

# CURRICULUM VITAE

## Zurab Kiguradze



First name: Zurab  
Last name: Kiguradze  
Date of birth: June 28, 1976  
Place of birth: Rustavi, Georgia  
Marital status: Married, three children  
Nationality: Georgian

Permanent address

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Office: Ilia Vekua Institute of Applied Mathematics  
of Ivane Javakhishvili Tbilisi State University  
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### Education

2003:	PhD (Candidate of Physical and Mathematical Sciences) in Computational Mathematics, № 003590. Iv. Javakhishvili Tbilisi State University. Thesis: „Investigation and Numerical Solution for One Nonlinear Diffusion Model”. Scientific Advisor: Professor Temur Jangveladze.
1999-2002:	Post-graduate Study in Iv. Javakhishvili Tbilisi State University, Department of Informatics and Computational Mathematics.
1999:	Graduated from the Iv. Javakhishvili Tbilisi State University. Faculty of Mechanics and Mathematics, Department of Informatics and Computational Mathematics Master of Science Degree, <i>M</i> № 00052.
1997:	Graduated from the Iv. Javakhishvili Tbilisi State University Faculty of Mechanics and Mathematics, Bachelor of Science Degree, <i>BH</i> № 00033.

### Field of Research

Main activities:	Numerical Analysis; Computational Methods in Applied Mathematics; Nonlinear Equations and Systems of Mathematical Physics; Differential and Integro-Differential Equations and Systems; Numerical Solutions of Differential and Integro-Differential Equations and Systems; Programming.
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## Employment

2011-up to now:	I. Vekua Institute of Applied Mathematics of Iv. Javakhishvili Tbilisi State University, Scientific Researcher
2015-up to now:	Georgian Technical University, Associate Professor
2012-up to now:	Iv. Javakhishvili Tbilisi State University, Invited Professor
2009-2013:	Caucasus University, Professor
2006-2012:	Iv. Javakhishvili Tbilisi State University, Faculty of Exact and Natural Sciences, Department of Computer Science, Assistant Professor
2006-2010:	Ilia State University, Faculty of Masters and Doctoral Programs, Assistant Professor
1999-2006:	Iv. Javakhishvili Tbilisi State University, Docent
2001-2006:	Head of Computer Laboratory of a Department of Informatics and Computational Mathematics
1998-2004:	Rustavi Justical, Economical and Pedagogical Institute, Docent
2003:	David Agmashenebeli National Defense Academy of Georgia, Invited Professor
2000-2003:	National Center for Disease Control, Senior programmer

## Miscellaneous

Courses taught:	Numerical Analysis. Computational Methods. Numerical Solutions of Differential Equations. Investigation and Numerical Solution of Nonlinear Partial Differential and Inegro-Differential Equations and Systems. Elementary Differential Equations. Mathematics for Economists. Operator Equations. Variational Methods. Variational Methods in Mathematical Physics. Information Technologies. Advanced course in numerical analysis. Calculus. Linear Agebra. Discrete Mathematics. Programming: C/C++; Matlab; Mathematica; Mathcad; Turbo Pascal.
Computer Skills	Ms Office, LaTeX, Internet browsers, Adobe-Acrobat Professional, Adobe-Photoshop, Programming (Matlab, C/C++, MathCad, Maple, FreeFem++, Visual Studio, Mathematica, Turbo Pascal)
Master of Science Degree students:	13 (2 current, 11 finished)
Ph.D. Students	5 (2 current, 3 finished)
Publications:	During 1995-2017 more than 105 scientific publications
Citation indices	Citations – 521; h-index – 14; g-index – 19; i10-index – 18 (Based on Google Scholar Database)
Languages spoken:	Georgian (Native), English, Russian.

