



# Georgian National Academy of Sciences



## Personal Data (CV)

<b>Surname</b>	Didebulidze	<b>First Name</b>	Alexandre
<b>Address (work, home)</b>	52 Rustaveli Ave 0108 Tbilisi, Georgia (W) 44 Kostava Street App. 18, 0179 Tbilisi, Georgia(H)	<b>Date and place of birth</b>	30 September 1944, Tbilisi, Georgia
<b>Citizenship</b>	Georgia	<b>Phone number(s)</b>	+995 599 305 603; +995 595 094 390
<b>E-mail</b>	adidebulidze@yahoo.com		

### 3. Education

Education	Institution	Learning Time
Secondary	School # 37, Tbilisi	1951-1961
Higher	Georgian Technical University, Tbilisi	1961-1967
Postgraduate study, doctoral candidacy	Aspiranture	1968-1972

### 4. Knowledge of Languages

Foreign languages	Level of language proficiency (fluent, intermediate, beginning with the help of a dictionary)
German	Fluent written and spoken
Russian	Fluent written and spoken
English	Fluent written and spoken

### 5. Scientific or Academic Degree and Rank

	Title of the thesis	Date of conferment	Degree
Ph.D. thesis	Frequency controlled asynchronous electric motors for agricultural mobile aggregates	1974	Candidate of Technical Sciences (Equivalent to PhD)
Doctoral thesis	Specialized electrified transport-technological systems for agriculture	1991	Dr. of Technical Sciences
Professor	Electromechanics	1992	
Corresponding Member of the Academy	Department of Agriculture	1997	
Member of the Academy of Agricultural Sciences of Georgia	Department of Agricultural engineering	1995	

## 6. Work Experience

Date	Institution	Position
1967-1968	Georgian Technical University, Tbilisi	Assistant Professor
1968-1974	Institute of Mechanization and Electrification of Agriculture, Dighomi, Georgia	Aspirant, Senior scientific worker
1974	Agricultural Institute of Georgia, Tbilisi	Senior Lecturer, Docent
1989	Agricultural University of Georgia, Tbilisi	Professor, Head of department
2005	Agricultural University of Georgia, Tbilisi	Professor
2013	Agricultural University of Georgia, Tbilisi	Contract Professor
2004-2008	Ministry of Education and Science of Georgia	First deputy Minister, Parliamentary Secretary
2013	Academy of Sciences of Georgia, Tbilisi	Scientific secretary of the Centre for Innovations and HT

### 6.1 Teaching Activity

Date	Institution	Position
1967-1968	Georgian Technical University, Tbilisi	Assistant Professor
1974	Agricultural Institute (University) of Georgia, Tbilisi	Senior Lecturer, Docent, Professor, Contract Professor
2013-2015	Tbilisi State University	Contract Professor

### 6.2 Work Abroad

Form of activity	Date	Place and Institution
Delivering a course of lectures at foreign higher education institutions	1998	Giessen University, Germany
	2002	University of Luneburg, Germany
Long-term academic mission to research institutions	2000	Weitz Center, Rehovot, Israel
	1987	Leningrad (Sankt-Petersburg) Agricultural University, Russia
	1982	Moscow Power Engineering Institute
Other	March 1982 - Leipzig May 1983 - Moscow November 1983 - Bucharest	Exhibition of electromagnetic motors and pneumatic vehicles at international fairs

## 7. Sphere of Scientific Interests

Electromechanics
Sustainable development of agriculture
Education and Science Strategy

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

### 8.1 Monographs

Years	
2017	Organic Agriculture. Editors: T. Urushadze, M.Jorjadze, Tbilisi. - 578 pp., Chapter XXVI. Organic Agriculture and Bioenergetics, p. 539-554 (Co-author, in Georgian)
2016	The Roots of Georgian Science. Tbilisi, 72 pages (Co-author, in Russian)
2012	Applied Biosciences: IP, Legislation and Commercialization. Tbilisi, 120 pages (in Georgian).
1999	Conception Framework for a National Strategy for Reform of the Agricultural Research, Education and Extension System. Ministry of Agriculture of Georgia, p.54 (Co-authors: G. Agladze, R. Andguladze, T. Kunchulia).
1998	Energy Sector in Georgia. UNDP-Georgia, Tbilisi, p.72 (in English) (Co-author: M.Chachkhunashvili).
1998	Energy Sector in Georgia. UNDP-Georgia, Tbilisi, p.82 (in Georgian) (Co-author: M.Chachkhunashvili).
1997	Agriculture and Rural Development in Georgia: problems and prospects. UNDP-Georgia, Tbilisi, p.72 (in English).
1997	Agriculture and Rural Development in Georgia: problems and prospects. UNDP-Georgia, Tbilisi, p.84 (in Georgian).

