

Giorgi Ghvedashvili

Personal information

DOB: 12.04.1974

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Professional experience

01.2010 -	Head Department of Scientific Research and Development Ivane Javakhishvili Tbilisi State University, TSU
26.09.2012 -	Professor Faculty of Exact and Natural Sciences, TSU
27.09.2009 -26. 09.2012	Associate Professor Faculty of Exact and Natural Sciences, TSU
2008 - 01.2010	Deputy Head Department of Scientific Research and Development, TSU
2007-2008	Main Specialist Scientific Department, TSU
2006-2007	Associate Professor Faculty of Exact and Natural Sciences, TSU
2003-2006	Research staff member Laboratory of Applied Electrodynamics and Radio Techniques, TSU
2000-2003	Engineer Laboratory of Applied Electrodynamics, TSU

Scientific/Academic degree

2002	Candidate of Physical-Mathematical Sciences, Ph.D. / Academic doctor
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Education

12.2002	Ph.D. in Radio Physics, Diploma #003505
1996-1999	Ph.D. Student Specialty – Superconductivity, Faculty of Physics, TSU
1996	MS in Physics of Elementary Particles (diploma with honor AH #00166) Faculty of Physics, TSU

Working experience abroad / academic missions

02.03.2015 – 17.04.2015	Exchange Visitor Program at San Diego State University (SDSU) – within the scope of signed agreement between Georgia and the USA (the second compact of high education project, Millennium challenge Corporation)
14.06 – 15.07.2010	Invited Professor Swiss Federal Institute of Technology Zurich, ETH Zurich
1.11.2006 - 7.11.2006	Visit to Estonia and Finland in frames of TACIS project #123052 “Creating an effective model of science administration: review of EU best practices and elaboration of policy recommendations with the Ministry of Education and Science of Georgia”
04.2005 – 08.2005	Postdoctoral research fellow at the Computational Optics Group at ETH Zurich, Switzerland (Under INTAS Postdoctoral Fellowship)

09.2004 – 12.2004 Postdoctoral research fellow at the Department of Mathematical Analysis and Applications at University of Veliko Tirnovo 'St.St. Cyril and Methodius', Bulgaria (Under INTAS Postdoctoral Fellowship)

Academic experience

2003 - Lectures and Practical courses:
Electricity and Magnetism
Optics
Computer Modeling of Physical Processes
Research Management
Electronics
Electromagnetic Compatibility (EMC)
Antennas and Propagation (AP)

Area of research experience

Scattering and inverse problems in electrodynamics
Antenna design
EMC/EMI problems in applied electrodynamics
Numerical Methods
Influence EM fields on the Biological Objects (SAR Problems)

Trainings/Workshops

09.-11.2010 University Administration Support Program (UASP), International Research and Exchange Board (IREX), Kent State University, USA; Management Topic: Research Management
3-6.05.2010 Technology Transfer and Technology Licensing Workshop CLDP/SSGF/GRDF, Received Certificate
26.09.2010 -18.11.2010 International Research&Exchange Board (IREX), University Administration Support Program (UASP)
10.2009 – 04.2010 CCNA
Cisco Network Academy, GRENA
5.11 – 7.11.2008 Black Sea Economic Cooperation (BSEC) Workshop, S&T Working Group Meeting, Borovets, Bulgaria
06.2008 Technology commercialization, basic business practices and partnership development CRDF/GNSF/GRDF, Received Certificate
2.04 – 5.04.2008 "Forum on Higher Education" - Congress of the Black Sea Universities Network in frames of BSEC, Kiev, Ukraine
11.2007 "Technological Management: commercialization of R&D results in scientific research institutes". The Science & Technology Center in Ukraine (STCU). Received Certificate
16.07.2007-10.08.2007 Strategic Planning and Organizational Management Training. USAID Certificate