## Participation in Conferences and other Scientific Forums

2017:	International Conference on Mathematics and Engineering, ICOME-2017, May 10 - 12, YTU, Istanbul, Turkey
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2016:	<p>International Workshop on the Qualitative Theory of Differential Equations, QUALITDE-2016, Dedicated to the 100th birthday anniversary of academician A. Bitsadze, December 24-26, Tbilisi, Georgia</p> <p>5th International Conference on Biotechnology and Bioengineering &amp; International Conference on Coastal Ecology and Marine Biotechnology (ICBB&amp;ICCEMB), December 8-10, Bangkok, Thailand</p> <p>Second International Conference on "Application of Mathematics and Informatics in Natural Sciences and Engineering - AMINSE 2", Dedicated to the Birthday Centenary of Andro Bitsadze. September 20-24, Tbilisi, Georgia</p> <p>SIAM Annual Meeting (AN16) July 11-15. The Westin Boston Waterfront, Boston, Massachusetts, USA</p>
2015:	<p>International Workshop on the Qualitative Theory of Differential Equations, QUALITDE-2015, December 27-29, Tbilisi, Georgia</p> <p>Swedish-Georgian Conference in Analysis &amp; Dynamical Systems. July 15-22, 2015, Tbilisi, Georgia</p> <p>VI International Conference of the Georgian Mathematical Union. July 12-16, 2015, Batumi, Georgia</p> <p>SIAM SEAS Conference, University of Alabama at Birmingham, USA, Alabama, March 20-22</p>
2014:	<p>International Workshop on Qualitative Theory of Differential Equations (QUALITDE-2014), dedicated to the 125 birthday anniversary of Prof. A. Razmadze, December 18-20, Tbilisi, Georgia</p> <p>8th International Conference on Applied Mathematics, Simulation, Modelling (ASM '14), November 22-24, Florence, Italy</p> <p>Sem. Dep. Appl. Math. October 6, Laboratoire Jacques-Louis Lions, Université Pierre et Marie Curie, Paris, France</p> <p>V Annual Conference of Georgian Mathematical Union. September 8-12, Batumi, Georgia</p> <p>Caucasian Mathematics Conference (CMC I). September 5-6, Tbilisi, Georgia</p> <p>7th International Conference on Finite Differences, Finite Elements, Finite Volumes, Boundary Elements, May 15-17, Gdansk, Poland</p> <p>SIAM SEAS Conference, Florida Institute of Technology, March 29-30, Melbourne, Florida, USA</p>
2013:	<p>International Workshop on the Qualitative Theory of Differential Equations (QUALITDE – 2013), Dedicated to the 100th birthday anniversary of Professor Levan Magnaradze, December 20- 22, Tbilisi, Georgia</p> <p>IV International Conference of Georgian Mathematical Union dedicated to Academician Victor Kupradze (1903 – 1985) on the occasion of 110-th anniversary of his birthday and to the Georgian Mathematical Union on the occasion of 90 year from founding. September 9-15, Batumi, Georgia</p> <p>Second International Conference “Modern Problems in Applied Mathematics”</p>

