# Professional Biography(CV)

Name, Surname:Lali Kajaia
Email address:<u>lali.kajaia@agruni.edu.ge\_qajaia@gmail.com</u>



#### **Education:**

- 1. 2004-2006 Georgian Technical University, Building Faculty-seeker, 05.23.17 Quality of Doctors of Technical Sciences.
- 1998-2000Georgian Technical University Informatics and Management Systems,
   Applied Mathematics, Master of Applied Mathematics.
- 1993-1997Georgian Technical University Faculty of Physics and Electronics,
   Applied Mathematics, Acquisition of Bachelor's Degree in Applied Mathematics

### Work Experience:

- 1. 2023- Georgian Technical University, faculty of civil engineering, professor.
- 2. 2017 Professor, Faculty Buildings, Georgian Agricultural University.
- 3. 2018 -Senior Research, Seismic hazard and natural disaster risk sector, LEPL M. Nodia Institute of Geophysics.
- 4. 2013-2017- Associate Professor, Georgian Agricultural University.
- 5. 2010-2012- Senior Researcher, Institute of Architecture, Special Systems and Engineering, Georgian Technical University.
- 6. 2015 Director, Ltd. K. Zavrevi Seismide Construction Center LLC.
- 7. 2011-2013- Invited teacher, Engineering Direction and Construction, Georgian Agricultural University.
- 8. 2011-2013- Invited teache, Faculty of Construction, Georgian Technical University.
- 9. 2007-2010- Scientist, Seismide Building Division, Laboratory of Seismic Theory, K. Zavrev Institute of Construction Mechanics and Seismology.
- 10. 2004-2006- Seeker, Faculty of Construction, Georgian Technical University.
- 11. 1997-1999- Computer program teacher, LLC "Aster".

#### Publications:

- 1. 2004, The solution of the shape of the trapezoid shape, using the theory of complex variable functions. Georgian Academy of Sciences "Moambe". 170, # 3,2004, pp 553-556 (1) st. Tbilisi.
- 2004 The task of ending the infinite plate tightly when the border is a decent polygon. Periodic scientific journal "Intellect". # 3 (20), 2004, pp 37-41
   (5)
- 3. Tbilisi. 2005 .The three-page hardwood sliding plate task. "Science and Technology". # 1-3,2005, pp 102-106 (7) st. Tbilisi. 2005
- 4. Calculation of the rectangular sliding task of one side-by-side hierarchy. "Georgian Automobile-Road Institute" Tbilisi. 2005
- 5. In the world of engineering structures, the scientific journal "Construction" # 1, 2006 pp.36-39 st. Tbilisi.2006
- 6. Determination of the optimal law of changes in the thickness of the tunnel bandwidth using the plasticity properties of the material. R. Tskhvedadze,
  l. Kajaia. Scientific Technical Journal "Construction # 4 (1), 2007, issn 1512-3936,
  - p.64-68 st. Tbilisi. 2007
- Modeling the spatial surface of the concrete nonlinear work and fault in the tense condition of seismic impacts to assess the behavior of the structure. Akaki Tsereteli st. University. International Conference "Non-classical tasks of mechanics. 25-27.10.2007 Kutaisi.
- 8. 2007 Model of Nonlinear Behavior of Buildings under Seismic Action Taking into Account Non-Inertial Loads. International Symposium on Advance in Earthquake & Structural Engineering October 24-26 2007. SuleymanDemirel University, Isparta-Antalya-Turkey.
- 9. October 24-26.2007 Behavior of buildings under seismic action taking into account non-inertial loads Engineering. AESE-2007 / International Symposium on Advances in Earthquake & Structural October 24-26 2007 suleiman demirelis universiteti. isparta-antalia-TurqeTi.
- 10. On regional spectra of acceleration reactions Tbilisi according to empirical models of ground motion.2009. Earthquake resistant page. Safety of buildings. № 2, 2009. Moscow
- 11. 2010 building Behavior Rate Seismic Impact Static Nonlinear ' Pushover analysis Using Scientific technical Magazine "Construction" # 2 (17), 2010 Tbilisi.