### 8.2 Principal Papers (no more than 50)

Years	Name
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2019	Energy Conversion in the Electromagnetic Reciprocating Motor. Bulletin of the Georgian National Academy of Sciences, Vol. 13, # 2. Tbilisi, pages 49-57 (Co-author: G. Javakhishvili).
2019	Modes of operation of three-phase reciprocating two-stroke electromagnetic vibration motor with direct current magnetic biasing. "Energy" # 3(91), pp. 46-50 (co-author G.Javakhishvili).
2018	State recognition is key, but not everything – Governing common village pasture use in the Caucasus region (Co-authors: R.Neudert, Z.Bregvadze). International Scientific Conference: Between Europe and the Orient - A Focus on Research and Higher Education in/on Central Asia and the Caucasus, Almaaty, p. 65.
2018	Investigation of Ecological Purity of Village Pastures in Kakheti Region Based on the Analysis of Toxic Metals in Grass. Annals of Agrarian Science # 3 (16), pp. 318-320 (Co-authors: Bregvadze, Z., Enukidze, L., Chelidze, T., Loladze, T., Chankashvili, M.).
	Explaining conflicts on common village pastures – Comparative analysis of property rights in Azerbaijan and Georgia (submitted to "Society and Natural Resources") (Co-authors: R.Neudert, I.Theesfeld, N.Allahverdiyeva, V.Beckmann)
2017	Coexistence of Viticulture and Livestock Keeping in Kakheti Region (Georgia) – Historic Experience and Perspectives. International Scientific Conference: "Viticulture and Wine-Making in European Countries, Tbilisi. – p. 63 (Co-author: Z. Bregvadze).
2015	Enhancing the Sustainability of Agriculture in Georgia. International Scientific Conference: "Global Warming and Agrobiodiversity", Tbilisi. – pp. 128-132 (in Russian).
2015	Influence of Live Sheep Export on the Sheep Breeding in Kakheti Region of Georgia. Fourth International Conference: "Problems of Bio-Safe Food and Business Environment", Kutaisi, – pp. 12 - 19.
2014	Problems on Commercialization of Agricultural Biotechnology in Georgia. Annals of Agrarian Science, Vol. 12, # 3, pages 76 – 83.
2013	Problems of development of the traditional sheep farming in a mountainous area of Eastern Georgia. Magazine "Sustainable development of mountain areas", Vladikavkaz, # 3 (17), pp. 89-92 (in Russian).
2013	Agriculture of Georgia: Reforms, Global Impact and Outlook. Abstracts of the 6 <sup>th</sup> International Symposium on Recent Advances in Food Analysis (RAFA), Prague
2013	The Electrical Drive for Agricultural Bridge Unit. "Innovative technologies for sustainable and safe development of the agricultural sector", Tbilisi, pp. 374-376 (in Russian).
2013	Operating Regimes of the Electromagnetic Oscillation Motor. Materials of the International Conference "Innovative technologies for sustainable and secure development of the agricultural sector", Tbilisi, pp. 376-379.
2011	Commercialization Issues of Agricultural Biotechnologies. Conference "Biodiversity and Agricultural Biotechnologies". Agrarian University of Georgia, Tbilisi, pp 174-182
2011	Priorities for Sustainable Development of Georgian Highlands. Annals of Agrarian Science, Vol. 9, # 1, pages 153 – 157 (Co-author: Tarkhan-Mouravi G.).
2010	The Drive Unit with Permanent Magnets for use in the Mobile Agricultural Machinery. Materials of the International Conference: "Conservation of the Agrobiodiversity and Sustainable Development of Agriculture", Tbilisi. – 337-339 pp (Co-authors: Tsertsvadze M., Tsertsvadze R.).
2009	Agriculture and Land Use Change in Georgia, Georgia in Transition: Experiences and Perspectives. Schriften zur Internationalen Entwicklungs- und Umweltforschung, vol. 26. Peter Lang Verlag, Frankfurt am Main, pp. 241 - 263 (Co-author T. Urushadze).
2006	An Ecoregional Conservation Plan for the Caucasus. Edited by L. Williams, N. Zazanashvili and G. Sanadiradze, WWF Caucasus Office. Second Edition, WWF. - 223 pages.
2005	Economic Situation of Family Farms with a Focus on Grapes Production. A Case Study of Georgia. In: Deutscher Tropentag , Stuttgart-Hohenheim. The Global Food & Production Chain – Dynamics, Innovations, Conflicts, Strategies. Books of Abstracts, Universität Hohenheim, p. 513 (Co-authors: Gongladze S., Schlauderer R.).
2004	Genetically modified crops and Georgian Agriculture. Abstracts of the International Caucasian Conference on cereals and food legumes, Tbilisi. - pp. 418 – 420 (Co-author Korakhashvili A.).
2003	Caucasus Biodiversity Hotspot. Critical Ecosystem Partnership Fund (CEPF), 2003. - 60 pages (Co-author; Editor - Laura Williams), <a href="http://www.cepf.net">http://www.cepf.net</a> ;
2003	Statistics of Agriculture of Georgia. FAO Workshop on "Moving towards an Agricultural Statistics System for the Market Economy", Kishinev. - 7 pages (Co-author: Zurab Kirvalidze).
2002	Аграрная реформа и продовольственная безопасность Грузии. Сборник: Первая международная конференция «Продовольственная безопасность России», Москва, март 2002, стр. 131-132.
2002	Nature Conservation Aspects of Pastoral Farming in Georgia. In: "Pasture-landscapes and Nature Conservation", Springer-Verlag, Berlin-Heidelberg-New York, pp. 87-105. (Co-author Plachter H.).
2001	Экологические аспекты ресурсосбережения в сельском хозяйстве горной зоны Грузии. Мат. межд. научной конференции "Проблемы сельского хозяйства и экологии Закавказского региона", т. 2, Ереван, стр. 67 – 73.
2001	The Energy Crisis in Georgia: Causes and Exit Strategy Options. Journal of Social and Political Studies "Central Asia & the Caucasus", Lulea, Sweden, # 2(8). pp.
2001	Preconditions and potentials of farming development in Georgia. The Seminar Materials: "Agrarian Reforms in Georgia – Reality and Perspectives". Tbilisi, pp. 109-111.
2000	Georgia's Energy Prospects. Journal of Social and Political Studies "Central Asia & the Caucasus", Lulea, Sweden, # 1. 96-106.
1996	Integration of Ecological Aspects in Processes of Landuse to the Goal of Protection of the Biological Diversity in the Eastern Black Sea Region. Abstracts: "Conservation of the Biological Diversity as a Prerequisite for Sustainable Development in the Black Sea Region", Kobuleti, p.18-19 (Co-authors: V. Metreveli, R. Makharoblidze).
1995	К вопросу повышения энергетических показателей однофазного возвратно-поступательного вибратора. Труды Грузинского сельхозинститута, стр. 93-98 (Соавторы: Р.Ксворели, Г.Джавахишвили).