	<p>Dedicated to the 95th Anniversary of the I. Javakhishvili Tbilisi State University &amp; 45th Anniversary of the I.Vekua Institute of Applied Mathematics of TSU. September 4-7, Tbilisi, Georgia</p> <p>WSEAS, 2nd International Conference on Applied, Numerical and Computational Mathematics (ICANCM '13). April 23-25, Morioka City, Iwate, Japan</p>
2012:	3 <sup>rd</sup> International Conference of the Georgian Mathematical Union (September 2-9, Batumi, Georgia)
2011:	<p>2<sup>nd</sup> International Conference of the Georgian Mathematical Union. Dedicated to the 70<sup>th</sup> Anniversary of the Georgian National Academy of Sciences &amp; the 120<sup>th</sup> Birthday of its First President Academician Nikoloz (Niko) Muskhelishvili (September 15-19, Batumi, Georgia)</p> <p>International Conference “CONTINUUM MECHANICS AND RELATED PROBLEMS OF ANALYSIS” to Celebrate the 70th Anniversary of the Georgian National Academy of Sciences &amp; the 120<sup>th</sup> Birthday of its First President Academician Nikoloz (Niko) Muskhelishvili (September 9-14, Tbilisi, Georgia)</p> <p>Seminar on Nonlinear Analysis and Optimization (Technion - Israel Institute of Technology, Department of Mathematics)</p>
2010:	<p>1<sup>st</sup> International Conference of the Georgian Mathematical Union (September 12-19, Batumi, Georgia)</p> <p>Advanced Courses on Boundary Value Problems for Partial Differential Equations. Tbilisi Int. Centre Math. Inf. (TICMI), I.Vekua Inst. Appl. Math. (June 23-24, Tbilisi, Georgia)</p> <p>1<sup>st</sup> International Conference Dedicated to commemoration of Professors Elene Dekanosidze and Murman Tsuladze, outstanding representatives of the Georgian informatics scientific school “INFORMATION AND COMPUTATIONAL TECHNOLOGIES” (May 2-6, Tbilisi, Georgia)</p> <p>Progress in Electromagnetics Research Symposium (Xi'an, China, March 22-26)</p>
2009:	<p>The Fifth Congress of Georgian Mathematicians (October 9-12, Batumi-Qutaisi, Georgia)</p> <p>The 2nd WSEAS International Conference (June 26-28, Tbilisi, Georgia)</p>
2008:	<p>International Conference on Modern Problems of Applied Mathematics, dedicated to the 90<sup>th</sup> Anniversary of the Iv.Javakhishvili Tbilisi State University &amp; 40<sup>th</sup> Anniversary of the I.Vekua Institute of Applied Mathematics (October 7-9, Tbilisi, Georgia)</p> <p>Seminar at Department of Applied Mathematics (19 May, Naval Postgraduate School, Monterey, CA, USA)</p>
2007:	ISAAC Conf. "Complex Analysis, Partial Differential Equations, and Mechanics of Continua" dedicated to the 100 <sup>th</sup> birthday anniversary of I.Vekua (April 23-27, 2007, Tbilisi, Georgia)
2005:	The Fourth Congress of Georgian Mathematicians (November, Tbilisi, Georgia)

2003:	DEMPH-2003 – Symposium on Differential Equations and Mathematical Physics Dedicated to the 100 <sup>th</sup> Birthday Anniversary of Academician V.Kupradze (December 24-25, Tbilisi, Georgia)
2001:	Republican Conference of Mathematicians (April 21, Tbilisi, Sukhumi Branch of Tbilisi State University, Georgia)
1997:	International Symposium on Problems of Continuous Mechanics (June 16-19, Tbilisi, Georgia)
1995-2017:	Enlarged Sessions of the Seminar of I.Vekua Institute of Applied Mathematics (April, Tbilisi, Georgia)

### Additional Information

2008-2017:	Participation as a National Contact Point of The Marie Skłodowska-Curie Actions (Horizon 2020 - MSCA) in various meetings and seminars organized by European Commission
2016:	Two months business-trip at Laboratoire Jacques-Louis Lions at University of Pierre and Marie Curie, Paris, France
2015:	Three months business-trip at Institute of Mathematics of Academy of Science of Czech Republic, Brno, Czech Republic
2014:	Two months business-trip at Laboratoire Jacques-Louis Lions at University of Pierre and Marie Curie, Paris, France
2014:	Three months business-trip at McMaster University, Department of Mathematics and Statistic, Hamilton, ON, Canada
2014-2016:	Various conferences and meetings organized by European Commission
2013, 2011, 2010, 2008:	Three months business-trips at Naval Postgraduate School, Department of Applied Mathematics, Monterey, CA, USA
2010:	Certificate of European Professional Development Center for successfully completed computer course in Master of Networking and Information-Communication Technologies
2009:	Certificate of Appreciation for presenting a lecture in the EUROPEAN COMPUTING CONFERENCE (ECC '09), 3 <sup>rd</sup> International Conference COMPUTATIONAL INTELLIGENCE (CI '09) and 2 <sup>nd</sup> WSEAS International Conference on FINITE DIFFERENCES, FINITE ELEMENTS, FINITE VOLUMES, BOUNDARY ELEMENTS (F-and B '09)  Award for the best scientific paper in the 2 <sup>nd</sup> WSEAS International Conference on FINITE DIFFERENCES - FINITE ELEMENTS - FINITE VOLUMES - BOUNDARY ELEMENTS (F-and B '09)
2008-up to now:	Deputy Editor of the Enlarged Sessions of the Seminar of I.Vekua Institute of Applied Mathematics
2008:	Diploma of President of Georgia  Certificate for winning in competition “President’s grant for young scientists”