Awards, honors

2009-2010 President Grant for Young Scientists, GNSF
2008-2009 I. Vekua Young Scientists Fellowship Grant
10.2006 Diploma for the Best Project in Natural Sciences honored by Ministry of Science and Education of Georgia and Georgian National Scientific Foundation (GNSF)
05.2006 1st Prize Winner of INTAS Young Scientists Writing Competition 2006
2004-2006 INTAS Young Scientists Postdoctoral Fellowship Grant
10.2002 Award for the recognition of the remarkable young scientist paper presentation at the VI International Seminar/Workshop "Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory" (Diped-2002); 2002, Tbilisi, Georgia

- 09.2002 Award for the recognition of the remarkable young scientist paper presentation at the International Conference "Mathematical Methods in Electromagnetic Theory" (MMET 2002), 2002, Kiev, Ukraine
- 1992 – 1994 Student Fellowship Grant by Soros Foundation (Georgia)

Memberships

- 2002 - IEEE Member (2010-2013 Georgian Chapter Chairman, 2014- Chapter Vice Chairman)
- 2010 - Individual Full Member of Society of Research Administrators International (SRA International)
- 2010 - Professional Member of American Association for the Advancement of Science (AAAS)

Invited lectures and presentations in Bulgaria in frame of the INTAS Postdoctoral Fellowship Grant

- 09.2004 – 12.2004 University of Veliko Tirnovo "St. St. Cyril and Methodius"
South-West University "Neofit Rilsky" of Blagoevgrad
Konstantin Preslavsky University of Shumen
Technical University of Gabrovo
Technical University of Varna
Technical University-Sofia Branch Plovdiv
University "Paisii Hilendarski" of Plovdiv
University of Rousse "Angel Kinchev"
Higher College of Telecommunications and Posts of Sofia
University of Chemical Technology & Metallurgy of Sofia

Participation in scientific projects: see attachment

Conferences: see attachment

Publications: see attachment

Skills

Foreign languages

English - fluent
Russian - fluent

Computer skills

Windows, Microsoft office (Word, Excel, Power Point, Outlook), Adobe Photoshop, Adobe Acrobat Professional, Paint Pro Shop
Programming languages (C++, FORTRAN, Basic)

Scientific Projects**2013-2015**TEMPUS IV
6th Call**TSU Team Leader**

Development of Embedded System Courses with implementation of Innovative Virtual approaches for integration of Research, Education and Production in UA, GE, AM - DESIRE 544091-TEMPUS-1-2013-1-BE-TEMPUS-JPCR

2013-2015Shota Rustaveli
National Science
Foundation**Project Leader**

Development of Grid Infrastructure and Services to Support Research Communities in Georgia

09.2012Shota Rustaveli
National Science
Foundation /
Conference Grant**Organizing Committee Member**

XVII International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory

09.-11.2010

IREX, UASP

Project Leader

“Tbilisi State University Research Portal”

2009-2011

SNF, SCOPE

Project manager

“Modernization of LAE infrastructure and development of Unique Georgian Research Portal”

2009-2012

GNSF

Project manager

“Buried objects detection and discrimination: combining fast, accurate and physically complete forward and inverse models for UXO identification problems”

2009-2012

GNSF

Project manager

“Simulation of Composite Meta-Materials for Nano-Optical Devices”

2009-2010President Grant for
Young Scientists, GNSF**Project Leader**

“Study of Soil’s Roughness Effect in the Unexploded Ordnances (UXO) Problem (Detection and Discrimination) Using Electromagnetic Modeling, Based on the Method of Auxiliary Sources (MAS)”

2008-2010

NATO NIG

Project Leader

“Development of the Network Infrastructure at R&E Center and Mod of Distance Learning at TSU”

2007-2009

CRDF/GRDF

Project Research Staff

“Advanced EM forward and inverse modeling approaches: application to subsurface objects detection and discrimination”

2006-2008

GNSF

Project Leader

“Research of Dielectric Coated Personal Communication Systems (PCS) Antennas to meet modern claims of Electromagnetic Compatibility (EMC) with Achieving Maximal Health Safety for User”

2005-2008

SNF SCOPE

Project Research Staff

“Simulation and Synthesis of Metamaterials for Electromagnetics and Optics”