1990	Автоматизированный электропривод мостового агрегата для виноградных питомников. Журнал «Техника в сельском хозяйстве», Москва, № 1, стр. 33-36 (соавторы: В.Метревели, Д. Габелия, Р.Рамазашвили).
1989	Определение оптимальных режимов работы электромагнитного вибратора. Журнал «Техника в сельском хозяйстве», Москва, № 6, 1989, стр. 36-38 (соавторы: В.Метревели, Р.Ксоврели, Л.Маисашвили).
1986	Пневмотранспортная установка для горных сенокосов. «Техника в сельском хозяйстве», Москва, № 5, 1986, стр. 59 (соавторы: В.Метревели, М.Самхарашвили).
1986	Пневмотранспортировка сена с высокогорных сенокосов. Журнал «Кормопроизводство», Москва, № 5, 1986, стр. 45-46 (соавторы: В.Метревели, М.Самхарашвили).
1985	Повышение производительности пневмотранспортной установки. Журнал «Тракторы и с/х машины», Москва, № 7, 1985, стр. 54-55 (соавторы: В.Метревели, Дж. Кацитадзе, М.Самхарашвили).
1977	Влияние кабеля на работу электропривода сельскохозяйственного ручного инструмента. Труды Грузинского сельхозинститута, т. 46, Тбилиси, стр. 131 – 135 (Соавторы: В.Метревели, Г. Мшвидобадзе).
1973	Круговая диаграмма частотноуправляемого асинхронного двигателя // Механизация и электрификация сельского хозяйства, Москва, № 7, 1973. стр. 31-33 (соавтор В.И.Метревели).
1972	Система электрифицированных машин для горного земледелия. Сб. "Электропривод сельскохозяйственных машин и оборудования", ВИЭСХ, Москва, 1972, стр. 58-60 (группа авторов).