	Certificate for winning in competition “I.Vekua’s stipend for young scientists”
2000-2002:	The diplomas of a Soros's conference of the students and post-graduate students
1999:	Diploma of President of Georgia for the winning in the scientific conference "Student Days 99" Diploma for the victory in the 59 <sup>th</sup> scientific conference of TSU students

### **Scientific Grants:**

1. Grant of the Shota Rustaveli National Science Foundation “Scientific-Research business-trip for young scientists to abroad”, 2015 (Business-trip at Czech Republic);
2. Grant of the Shota Rustaveli National Science Foundation “Scientific-Research business-trip for young scientists to abroad”, 2014 (Business-trip at Canada);
3. Grant of the National Centre for Scientific Research (France) and Shota Rustaveli National Science Foundation (Georgia), Investigation and Numerical Solution of Some Nonlinear Integro-Differential Models Based on Maxwell System, 2014-2016;
4. Grant of the Shota Rustaveli National Science Foundation “Grants for Fundamental Researches”, Investigation and numerical solution of some systems of nonlinear partial integro-differential equations, 2014-2015;
5. Grant of the Shota Rustaveli National Science Foundation “Travel grant”, for participation SIAM Conference in Florida Institute of Technologies, Melbourne, Florida, USA, March 29-30, 2014;
6. Grant of the Shota Rustaveli National Science Foundation “Scientific-Research business-trip for young scientists to abroad”, 2013 (4-months Business-trip at USA);
7. Grant of the Shota Rustaveli National Science Foundation “Grant for Fundamental Researches”, Investigation and numerical solution of some nonlinear nonstationary models, 2013-2016;
8. Grant of the Shota Rustaveli National Science Foundation “Scientific-Research business-trip for young scientists to abroad”, 2011 (3-months Business-trip at USA);
9. Grant of the Shota Rustaveli National Science Foundation “Scientific-Research business-trip for young scientists to abroad”, 2010 (3-months Business-trip at USA);
10. Grant of the Georgian National Science Foundation (GNSF), (Project Manager), 2008 – 2009;
11. Grant of the U.S. Civilian Research & Development Foundation (CRDF), the Georgia National Science Foundation (GNSF) and the Georgian Research and Development Foundation (GRDF), 2008 (3-months Business-trip at USA);
12. Grant of the President of the Georgia, 2002, 2008;
13. Stipend named after Ilia Vekua 2008;
14. Grant for the Stimulation Program of the Research Activities, 2005 – 2006;
15. Grant of the UNICEF – Management of an epidemic network in Georgia, 2002;
16. International Science Foundation – Open Society Georgia Foundation 2000 – 2002.

### **Membership**

1. European Commission, National Contact Point (NCP), 2008 – up to now;
2. Member of Georgian Mathematical Union, 2006 – up to now;
3. Member of the Central Jury of Republican Mathematical Olympiad for the Pupils of Secondary Schools 2000 – 2002.