2004-2006

INTAS

Young Scientists Post-Doctoral Fellowship Grant

“Investigation, Development and Creation of Realistic Model of Personal Communication Systems (PCS) Antenna and Study of its Interaction with the User Using Effective Numerical Method to Achieve Maximal Health Safety”

2003-2004

CRDF/GRDF

Project Research Staff

“Development of an Efficient Numerical Method and Creation of User-Friendly Software Package for the Solution of Electromagnetic Compatibility Problems for Unbounded Complex Structures”

Conferences

1. G. Ghvedashvili, T. Gogua. TSU Research Management - on the way of reforms. IREX University Administration Support Program Conference, October 5-6, 2013, Kiev, Ukraine.
2. G. Ghvedashvili. TSU on the Way of Reforms: from Capacities to Excellence. Conference "Enhancement of European International Cooperation and Eastern Partnership in R&D&I" organized under the Lithuanian Presidency of the Council of the European Union. Vilnius, 30 September – 1 October 2013. <http://www.eep.eu2013.vu.lt/images/Ghvedashvili.pdf>
3. 3D Optical Nano-Antenna. XXth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2015), September 21-24, 2015, Lviv, Ukraine.
4. Effect of ⁵⁵Mn NMR Echo Enhancement of Nuclei Arranged in Domain Walls of Half-Metallic Heusler Compound NiMnSb in Applied Magnetic Fields. XIXth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED), 2014 September 22-25, Tbilisi, Georgia
5. Extension of the method of Auxiliary Sources for the Eigenvalue problems of the Laplace Operator in Case of Space Periodic Bounaries. XIXth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED), 2014 September 22-25, Tbilisi, Georgia
6. Bio Heat Equation Modeling on Macro and Micro Scales. XIXth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED), 2014 September 22-25, Tbilisi, Georgia
7. Computer simulation of nanoplasmonic antennas. XVIIIth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2013), September 23-26, 2013, Lviv, Ukraine.
8. TSU on the Way of Reforms: from Capacities to Excellence. Conference "Enhancement of European International Cooperation and Eastern Partnership in R&D&I" organized under the Lithuanian Presidency of the Council of the European Union. Vilnius, 30 September – 1 October 2013.
9. TSU Research Management - on the way of reforms. IREX University Administration Support Program Conference, October 5-6, 2013, Kiev, Ukraine.
10. ORGANIZATION AND MANAGEMENT OF RESEARCH ACTIVITIES IN MODERN EDUCATIONAL ENVIRONMENT. PROBLEMS AND CHALLENGES. 5th International Conference of Education, Research and Innovation. November 19-21, 2012, Madrid, Spain.
11. MAS Simulations of optical antenna structures. 7th Workshop on Numerical Methods for Optical Nano Structures. July 4-6, 2011, Zurich, Switzerland
12. Web based research administration and information system. XVIth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2011), September 26-29, 2011, Lviv, Ukraine.
13. MAS approach to modeling of electromagnetic field's scattering on two-dimensional periodic structures. 6th Workshop on Numerical Methods for Optical Nano Structures. July 6-7, 2010, Zurich, Switzerland
14. Investigation of EMI response for magnetically susceptible and conductive rough surfaces. XIVth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2009), September 21-24, 2009, Lviv, Ukraine
15. MAS-MBPE Application for Analysis of Channel Plasmon Polaritons. XIVth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2009), September 21-24, 2009, Lviv, Ukraine
16. Investigation of Pear-shaped Monopole Antenna. Progress in Electromagnetics Research Symposium (PIERS-2008). Cambridge, MA 02139, USA
17. Inverse (Receiving) Problem for Pear Shape Monopole Antenna (PSMA) And Study Antenna's Influence on the User Body. Xth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2007), Lviv, Ukraine
18. Numerical and Experimental Analysis of Pear-Shaped Monopole Antenna and Study of its Field Interaction with the User. 11th International Conference on Mathematical Methods in Electromagnetic Theory (MMET-2006), Kharkov, Ukraine