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

Years	Name
2019	Agricultural Dictionary. Two-volume, editor. Tengiz Urushadze. Georgian National Academy of Sciences, Tbilisi, 2019. - 398p (co-author, in Georgian).
2017	Electric micromachines. Agrarian University of Georgia, Tbilisi. - 156 pages (co-authors: M. Konjaria, E. Midelashvili, in Georgian).
2012	Applied Biosciences: Intellectual Property, Legislation, and Commercialization. Tbilisi. - 120 p.
1991	Service of electrical equipment. Supporting Manual, Georgian State Institute of Agriculture, Tbilisi, - 92 p. (Co-author I. Tsuladze)
1989	Electronics, microprocessors and communications technology. Methodological Reference for Laboratory Works. Georgian State Institute of Agriculture, Tbilisi, 57 p. (Co-authors: R. Ksovrel, N. Beridze, K. Chipashvili).
1987	Practical guide in electrical equipment operation. Georgian Institute of Agriculture, - 64 p.
1983	Practical guide of automated electric drives. Georgian Institute of Agriculture, Tbilisi. - 58 p.
1982	Automated electric drives in agriculture. «Education», Tbilisi, - 256 p. (Co-authors: V. Metreveli, Sh. Chelidze)

### 8.4 Electronic Publications

Years	Title	Address of Source
2017	Multiple stakeholders, cooperation and conflict in common pasture resources – Comparative analysis of property rights in Azerbaijan and Georgia. XVI Biennial IASC Conference, Utrecht. – 14 pages (Co-authors: Neudert R., Beckmann V.).	<a href="https://www.iasc2017.org/wp-content/uploads/2017/09/8B_Neudert-et-al.pdf">https://www.iasc2017.org/wp-content/uploads/2017/09/8B_Neudert-et-al.pdf</a>
2011	Commercialization Issues of Agricultural Biotechnologies. Conference “Biodiversity and Agricultural Biotechnologies”. Agrarian University of Georgia, Tbilisi. Pages 174-182.	<a href="http://agruni.edu.ge/boxcms/files/Statiebi-Conference-03.11.2011.pdf">http://agruni.edu.ge/boxcms/files/Statiebi-Conference-03.11.2011.pdf</a>
2006	The process of science reform in Georgia. International Conference: "Georgian-German Cooperation in Biomedical Science". Tbilisi, - 4 p.	<a href="http://www.gvesd.org.ge/pdf/conference/ad_geo.pdf">http://www.gvesd.org.ge/pdf/conference/ad_geo.pdf</a>
2003	Sustainable Agriculture in Georgia. The South Caucasus Regional Land Policy Conference, Tbilisi, – 20 pages	(CD-variant), <a href="http://www.aplr.org">http://www.aplr.org</a> .
2001	Sustainable rural development and poverty reduction in Georgia. International Conference “Access to Land”, 2001, Bonn, Germany, 6 p.	<a href="http://www.dse.de">http://www.dse.de</a> .

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

Years	Title	Name of Event
2019	Modes of operation of three-phase reciprocating two-stroke electromagnetic vibration motor with direct current magnetic biasing	I International Scientific-Technical Conference "Contemporary energy problems and ways to solve them".
2019	Grain seed sortier with reciprocal electromagnetic vibrating drive	Tbilisi, Georgia. International scientific Conference: "Wheat in European Countries and Georgia as one of Origin in Wheat"