### **Journal Referee**

1. Numerical Methods for Partial Differential Equations, 2014 – up to now;
2. Horizon Research Publishing (HRPUB), 2013 – up to now;

3. Bulletin of Tbilisi International Center of Mathematics and Informatics (TICMI) ), 2013 – up to now.
4. Applied Mathematics and Computation, 2012 – up to now;
5. Kharazishvili A. Mathematical Sketches. Part II. Ilia State University. Tbilisi, 2010, 190 p. (in Georgian);
6. Journal of CISSE, 2009 – up to now;
7. Journal of Applied Mathematics Informatics and Mechanics (AMIM) , 2009 – up to now;
8. Journal of Reports of Enlarged Sessions of the Seminar of I.Vekua Institute of Applied Mathematics, 2009 – up to now;
9. Kharazishvili A. Introduction in Set Theory. Part I. Ilia Chavchavadze State University. Tbilisi, 2008, 250 p. (in Georgian).

### **Reviewer's Activities**

1. Horizon Research Publishing, USA (HRPUB), 2013 – up to now.
2. Applied Mathematics and Computation, from 2012 – up to now.
3. Mathematical Reviews, 2010 – up to now;

### **Member of the Editorial Board**

1. Reports of Enlarged Session of the Seminar of I.Vekua Institute of Applied Mathematics.
2. Universal Journal of Computational Mathematics ([www.hrpub.org/journals/jour\\_info.php?id=24](http://www.hrpub.org/journals/jour_info.php?id=24)).

### **Conference Organization**

1. Member of the Organizing Committee of the Enlarged Sessions of the Seminar of Ilia Vekua Institute of Applied Mathematics (2008-2017, Tbilisi, Georgia).
2. Vice-Chair of the Second International Conference on Application of Mathematics and Informatics in Natural Sciences and Engineering - AMINSE 2, Dedicated to the Centenary of Andro Bitsadze. September 21-23, 2016, Tbilisi, Georgia.

## FULL LIST OF PUBLICATIONS

### Papers

1. The Asymptotic Behavior of the Solutions of One Nonlinear Integro-differential Parabolic Equation. Reports of Enlarged Sessions of the Seminar of I.Vekua Institute of Applied Mathematics, 1995, V.10, N1, p.36-38, (coauthor T.Jangveladze).
2. Domain Decomposition and Parallel Algorithm for Bitsadze-Samarskii Boundary Value Problem. Reports of Enlarged Session of the Seminar of I.Vekua Inst. of Appl. Math. 1995, V.10, N1, p.49-51.
3. On the Difference Schemes for One Nonlinear Diffusion Model. Seminar of I.Vekua Institute of Applied Mathematics, REPORTS, 1999, V.25, p.89-95 (coautor T.Jangveladze).
4. The Difference Scheme for One System of Nonlinear Partial Differential Equations. Reports of Enlarged Session of the Seminar of I.Vekua Institute of Applied Mathematics, V.14, N3, 1999, p.67-70.