19. Personal Communication Systems (PCS) Antenna with Managed Radiation Characteristics and Study of its Interaction with the User". Second World Congress "Safety in Aviation" Air Traffic Management, Security and Safety Symposium. Workshop "Microwaves, Radar & Remote Sensing" (MRRS 2005) , Kiev, Ukraine
20. Numerical and experimental investigation of dielectric coated personal communication systems (PCS) antenna. Xth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2005), Lviv, Ukraine
21. Realistic model of personal communication systems (PCS) antenna and its interaction study with the user". VIIIth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2003), Lviv, Ukraine
22. Drop-Shaped Monopole Antenna and Its Interaction with the User's Head". IX-th International Conference on Mathematical Methods in Electromagnetic Theory (MMET2002), Kiev, Ukraine
23. Experimental and Numerical Investigation of Pear-Shaped Antenna". VIth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2002), Tbilisi, Georgia

Publications

1. Gavasheli, T., Gegechkori, T., Ghvedashvili, G., Mamniashvili, G. "Study of self-healing and self-assembly processes in polymer nanocomposites synthesized with carbon nanoparticles doped by magnetic nanoclusters". 22nd International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory, DIPED 2017, Dnipro; Ukraine; 25 September 2017 through 28 September 2017; Category number CFP17458-PRT; Code 131764 – Proceedings, 6 November 2017, Article number 8100593, Pages 178-182
2. Kakulia, D., Sazandrishvili, N., Ghvedashvili, G. "Application notes on a lossy medium model in the method of auxiliary sources and solving of eigenvalue problems". 22nd International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory, DIPED 2017, Dnipro; Ukraine; 25 September 2017 through 28 September 2017; Category number CFP17458-PRT; Code 131764 – Proceedings, 6 November 2017, Article number 8100613, Pages 248-251
3. Kakulia, D., Lomia, A., Ghvedashvili, G. "'CO' shape wire antenna". Proceedings of International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory, DIPED 2016-Tbilisi; Georgia; 26 September 2016 through 29 September 2016; Category number CFP16458-ART; Code 125381, 5 December 2016, Article number 7772227, Pages 108-110
4. Gavasheli, T., Mamniashvili, G., Gegechkori, T., Shermadini, Z., Ghvedashvili, G. "Cumulative stimulated echo in magnets". Proceedings of International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory, DIPED 2016, Tbilisi; Georgia; 26 September 2016 through 29 September 2016; Category number CFP16458-ART; Code 125381, December, Article number 7772232, pp. 123-126