2018	State recognition is key, but not everything – Governing common village pasture use in the Caucasus region (Co-authors: R. Neudert, Z. Bregvadze).	Almaty, Kazakhstan, Status symposium “Between Europe and the Orient”.
2017	Multiple stakeholders, cooperation and conflict in common pasture resources – Comparative analysis of property rights in Azerbaijan and Georgia	Utrecht, Netherlands. XVI Biennial International Association for the Study of the Commons Conference
2017	Coexistence of Viticulture and Livestock Keeping in Kakheti (Georgia) - Historic Experience and Prospects	Tbilisi, Georgia. International Scientific Conference: “Viticulture and Wine-Making in European Countries,
2015	Enhancing the Sustainability of Agriculture in Georgia.	Tbilisi, Georgia. International Scientific Conference: “Global Warming and Agrobiodiversity”.
2014	General Aspects of Agriculture in Georgia	Murcia, Spain. Biopartner’s Networking Meeting: Viticulture and Oenology in Georgia
2013	Agriculture of Georgia: Reforms, Global Impact and Outlook.	Prague, Czech Republic. 6 <sup>th</sup> International Symposium on Recent Advances in Food Analysis (RAFA)
2013	Operating Regimes of the Electromagnetic Oscillation Motor.	Tbilisi. Conference "Innovative technologies for sustainable and secure development of the agricultural sector"
2003	Statistics of agriculture of Georgia	Kishinev, Moldova. Workshop on “Moving towards an Agricultural Statistics System for the Market Economy”, (Co-author: Z. Kirvalidze)
2003	Sustainable Agriculture and Rural Development in Georgia	Timisoara, Rumania, Rural Approaches and Opportunities for Development Conference (ROAD conference)
2003	Sustainable Agriculture	Tbilisi, Georgia. Regional Land Policy Conference
2002	Agricultural Reform and Food Security of Georgia	Moscow, Russia 1 <sup>st</sup> International Seminar “Food Security in Russia”
2001	Environmental aspects of resource conservation in agriculture of the mountainous zone of Georgia.	Erevan, Armenia. International Scientific Conference "Problems of Agriculture and Ecology of the Transcaucasian Region",
2001	Sustainable Rural Development and Poverty Reduction in Georgia	Bonn, Germany. International Conference “Access to Land: Innovative Agrarian Reforms for Sustainability and Poverty Reduction”.

## 9. Organizational Work (Holding of Congresses and Conferences, Editorial Work)

Years	Name
1996-2002	Board of Academic Experts of Georgia, Member, from 1997 - Vice-Chairman
1994-1998	Scientific Board Member, Ministry of Environment and Natural Resources Protection of Georgia
1995-1997	Georgian Library Development Foundation (NGO) – President
From 2006	Journal “Annals of Agrarian Science”, Member of the editorial team
2000-2010	Journal “Intellecti”, Member of the Scientific-Coordination Council
2007-2008	Member of the editorial board of the journal "Bulletin of the Georgian National Academy of Sciences"
1996-2008	Member of the UNESCO National Commission
2002-2004	Member of the editorial team of the journal "Economics of agriculture" (Moscow)
1997-2004	Member of the editorial team of the journal “Science and Technology” (Tbilisi)

## 10. Inventions (Author’s Certificate, Patents) - 42 Patents of 16 countries, among them:

Years	Name
2013	Combined Magnetic Engine. Patent of Georgia #5947, Official Bulletin of Industrial Property of Georgia, # 20/384, 2013, pp. 15-16.
2001	Electromagnetic vibroxciter. Patent of Georgia # 2611, Sakpatenti Official Bulletin # 15, 2001 (Co-authors: R.Kovreli, G. Javakhishvili).
2000	Vibrating shaving. Patent of Georgia # 2084, Sakpatenti Official Bulletin # 3, 2000 (Co-authors: R.Ksovreli).
2000	Vibrating device. Patent of Georgia # 2082, "Sakpatenti Official Bulletin" # 3, 2000 (Co-authors: R.Ksovreli, E.Midelashvili).
1997	Tillage vibrating working body. Patent of Georgia # 1146 Sakpatenti Official Bulletin # 14, 1997 (Co-authors: R.Kovreli, K. Chipashvili)
1997	Converter of a small reciprocating moving in rotation. Patent of Georgia # 870, Sakpatenti Official Bulletin # 5 (Co-authors: V.Metreveli, Sh. Chelidze)
1995	Electromagnetic vibrator. Patent of Georgia # 227, Sakpatenti Official Bulletin # 2, 1995 (co-author R.Ksovreli)
1994	Two-stroke electromagnetic vibrator. Patent of Georgia # 114, Sakpatenti Official Bulletin, # 2, p. 46-47 (Co-authors: R. Ksovreli, G. Javakhishvili, K. Machavariani)
1994	Electromagnetic vibration motor. Patent of Georgia # 49, Sakpatenti Official Bulletin # 1, 1994, p.151 (Co-authors: R.Ksovreli, M.Kupatadze).