5. On the Asymptotic Behavior of Solution for One System of Nonlinear Integro-differential Equations. Reports of Enlarged Sessions of the Seminar of I.Vekua Institute of Applied Mathematics, 1999, V.14, N1, p.35-38 (coauthor T.Jangveladze).
6. Finite Difference Scheme for a Nonlinear Integro-Differential System. Proceedings of I.Vekua Institute of Applied Mathematics (Tr. Inst. Prikl. Mat. Im. I.N. Vekua) V.50-51, 2000-2001, p.65-72.
7. On the Stationary Solution for One Diffusion Model. Reports of Enlarged Session of the Seminar of I.Vekua Institute of Applied Mathematics, V.16, N1, 2001, p.17-20.
8. Domain Decomposition for Bitsadze-Samarskii Boundary Value Problem. Reports of Enlarged Sessions of the Seminar of I.Vekua Institute of Applied Mathematics, 2001, V.16, N1, p.16-19 (coauthor T.Jangveladze).
9. \*Estimates of a Stabilization Rate as  $t \rightarrow \infty$  of Solutions of a Nonlinear Integro-Differential Equation. Georgian Math. J., 2002, V.9, N1, p.57-70 (coauthor T.Jangveladze).
10. Estimates of a Stabilization Rate as  $t \rightarrow \infty$  of Solutions of a System of Nonlinear Integro-Differential Equations. Reports of Enlarged Session of the Seminar of I.Vekua Institute of Applied Mathematics, 2003, V.18, N1-2, p.16-19 (coauthor T.Jangveladze).
11. Estimates of a Stabilization Rate as  $t \rightarrow \infty$  of Solutions of a Nonlinear Integro-Differential Diffusion System. J. Appl. Math. Inform. Mech., 2003, V.8, N2, p.1-19 (coauthor T.Jangveladze).
12. On One Nonlinear Integro-Differential Diffusion System. Bull. Georgian Acad. Sci., 2004, V.170, N1, p.42-45 (coauthor T.Jangveladze).
13. The Asymptotic Behavior as  $t \rightarrow \infty$  of the Solution of One Nonlinear Integro-Differential Equation. Bull. Georgian Acad. Sci., 2004, V.170, N2, p.228-230. (coauthor T.Jangveladze).
14. The Asymptotic Behavior of the Solutions of One Nonlinear Integro-Differential Model. Seminar of I.Vekua Institute of Applied Mathematics, REPORTS, 2004, V.30, p.21-32.
15. Asymptotic Behavior and Numerical Solution of the System of Nonlinear Integro-Differential Equations. Reports of Enlarged Session of the Seminar of I.Vekua Institute of Applied Mathematics. 2004, V.19, N1, p.58-61.
16. Long Time Behavior of Solutions to Nonlinear Integro-Differential Equation. Proceedings of I.Vekua Institute of Applied Mathematics (Tr. Inst. Prikl. Mat. Im. I.N. Vekua) 2004-2005, V.54-55, p.65-73 (coauthor T.Jangveladze).
17. Domain Decomposition Method for Bitsadze-Samarskii Boundary Value Problem. Trudy Tbiliss. Mat. Mekh. Astronom., 2005, V.354, N34-35, p.225-236 (in Russian, coauthor T.Jangveladze).