5. Kajaia, G., Tkeshelashvili, N., Tavzarashvili, K., Ghvedashvili, G. "MAS simulation of plasmonic scatterers". Proceedings of 2016 IEEE International Conference on Mathematical Methods in Electromagnetic Theory, MMET 2016; Lviv; Ukraine; 5 July 2016 through 7 July 2016; Volume 2016-August, 15 August 2016, Article number 7544116, Pages 208-211.
6. K. Tavzarashvili, G. Ghvedashvili, G. Kajaia, T. Gogua, N. Tkeshelashvili. "3D Optical Nano-Antenna". Proceedings 2015 XXth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2015), September 21-24, 2015, Lviv, Ukraine, pp. 102-105.
7. Ts. Gavasheli, G. Ghvedashvili, A. Akhalkatsi, G. Mamniashvili, T. Gegechkori, O. Maghradze. "Effect of 55Mn NMR Echo Enhancement of Nuclei Arranged in Domain Walls of Half-Metallic Heusler Compound NiMnSb in Applied Magnetic Fields." Proceedings 2014 XIXth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED), 2014 September IEEE Catalog Number: CFP14458-PRT ISBN (IEEE): 978-4799-6213-6 ISBN (NASU): 978-966-02-7158-6
8. D. Kakulia, V. Ghoghoberidze, G. Ghvedashvili. "Extension of the method of Auxiliary Sources for the Eigenvalue problems of the Laplace Operator in Case of Space Periodic Boundaries". Proceedings 2014 XIXth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED), 2014 September IEEE Catalog Number: CFP14458-PRT ISBN (IEEE): 978-4799-6213-6 ISBN (NASU): 978-966-02-7158-6
9. K. Lomia, L. Shoshiashvili; D. Kakulia; G. Ghvedashvili; F. Shubitidze. "Bio Heat Equation Modeling on Macro and Micro Scales". Proceedings 2014 XIXth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED), 2014 September IEEE Catalog Number: CFP14458-PRT ISBN (IEEE): 978-4799-6213-6 ISBN (NASU): 978-966-02-7158-6
10. K. Tavzarashvili, G. Ghvedashvili, T. Gogua. "Computer simulation of nanoplasmonic antennas". XVIIIth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2013), September 23-26, 2013, Lviv, Ukraine, pp. 97-100.
11. G. Ghvedashvili, L. Kvinikadze, G. Shabashvili. ORGANIZATION AND MANAGEMENT OF RESEARCH ACTIVITIES IN MODERN EDUCATIONAL ENVIRONMENT. PROBLEMS AND CHALLENGES. Proceedings of Vth International Conference of Education, Research and Innovation (ICERI2012), November 19-21, 2012, Madrid, Spain, pp. 4724 - 4732.
12. D. Kakulia, A. Lomia, T. Gogua, G. Ghvedashvili, T. Gavasheli. The MAS based simulation of plane wave angular incident on two-dimensional dielectric sphere array, XVIIth International Seminar/Workshop on Direct and

- Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2012), September 24-27, 2012, Tbilisi, Georgia, pp. 63 - 67.
13. D. Kakulia, K. Tavzarashvili, G. Ghvedashvili, D. Karkashadze, Ch. Hafner. The Method of Auxiliary Sources Approach to Modeling of Electromagnetic Field Scattering on Two-Dimensional Periodic Structures. *Journal of Computational and Theoretical Nanoscience*, Volume 8, Number 8, August 2011 , pp. 1609-1618(10)
 14. K. Tavzarashvili, G. Ghvedashvili. MAS simulations of optical antenna structures. *International Conference on Nanotechnology, Optoelectronics and Photonics (ICNOP 2011)*, November 28-30, 2011, Venice, Italy, pp. 1479-1483.
 15. G. Ghvedashvili, L. Shoshiashvili, T. Gogua, K. Tavzarashvili. Web based research administration and information system. *Proceedings of XVIth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2011)*, September 26-29, 2011, Lviv, Ukraine. pp. 161-164.
 16. K. Tavzarashvili, G. Ghvedashvili, D. Kakulia. MAS simulation of plasmon coupling in nanosphere pairs. *Proceedings of XVIth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2011)*, September 26-29, 2011, Lviv, Ukraine. pp. 170-173.
 17. D. Kakulia, K. Tavzarashvili, G. Ghvedashvili, G. Chelidze. Inversion of a prolate metallic object's orientation with the Gauss-Newton minimization algorithm. *Proceedings of XVIth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2011)*, September 26-29, 2011, Lviv, Ukraine. pp. 119-122.
 18. L. Shoshiashvili, K. Tavzarashvili, G. Ghvedashvili, T. Gogua. Electromagnetic research environment (EMagRE)-Crossplatform EM software package based on FDTD method. *Proceedings of XVIth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2011)*, September 26-29, 2011, Lviv, Ukraine. pp. 174-177.
 19. K. Tavzarashvili, G. Ghvedashvili, D. Kakulia. MAS-MBPE Application for Plasmonic Structures. *Photonics Global Conference 2010 (PGC 2010)*, Digital Object Identifier: [10.1109/PGC.2010.5706136](https://doi.org/10.1109/PGC.2010.5706136) Dec 14-16, 2010 Singapore. Page(s): 1 - 5.
 20. K. Tavzarashvili, D. Kakulia, G. Ghvedashvili, D. Karkashadze. MAS approach to modeling of electromagnetic field's scattering on two-dimensional periodic structures. *6th Workshop on Numerical Methods for Optical Nano Structures*. July 6-7, 2010, Zurich, Switzerland
 21. G. Ghvedashvili, D. Kakulia, F. Shubitidze. Investigation of EMI response for magnetically susceptible and conductive rough surfaces. *Proceedings of XIVth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2009)*, September 21-24, 2009, Lviv, Ukraine. pp. 49-52.
 22. K. Tavzarashvili, G. Ghvedashvili, D. Karkashadze, G. Sapparishvili. MAS-MBPE Application for Analysis of Channel Plasmon Polaritons. *Proceedings of XIVth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2009)*, September 21-24, 2009, Lviv, Ukraine. pp. 236-239.
 23. Giorgi N. Ghvedashvili, David G. Kakulia, Kakhaber N. Tavzarashvili, and T. L. Gogua. Investigation of Pear-shaped Monopole Antenna. *PIERS Proceedings, Progress In Electromagnetics Research Symposium (PIERS 2008 Cambridge)*, pp. 311 - 317, July 2-6, Cambridge, USA, 2008
 24. D. Kakulia, G. Ghvedashvili and F. Shubitidze. Extending MAS/TSA Technique for Conducting Environments to Enhance Underwater UXO Discrimination. *PIERS Proceedings, Progress In Electromagnetics Research Symposium (PIERS 2008 Cambridge)*, pp. 65 - 69, July 2 - 6, 2008, Cambridge, USA, 2008.
 25. K. Tavzarashvili, Ch. Hafner, Cui Xudong, R. Vahldieck, D. Karkashadze, and G. Ghvedashvili. "Model-Based Parameters Estimation (MBPE) for Metallic Photonic Crystal Filters". *Applied Computational Electromagnetics Society (ACES) Journal*, Volume 22, Number 2, July 2007, pp. 228-235.
 26. D. Kakulia, A. Razmdze, **G. Ghvedashvili**, L. Shoshiashvili, R. Zaridze. "Numerical study of human expose by EM radiation". *Proceedings of 7th International Symposium on Electromagnetic Compatibility and Electromagnetic Ecology*, 26-29 June, 2007, St Petersburg, Russia. Page(s): 303-306.
 27. R. Zaridze, D. Kakulia, G. Ghvedashvili, G. Sapparishvili, T. Gogua, I. Avaliani. The Internet Network Connection through the LinkStar RCST Terminal in Georgia. *Proceedings of XIIth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2007)*, September 17-20, 2007, Tbilisi, Georgia. pp. 11-15.