1993	Electromagnetic vibrator. USSR AC # 1820460, "Bulletin of the Inventions" No. 21, 1993 (co-author R.Ksovreli)
1992	Электромагнитный привод возвратно-поступательного движения. AC СССР #1781783, "Бюллетень изобретений" # 46, 1992 (соавторы: Р.И.Ксоврели, Г.А.Джавахишвили, А.Ф.Гасеев)
1992	Electromagnetic vibrator. USSR AC # 1774440, Bulletin of Inventions # 41(co-authors: R. Ksovreli, A.Gasseyev, G. Javakhishvili).
1992	The method of tea leaves collecting. USSR AC # 1727667, "Bulletin of inventions" # 15, 1992 (co-authors: V. Metreveli, E. Gudushauri, V. Petrov and others)
1991	Electromagnetic Oscillation Motor. Patent of Australia № 606853, 09.07.1991
1991	Electromagnetic Oscillation Motor. Patent of Canada # 1285595, 02.07.1991
1990	Electromagnetic Oscillation Motor. Patent of India № 9162, 26.05.1989
1989	Electromagnetic Vibrator. Patent of Bulgaria # 64345, 1989
1989	Electromagnetic Oscillation Motor. US Patent # 4885487, 05.12.1989
1989	Electromagnetic vibrator. USSR AC # 1469532, Bulletin of Inventions No. 12 (co-authors V. Metreveli, R. Ksovreli, Sh. Chelidze, L. Maisashvili).
1989	USSR license passport for the invention of "Electromagnetic vibrator" No. 220149, 1989
1989	Electromagnetic vibration motor. USSR AC # 1462451, Bulletin of Inventions No. 8, 1989 (co-authors R. Ksovreli, V. Kochiev, A. Gasseyev).
1989	Vibrating electric motor. USSR AC # 1453545, Bulletin of Inventions No. 3, 1989 (co-authors, R. Ksovreli, A. Gasseyev).
1988	Electromagnetic Oscillation Motor. Patent of Finland № 882201, 05.11.1988
1988	Electromagnetischer Vibrator. Patentschrift der Bundesrepublik # 3390536, 20.10.1988
1988	Electromagnetic Vibrator. Brevetto per Invenzione Italia # 1195562, 19.10.1988
1988	Electromagnetic Oscillation Motor. EU Patent # 0282589, 21.09.1988
1988	Electromagnetic Vibrator. Patent Czechoslovakia № 255533, 20.09.1988
1988	Electromagnetic Oscillation Motor. Carta Patente do Brasil № 8607205, 13.09.1988,
1988	Electromagnetic Vibrator. Patent of Australia # 570651, 18.08.1988
1988	Vibrador Electromagnetico. Carta Patente do Brasil # 8307751, 26.07.1988
1988	Device for connecting and winding thin-walled flexible hoses. USSR AC # 1416791, Bulletin of Inventions No. 30, 1988 (co-authors M. Samkharashvili, R. Rusieshvili, T. Karchaidze).
1988	Electromagnetic Vibrator. Patent of DDR # 253746, 03.02.1988
1988	Electromagnetic Oscillation Motor. Patent, registered by WIPO № WO1988002193
1987	Rotational sprayer AC # 1347986, "Bulletin of inventions" No. 40, 1987 (co-authors V. Metreveli, Sh. Antidze, R. Ramazashvili).
1987	Electromagnetic Vibrator. Brevet d'Invention Francaise # 2556148, 20.02.1987
1986	Electromagnetic Vibrator. Patent of India # 7003, 07.10.1986
1986	Electromagnetic vibrator. USSR AC # 1040573, Bulletin of Inventions No. 19, 1986 (co-authors: Metreveli V., Ksovreli R., Chelidze Sh., Maisashvili L.).
1986	Electromagnetic Vibrator. Canadian Patent # 1202662, 01.04.1986
1985	Electromagnetic Vibrator. United Kingdom Patent # № 2157093, 11.04.1985
1984	Screw feeder for pneumatic conveying system. USSR AC # 1100208, Bulletin of Inventions No. 24, 1984 (co-authors: Metreveli V., Samkharashvili M.).
1983	Device for packing products in bags. USSR AC # 1049365, Bulletin of Inventions No. 59, (co-authors: Metreveli V., Mesarkishvili S., Samkharashvili M.).
1981	A device for washing of kvevri. USSR AC # 823270, "Bulletin of inventions" No. 15, 1981 (co-authors: Managadze J., Chelidze Sh., Metreveli J.).