18. On the Asymptotic Behaviour as  $t \rightarrow \infty$  of Solutions of One Nonlinear Integro-Differential Parabolic Equation Arising in Penetration of a Magnetic Field into a Substance. Reports of Enlarged Sessions of the Seminar of I.Vekua Institute of Applied Mathematics, 2005, V.20, N1, p.8-11 (coauthor T.Jangveladze).
19. Large Time Behavior of the Solutions and Finite Difference Scheme for One System of Nonlinear Integro-Differential Equations. Bull. Georgian Acad. Sci., 2006, V.174, N2, p.211-214. (coauthor M.Aptsiauri).
20. \*Asymptotics of a Solution of a Nonlinear System of Diffusion of a Magnetic Field into a Substance. Siberian Math. J., 2006, V.47, N5, p.1058-1070 (in Russian, coauthor T.Jangveladze). English translation: Siberian Math. J., 2006, V.47, N5, p.867-878.
21. \*On the Stabilization of Solutions of an Initial-boundary Value Problem for a Nonlinear Integro-Differential Equation. Differenc. Uravneniya, 2007, V.43, N6, p.833-840 (in Russian, coauthor T.Jangveladze). English translation: Differential Equations, 2007, V.43, N6, p.854-861.
22. Large Time Asymptotics of Solutions to a Nonlinear Integro-Differential Equation. Mem. Differential Equations Math. Phys. 2007, V.42, p.35-48 (coauthor T.Jangveladze).
23. On Variational Formulation and Decomposition Methods for Bitsadze-Samarskii Nonlocal Boundary Value Problem for Two-Dimensional Second Order Elliptic Equations. Proc. of I.Vekua Inst. Appl. Math., 2007, V.57, p.56-66 (coauthors T.Jangveladze, G.Lobjanidze).
24. On Nonlinear Integro-Differential Equations Based on Maxwell's System. Proc. of I.Vekua Inst. Appl. Math., 2006-2007, V.56-57, p.55-65 (coauthor T.Jangveladze).
25. Large Time Behavior of Solutions and Difference Schemes to Nonlinear Integro-Differential System Associated with the Penetration of a Magnetic Field into a Substance. Appl. Math. Inform. Mech., 2008, V.13, N1, p.40-54 (coauthor T.Jangveladze).
26. \*Asymptotic Behavior of the Solution to Nonlinear Integro-Differential Diffusion Equation, Differenc. Uravneniya, 2008, V.44, N4, p.517-529 (in Russian, coauthor T.Jangveladze). English translation: Differential Equations, 2008, V.44, N4, p. 538-550.
27. \*Large Time Behavior of Solutions to One Nonlinear Integro-Differential Equation. Georgian Math. J. (the issue is dedicated to the memory of Prof. J.-L. Lions on the occasion of his 80-th birthday anniversary), 2008, V.15, N3, p.531-539 (coauthor T.Jangveladze).
28. On the Stabilization of Solution as  $t \rightarrow \infty$  and Convergence of the Corresponding Finite Difference Scheme for One Nonlinear Integro-Differential Equation. Reports of Enlarged Sessions of the Seminar of I.Vekua Institute of Applied Mathematics, 2008, V.22, p.15-19 (coauthors M.Aptsiauri, T.Jangveladze).
29. On Investigation and Numerical Solution of One Nonlinear Biological Model. Reports of Enlarged Sessions of the Seminar of I.Vekua Institute of Applied Mathematics, 2008, V.22, p.46-50 (coauthors T.Jangveladze, M.Nikolishvili).
30. Large Time Behavior of Solutions and Numerical Approximation of Nonlinear Integro-Differential Equation Associated with the Penetration of a Magnetic Field into a Substance. Appl. Math. Inform. Mech., 2008, V.13, N2, p.3-17 (coauthors M.Aptsiauri, T.Jangveladze).
31. On Asymptotic Behavior of Solution of One Nonlinear One-Dimensional Integro-Differential Analogue of Maxwell's System. Rep. Enl. Sess. Sem. of I.Vekua Inst. Appl. Math., 2009, V.23, p.5-10 (coauthors M.Aptsiauri, T.Jangveladze).
32. On Approximate Solution of One Nonlinear Two-Dimensional Diffusion System. Rep. Enl. Sess. Sem. of I.Vekua Inst. Appl. Math., 2009, V.23, p.42-45 (coauthors T.Jangveladze, M.Nikolishvili).

