14 meetings in: Sofia - 1995,96,97,2000; Brussels - 1996,97,98; Varna - 1998; Istanbul - 1998,2001; Athens - 1999; Bucharest - 1999,2000; Kiev - 2001.	1995 - 2001
	2. Coordinator of Georgian Energy Development Policy State Program (TACIS)	1995 - 1998
	3. Member of Scientific-Technology development commission of Black Sea Countries and participant of its meetings in: Bucharest, Athens, Istanbul, Sinaia-Romania.	1995 - 1998
	4. Working groups' member of International Society of Scientific Unions (ICSU) in Potsdam - 1994, Paris - 1996	1994 - 1996
	5. Coordinator of Georgian Scientific System Development Policy State Program (TACIS)	1997 - 2000
	6. Founder and president of Georgian Research and Development Foundation	2001 - 2018

### 14. Awards and Prizes, Honorary Title

Date	Name of Awards, Prizes, Honorary Title
1998	The Medal of Honor
2016	The honorary diploma of the Georgian National Academy of Sciences for scientific achievements

**15. Family Status**

Married, two children and three grandchildren