- 12. Construction of the curve `PUSHOVER ~ to assess the behavior of constructions under seismic action beyond the elastic limit. Earthquake resistant construction. Safety constructions.№2, 2010 Moscow.
- 13. The use of non-linear static `PUSHOVER ~ method for evaluating the behavior of structures during seismic effects. Passionate mechanics and calculation of buildings # 2, 2010 Moscow.
- 14. 9-14 September 2011 Using a nonlinear static `pushover ~ analysis for the high-rise building on seismic action , Continuum mechanics and related problems of analysis. To celebrate the 70th anniversary of the Georgian National Academy of Sciences Tbilisi, September 9-14.2011 Tbilisi
- 15. 20-22 December 2010 Calculation of the high building with a double frame frame system on the seismometer Kajaia, K. Chkhikvadze, Ts. Cistern, n. Chlaidze First Annual Conference of the Mechanical Union of Georgia Dedicated to the 120th anniversary of Nikoloz Muskhelishvili (16,02,1891-16,07,1976) 20-22, December, 2010, Tbilisi.
- 16. seqtemberi 15-19, 2011 Design of High Rise Buildings on Seismic Effects ofSpectral and Nonlinear Dynamic Methods Lali Qajaia, Ts. Tsiskreli, N. Chlaidze, K. Chkhikvadze Second Annual Conference of the Mechanical Union of Georgia Dedicated to Ilia Vekua (23.IV.1907-2.XII.1977) 105th anniversary of birth 15-19, September, 2011.Batumi, Shota Rustaveli Batumi State University.
- 17. October 6-8. 2012 Street Construction of regional spheres of acceleration reaction in Tbilisi using earthquake depth using empirical motion model.Kajaia
   L. Cistern Chlaidze N. Chkhikvadze K. II International Conference "Unclassic Objectives of Mechanics" 6-8.10.2012 Street Kutaisi AkakiTsereteli State University
- October 6-8. 2012 Calculation of triangular lattice by means of gold crossing method. Tskhvedadze R. Tabatadze d. Kajaia. L II International Conference "Non-Classical Measures of Mechanics" 6-8.10.2012
- 19. 8-10 october. 2014 Mechanical power line design for parabolic cone reflector. 5th Annual Conference of Georgian Mechanical Union 8-10,2014 st. Tbilisi. IvaneJavakhishvili Tbilisi State University.

- 20. 2014. 29-30 MAY DASIGN OF TALL BULDING ACCORDING ACCORDING TO EUROCODE-8 USING SPECTRAL METHOD. L / QAJAIA. TS. TSISKRELI. K.CHIKVADZE, N. CHLAIDZE. ECCE-GSCE-WCCE INTERNATIONAL CONFERENCE SEISMICS 2014. TBILISI, GEORGIA 2014.
- 21. 25-29 Aug. 2017 Accelorathion as Speaktra for Tbilisi City, with SaitEffeqt.Second Europen Conference on Earthquake Engineering and Seismology.Istanbul
- 22. 30.06-1.07. 2018 Architects and structural engineers in buildings in seismic resistant dezign -Georgia. II EnternathionConfenence seismic 2018 Tbilisi, Georgia 2018
- 23. N. Tsereteli', L. Danciu, O. Varazanashvili, K. Sesetyan, L. Qajaia, T, Sharia, D. Svanadze, I. Khvedelidze. 2020. The 2020 National Seismic Hazard Model for Georgia (Sakartvelo). Building Knowledge for Geohazard Assessment and Management in the Caucasus and other Orogenic Regions 2021. ISSN: 1874-6519

  <a href="https://www.springer.com/gp/book/9789402420456?fbclid=IwAR3Z1fT\_GOjMe1IZscieAj9PUsv7HlMsargnMMbEuOWnj35\_qV98sjODBR0#aboutBook">https://www.springer.com/gp/book/9789402420456?fbclid=IwAR3Z1fT\_GOjMe1IZscieAj9PUsv7HlMsargnMMbEuOWnj35\_qV98sjODBR0#aboutBook</a> in press

### Participation in Scientific Grant Projects

- ➤ 2019 -2022 DAMAST Technologies for Safe and Efficient Operation of Hydropower Reservoirs. German-Georgian project
- ➤ 2019. NATO Advanced Research Workshop G5566 Building Civil Protection Capacity to Mitigate Geohazards in the Caucasus: A Regional Approach <a href="https://2019tbilisinatoworkshop.unimib.it/">https://2019tbilisinatoworkshop.unimib.it/</a>

# Participation in international scientific forums:

- 1. **25-27.10.07** International Conference on classical mechanics tasks ~ Determine the brick wall bracket parameters using nonlinear finite elements, Georgia Tbilisi.
- **2. 25-27.10.07-** International Conference on Non-Classical Axes of Mechanics, Modeling of spatial surface of non-linear behavior and rupture of concrete in a tense condition for seismic impact assessment, Georgia Kutaisi.
- **3. 24-26.2007** AESE-2007 / International Symposium on Advances in Earthquake & Structural Engineering, Behavior of buildings under seismic action taking into a count non-inertial loads, suleimandemirelisuniversiteti, isparta-antalia-TurqeTi.