33. Finite Difference Scheme to a Nonlinear Integro-Differential Equation Associated with the Penetration of a Magnetic Field into a Substance. Proc. 2<sup>nd</sup> WSEAS Int. Conf. FINITE DIFFERENCES, FINITE ELEMENTS, FINITE VOLUMES, BOUNDARY ELEMENTS (F-and-B '09), 2009, p.186-192 (coauthor T.Jangveladze).
34. Asymptotics of Solution and Finite Difference Scheme to a Nonlinear Integro-Differential Equation Associated with the Penetration of a Magnetic Field into a Substance. WSEAS Transactions on Mathematics, 2009, V.8, N8, p.467-477 (coauthor T.Jangveladze).
35. \*Large Time Behavior of Solutions to a Nonlinear Integro-Differential System. J. Math. Anal. Appl., 2009, V.351, N1, p.382-391 (coauthors T.Jangveladze, B.Neta).
36. \*Large Time Behavior of Solutions and Finite Difference Scheme to a Nonlinear Integro-Differential Equation. Comput. Math. Appl., 2009, V.57, N5, p.799-811 (coauthors T.Jangveladze, B.Neta).
37. \*Finite Difference Approximation of a Nonlinear Integro-Differential System. Appl. Math. Comput., 2009, V.215, N2, p.615-628 (coauthors T.Jangveladze, B.Neta).
38. \*Large Time Asymptotic and Numerical Solution of a Nonlinear Diffusion Model with Memory. Comput. Math. Appl., 2010, V.59, N1, p.254-273 (coauthors T.Jangveladze, B.Neta).
39. \*Asymptotics for Large Time of Solutions to Nonlinear System Associated with the Penetration of a Magnetic Field into a Substance. Appl. Math., 2010, V.55, N6, p.471-493 (coauthor T.Jangveladze).
40. On One Nonlinear Integro-Differential Equation, Rep. Enl. Sess. Sem. of I.Vekua Inst. Appl. Math., 2010, V.24, p.9-12 (coauthor M.Aptsiauri).
41. On Asymptotic Behavior and Numerical Resolution of One Nonlinear Maxwell's Model, Proc. 15<sup>th</sup> WSEAS Int. Conf. Appl. Math., 2010, p.55-60.
42. On Decomposition Methods and Variational Formulation for Bitsadze-Samarskii Nonlocal Boundary Value Problem for Two-Dimensional Second Order Elliptic Equations, Proc. 15<sup>th</sup> WSEAS Int. Conf. Appl. Math., 2010, p.116-121. (coauthors T.Jangveladze, G.Lobjanidze).
43. \*Galerkin Finite Element Method for One Nonlinear Integro-Differential Model, Appl. Math. Comput., 2011, V217, N16, p.6883-6892 (coauthors T.Jangveladze, B.Neta).
44. \*Large Time Behavior of Solution of Initial-Boundary Value Problem with Mixed Boundary Conditions for one Nonlinear Integro-Differential Equation, Cent. Eur. J. Math., 2011, V9, N4, p.866-873 (coauthor T.Jangveladze).
45. Numerical Resolution of One System of Nonlinear Partial Differential Equations, Rep. Enl. Sess. Sem. of I.Vekua Inst. Appl. Math., 2011, V.25, p.76-79 (coauthors M. Nikolishvili, B.Tabatadze).
46. \*Asymptotic Behavior of Solution of One System of Nonlinear Integro-Differential Equations, Differenc. Uravneniya, 2012, V.48, N1, p.70-78 (in Russian, coauthors T.Jangveladze, M.Aptsiauri). English translation: Differential Equations, 2012, V.48, N1, p.72-80.
47. Finite Element Method for a System of Nonlinear Integro-Differential Equations with Mixed Boundary Conditions, Rep. Enl. Sess. Sem. of I.Vekua Inst. Appl. Math., 2012, V.26, p.23-28 (coauthors T.Jangveladze, B.Neta).
48. Galerkin Method for One Nonlinear Integro-Differential Equation with Mixed Boundary Conditions. Appl. Math. Inform. Mech., 2012, V.17, N1, p.31-38.
49. \*Finite Element Approximations of a Nonlinear Diffusion Model with Memory, Numerical Algorithms, 2013, V.64, N1, p.127-155 (coauthors T.Jangveladze, B.Neta, S. Reich, DOI: 10.1007/s11075-012-9658-7).
50. On Some Nonlinear Partial Differential and Integro-Differential Diffusion Models, Proc. 2<sup>nd</sup> International Conference on Applied, Numerical and Computational Mathematics, Recent Advances in Mathematical Methods and Computational Techniques in Modern Science, 2013, p.124-129 (coauthor T.Jangveladze).

51. On Variational Formulation and Domain Decomposition Method for Bitsadze-Samarskii Nonlocal Boundary Value Problem, Proc. 2<sup>nd</sup> International Conference on Applied, Numerical and Computational Mathematics, Recent Advances in Mathematical Methods and Computational Techniques in Modern Science, 2013, p.130-134 (coauthors T.Jangveladze, G.Lobjanidze).
52. On One Nonlinear Integro-Differential Equation with Source Term. Rep. Enlarged Sess. Semin. I.Vekua Appl. Math., 2013, V.27, 23-26 (coauthor T. Jangveladze).
53. Asymptotic Behavior of the Solution and Semi-Discrete Finite Difference Scheme for One Nonlinear Integro-Differential Model with Source Terms, Appl. Math. Inform. Mech., 2013, V.18, N2, p.33-44 (coauthors T. Jangveladze, A. Kratsashvili).
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