## 11. International and Local Scientific grants

Years	Name
1995–1997	Open Society - Georgia Foundation, Project ED1-95. Libraries Development Fund - Transfer of literature from the American Friendship Fund (AFF) to the Libraries of Georgia, Director; More than 30,000 English-language books and journals from the USA have been donated to Georgian libraries - TSU, Agricultural University, GTU, etc.
1998	World Bank Project: "Development of National Strategy for Agricultural Research, Education and Extension System" - Consultant
1999	Grant Issue of Georgian Academy of Sciences 18.8. "The Contemporary State of Nomadic Livestock and Its Theoretical Basis and Practical Proposals for its Development" - Performer;

2000	Grant Issue of the Georgian Academy of Sciences 18.9. "Developing Measures for Providing Environmentally Friendly Livestock Products in the Market Economy for Georgian Mountain Resorts " - Performer
2001 - 2003	Council of Europe Project: "European Mountains 2002: Pyrenees - Alps - Caucasus: Mountainous Area Development", with the participation of organizations from France, Italy, Spain, Georgia, Armenia and Azerbaijan
2001 – 2004	USAID-DAI, Project “Restructuring and Strategy of the Ministry of Agriculture of Georgia”. Senior Analyst.
2002 –2003	AHT International GmbH, Project: "Conservation of Nature and Biological Diversity in the Caucasus Region", Consultant for Land Use and Agriculture Problems
2002 – 2003	Eurasia Foundation's South Caucasus Land Policy Project. Preparation of Report on Sustainable Agriculture in Georgia
2003 – 2004	World Bank Project # 7615040/7620016: "Relations between farmer and processing plant in CIS countries (Georgia, Armenia, Moldova, Ukraine, Russia)", in collaboration with Newcastle University.
2003	AFH Consultants International GmbH. Preparation of expert report on "Assessment of the Importance of Georgian Wine Sector"
12.2003	Open Society Georgia Foundation Grant: Rural Development - Approaches and Opportunities, Business Trip to Conference in Timisoara, Romania
2003	Horizon Foundation. Elaboration of a sustainable development model for the Aragvi River Basin. Participant - was tasked with studying socio-economic problems
11.2006	Creating an Effective Model of Science Administration in the EU TACIS Project: Reviewing the EU Experience and Developing Policy Recommendations with the Ministry of Education and Science of Georgia; Introductory business trip to Finland and Estonia
2006–2007	European Union e-Society Development Project in the South Caucasus - Head of the Steering Committee
03 – 08.2009	US Agency for International Development (USAID / PAR) Project: "Development of Strategic Plan of the Ministry of Agriculture of the Autonomous Republic of Adjara" - Consultant
2010-2013	EU TEMPUS Project JPCR-159340: "MAPB - Master in Applied Biology Programme"
2013-2014	Strengthening Georgia's International Potential for Nutrition and Biotechnology ("Biopartners"). 7th Framework Program for Research and Innovation of the European Commission
2015-2019	Volkswagen Foundation Grant # 88 504. Collective Use and Conflict of Common Pasture Villages - Comparative Studies of the Problem in Azerbaijan and Georgia - Head of the Georgian Team.