28. G.N.Ghvedashvili, G.G. Kajaia, D.G. Kakulia, L.S. Shoshiashvili, T.L. Gogua. Inverse (receiving) problem for pear shape monopole antenna (PSMA) and study antenna's influence on the user body. Proceedings of XIIth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2007), September 17-20, 2007, Tbilisi, Georgia. pp. 118-121.
29. K.Tavzarashvili, Ch.Hafner, Cui Xudong, Ruediger Vahldieck, D.Kakulia, G.Ghvedashvili, and D.Karkashadze. Method of Auxiliary Sources and Model-Based Parameter Estimation for the Computation of Periodic Structures. Journal of Computational and Theoretical Nanoscience, Volume 4, Number 3, May 2007, pp.667-674.
30. G.N. Ghvedashvili, K.N. Tavzarashvili, D.G. Kakulia, and R.S. Zaridze. Personal Communication Systems (PCS) Antenna with Managed Radiation Characteristics and Study of its Interaction with the User. Journal of Telecommunications and Radio Engineering, Volume 66, Issue 14, 2007, pp. 1265-1272
31. G.N. Ghvedashvili, G.G. Kajaia, G.S. Sapparishvili, R.S. Zaridze. "Analyze of Dielectric Coated Personal Communication Systems (PCS) Antenna and Study of its Field Interaction with the User". Proceedings of 17th International Zurich Symposium on Electromagnetic Compatibility. 27 February - 3 March, 2006, Singapore. pp. 517-520.
32. G.N. Ghvedashvili, G.G. Kajaia, G.Sh. Sapparishvili, D.G. Kakulia, R.S. Zaridze. "Numerical and Experimental Analysis of Pear-Shaped Monopole Antenna and Study of its Field Interaction with the User". Proceedings of the 11th International Conference on Mathematical Methods in Electromagnetic Theory (MMET-2006). June 26-29, 2006. Kharkiv, Ukraine. pp. 115-117.
33. V. Tabatadze, D. Kakulia, G. Ghvedashvili, G. Sapparishvili, R. Zaridze. "Application of Equivalent Currents and Charges Conception for Visualization of the Body's Front-Face Area Based on Total Field's Reconstruction". Proceedings of the 11th International Conference on Mathematical Methods in Electromagnetic Theory (MMET-2006). June 26-29, 2006. Kharkiv, Ukraine. pp. 520-522.
34. D. Kakulia, G. Kajaia, G. Ghvedashvili, D. Karkashadze, R. Zaridze. "Frequency-Selective Dielectric Layer and its Modeling by Method of Auxiliary Sources". Proceedings of the 11th International Conference on Mathematical Methods in Electromagnetic Theory (MMET-2006). June 26-29, 2006. Kharkiv, Ukraine. pp. 574-576.
35. R. Zaridze, D. Kakulia, G. Ghvedashvili, G. Sapparishvili, V. Tabatadze, A. Bijamov Jr. "Numerical Simulation for Experimental Surface Recognition Based on Reflected Field Reconstruction". Proceedings of MEDITERRANEAN MICROWAVE SYMPOSIUM 2006, September 19-21, 2006, Genova, Italy. pp. 204-206.
36. D. G. Kakulia, G. G. Kajaia, G. N. Ghvedashvili, D. D. Karkashadze, R. S. Zaridze. Transmission characteristics of dielectric layers with periodical dents. Proceedings of XIth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2006), October 11-13, 2006, Tbilisi, Georgia. pp. 91-94
37. V. Tabatadze, D. Kakulia, G. Ghvedashvili, G. Sapparishvili, R. Zaridze. Visualization of the body's front-face area based on total field's reconstruction. Proceedings of XIth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2006), October 11-13, 2006, Tbilisi, Georgia. pp. 185-188.
38. D. Karkashadze, L. Shoshiashvili, G. Ghvedashvili, D. Kakulia, G. Kajaia, T. Gogua. 3D IWGA Source in FDTD modeling. Proceedings of XIth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2006), October 11-13, 2006, Tbilisi, Georgia. pp. 197-200.
39. Zaridze R., Tabatadze V., Kakulia D., Ghvedashvili G., Sapparishvili G. "Acceleration of Total Field's Reconstruction for Visualization of Scatterer Surface". Proceedings of the European Conference on Antennas & Propagation (EuCAP 2006), November 6-10, 2006, Nice, France.
40. A. Bijamov, G. Ghvedashvili, N. Gritsenko, D. Kakulia, G. Kajaia, L. Nikolaeva, A. Razmadze. L. Shoshiashvili, R. Zaridze. "Program kit to study human head exposed to EM radiation". The Proceedings of 6th International Symposium on Electromagnetic Compatibility and Electromagnetic Ecology, June 21-24, 2005, Saint-Petersburg, Russia. pp 270-273.
41. R. S. Zaridze, D. Kakulia, K. Tavzarashvili, G. Ghvedashvili, D. J. Pommerenke, Kai Xiao. "The Method of Auxiliary Sources as an Efficient Numerical Technique for Large 3D Semi Open Structures". 2005 IEEE AP-S International Symposium and USNC/URSI National Radio Science Meeting, July 3-8, 2005, Washington DC, USA. p. 98-101.
42. G.N. Ghvedashvili, K.N. Tavzarashvili, D.G. Kakulia, R.S. Zaridze. "Numerical and experimental investigation of dielectric coated personal communication systems (PCS) antenna". Proceedings of Xth International

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