- **4. 2010-** International Scientific Technical Conference, Problems of Construction Mechanics, Assessment of Building Conduct on Seismic Impact, Using Static Nonline Linear Pushover Analysis, Georgian Technical University.
- **5. 20-22,2010-** First Annual Conference of Georgian Mechanical Union dedicated to 120 years old NikolozMuskhelishvili, Calculation of high-level building with a double (frame frame) system on seismic resistance, Georgia Tbilisi.
- **6. 9-142011-** Continuum mechanics and related problems of analysis. Georgian national academy of sciences, Using a nonlinear static `pushover ~ analysis for design the high -rise building on seismic action, Tbilisi, Georgian Academy of Sciences.
- 7. **15-19, 2011-** Second Annual Conference of the Mechanical Union of Georgia Is dedicated Ilia Vekua (23.IV.1907-2.XII.1977) 105th anniversary of birth, Lali Qajaia, Ts. Tsiskreli, N. Chlaidze, K. ChkhikvadzeDesign of High Rise Buildings on Seismic Effects ofSpectral and Nonlinear Dynamic Methods, Batumi, Shota Rustaveli Batumi State University
- **8. 15-172011-** Is dedicated Ilia Vekua (23.IV.1907-2.XII.1977) 105th anniversary of birth, l. Qajaia, c. Ciskreli, n. ClaiZe, k.CxikvaZe. Peculiarities of calculation of seismic resistance of high buildings and modern construction norms, iv. JavakhishviliNamed after Tbilisi StateUniversity.
- **9. 6-82012-** International Conference "Non-Classical Measures of Mechanics" Kajaia l. Cistern Chlaidze N. Chkhikvadze K. Street Construction of regional spheres of acceleration reaction in Tbilisi using the grounds of earthquake using motion of empirical motion, Kutaisi Akaki Tsereteli State University
- 10. **6-82012-** International Conference "Non-Classical Measures of Mechanics " Tskhvedadze R. Tabatadze d. Kajaia l. Calculation of triangular lattice by means of gold crossing method, Kutaisi AkakiTsereteli State University.
- 11. **19-212012-** The third annual conference of the Georgian Mechanical Union is dedicated to the 110th anniversary of the birth of Victor Kupradze , ( Georgia technical University ). Highlight The building Seismic Impact Calculation Specifics The nose Take, into account Georgian Seismic Norms new Edition L. Kajaia , iv. JavakhishviliTbilisi State University.
- 12. **19-212012-** Third Annual Conference of Georgian Mechanical Union Is dedicated to the 110th anniversary of the birth of Victor Kupradze ON FRAMEWORK BUILDING COLUMNS, SEISMIC IMPACT M. Kalabegashvili, R. Thschvedaze, D. jankarashvili, L. Qajaia, A.Tabatadze, iv. JavakhishviliTbilisi State University.
- **13. 8-102014-** Mechanical power line design for parabolic cone reflector, 5th Annual Conference of Georgian Mechanical Union 8-10,2014, Tbilisi. IvaneJavakhishvili Tbilisi State University.
- **14. 29-30 2014-** DASIGN OF TALL BURDING ACCORDING ACCORDING TO EUROCODE-8 USING SPECTRAL METHOD. L / QAJAIA. TS. TSISKRELI. K.CHIKVADZE, N. CHLAIDZE, ECCE-GSCE-WCCE INTERNATIONAL CONFERENCE SEISMICS 2014.

- **15.** 25-29, 2017 Accelorathion as Speaktra for Tbilisi City, with SaitEffeqt, Second Europen Conference Earthquake Engineering and Seismology Stanbul.
- 16. 30.06-1.07.2018 Architects and structural engineers role in buildings seismic Resistant Dezign-Georgia. II Enternathion Confenence seismic 2018.
- 17. 05.10-07.10, 2023 77<sup>th</sup> ECCE General Meeting. "Sustainability in the Construction Industry" Vilnius, Lithuania

Scholarship- 12.06-19.06, 2023 Erasmus + exchange program, Poland, Koszalin technological university.

2023. Co- author of the book: Theoretical Mechanics – Statics. Practices Book. 2015. Co-author of the book: A collection of tasks of construction mechanics.

Review of the dissertation presented for the academic degree of the Doctor on the subject of calculation of plastic deformations.

On June 16-18, 2010, I took part in the ~ 21 European Regional Earthquake Engineering Seminar ~ -Turkey, Istanbul.

## Georgia Association of associations and scientific community:

Member of the National Association of Seismic Construction of Georgia , Secretary General .

Member of the Georgian Mechanical Union, Secretary General.

Member of the Georgian Society of Civil Engineer.

2023- Word Council of Civil Engineers (WCCE) Member of the Standing Committee of Education and Capacity Building.

Knowledge of foreign languages: English, Russian.

Computer programming knowledge: Microsoft office, LIRA SOFT, ANSYS, AUTOCAD, SEISMOSOFT, PHOTOSHOP, COREL and more