## 12. Scientific-Commercial Activity, Implementation

Years	Name
1983–1991	Development of electrified agricultural bridge technologies (led by V.Metreveli); In this topic, I am tasked with designing a two-wheel-drive electric shaft working scheme. The bridge aggregate was manufactured at the crane factory in Rustavi and from 1989-1991 worked in the candy vine nursery in Mtskheta district, providing great energy savings, and reduced seedling damage
1980-1986	Hay and green mass pneumatic powertrain with automatic impact motor. USSR 3 copyrights were obtained at the plant sites, a trial copy of 4 copies was produced, the plant was exhibited at the Bucharest Exhibition in 1983, and in Moscow at the WDNC in 1984.
1975–1987	Development of agricultural electrified hand guns and small mechanization devices
1979–2000	A new type of angular fluorescence electromagnetic motor (with Prof. Robison Fabric). The vibrator design is protected by 18 patents in 11 countries, with a license issued. The Tskhinvali factory "ElectroVibromanica" has released a trial batch of vibrators and exhibits at international exhibitions and fairs in Moscow, Budapest, Bucharest and Saigon.
1985–1998	2-way reciprocating-forward electromagnetic vibrator (together with Prof. R. Ksvrel), whose work is performed under mechanical and electromagnetic resonance conditions, which was achieved for the first time in practice; The vibrator is manufactured in Tskhinvali factory "Electro-vehicle", the circuits are protected by 5 patents of USSR and Georgia.

## 13. Other Activities

	Name	Years
Supervision of Theses and Masters work	<b>Doctor of Sciences:</b> Ksovreli R. Electromagnetic vibrating drives for agricultural machines and aggregates	1994
	<b>Academic doctors (PhD)s:</b> Midelashvili E. Processing of electromagnetic vibrating machines for technological processes of winemaking	2011
	Tsertsvadze M. Drive with permanent magnets for mobile agricultural machinery	2013

	<b>Candidate of Sciences (PhD):</b> Maisashvili L. Electromagnetic vibrator for transportation of loose materials Gabelia d. Operating modes of longitudinal displacement drive of the electrified bridge aggregate of the vine nursery Machavariani K. Loose agricultural products with guided electromagnetic vibration dosing Rurua E. Increase the efficiency of electrical equipment in lowland mountainous farms	1990 1990 1999 2006
	<b>Masters:</b> Kanashvili A. Finding damage to power cables and eliminating accidents Sidamonidze Ch. Reciprocating Electromagnetic Tour Drive Seed Sorter Chagelishvili Z. Asynchronous drive of agricultural mechanisms from autonomous source of proportional power Jamagidze J. Protection against abnormal modes of asynchronous drive Tsvitsivadze L. Rationalizing the exploitation of small canning enterprises Abuladze M. Enhancing the reliability of the electrical equipment of the food processing plant Koniashvili N. Energy saving in small farms Kavteladze Nana. Problems, Absatzwege and Entwicklung der Absatzmärkten bei Mineralwasser in Georgien. Fachhochschule Weinstefan, Triesdorf, Deutschland Sturua P. Research on bridge electrified technology in vine nursery Kavteladze Nino. Optimization of wine aging technology using electromagnetic waveguide Kuliashvili Z. Hand-held constant-current power tool with photovoltaic power source Kizivadze-Tavadze N. International Standards of Bio Production, Production of Bio Production, Problems of Marking and Certification in Georgia	1998–2000 1999–2001 2001–2003 2002–2004 2004–2006 2005–2007 2006–2008 2009–2010 2008–2010 2010–2011 2011–2013 2012–2013
<b>Participation in International, State and Regional Programs</b>	World Bank Project: "Relationships between Farmer and Processing Enterprise in CIS Countries (Georgia, Armenia, Moldova, Ukraine, Russia)" in collaboration with Newcastle University.	2003 – 2004
	Documentation of Spatial-Territorial Planning of Mestia Municipality and Mulakhi Community (Problems of Agriculture). Ministry of Economy and Sustainable Development of Georgia	2016-2017
	Spatial Planning of Ambrolauri Municipality (Agriculture). Ministry of Economy and Sustainable Development of Georgia	2018
	Spatial-Territorial Planning Project of Akhmeta Municipality and Villages of Tusheti. Ministry of Economy and Sustainable Development of Georgia	2018
	Spatial-Territorial Planning Project of Kazbegi Municipality. Ministry of Economy and Sustainable Development of Georgia	2019-2020

#### 14. Awards and Prizes, Honorary Title

Date	Name of Awards, Prizes, Honorary Title
2015	The Georgian Agricultural University's highest award for outstanding contribution to scientific and educational activity
2007	Certificate of Catholicos-Patriarch of All Georgia for great tribute to the nation
1999	Order of Honor of Georgia
1982	Diploma of the USSR Chamber of Commerce and Industry for active support in the development of trade, economic and scientific-technical ties

#### 15. Family Status

One daughter and one granddaughter



