

## Curriculum Vitae



### Personal information

First name(s) / Surname(s) **Marika (Marina) Kapanadze**  
Address(e) 1, Debi Ishkhnelebi str, Ap.1a., 0160, Tbilisi, Georgia  
Telephone(s) +995 322 22 00 09      Mobile: +995 577 41 52 42  
E-mail marika\_kapanadze@iliauni.edu.ge  
Nationality Georgian  
Date of birth 23.08.1963  
Gender Female

**Desired employment / Occupational field**      **Professor at Ilia State University, Georgia  
Education, Science Education**

### Work experience

Dates	<b>2008 - present</b>
Occupation or position held	Professor of Science Education, head of Science Education Research Centre SALiS
Main activities and responsibilities	Lectures in Science and Science Education, trainings with the in-service science teachers, coordinating of EU funded projects, head of PhD program in Education
Name of employer	<b>Ilia State University, Georgia</b>
Dates	<b>2020 - 2022</b>
Occupation or position held	Invited Professor
Main activities and responsibilities	Conduct joint research in Science Education
Name of employer	<b>Technical University of Munich, Germany</b>
Dates	<b>2015 - 2016</b>
Occupation or position held	Individual Consultant
Main activities and responsibilities	Design, develop and support the implementation of a learner-centered curriculum that prepares curriculum writers to create learner-centered TPD courses.
Name of employer	<b>Millennium Challenge Corporation - Georgia</b>

Dates **2012 - 2014**  
Occupation or position held Expert of Physics, Head of Science Group  
Main activities and responsibilities Development of National Curriculum in Physics and Science, supporting materials for teachers, textbooks revision  
Name of employer **Ministry of Education and Sciences of Georgia**  
Tbilisi, Georgia

Dates **2004 - 2011**  
Occupation or position held Expert of Physics, Head of Science Group  
Main activities and responsibilities Development of National Curriculum in Physics and Science, supporting materials for teachers, textbooks revision  
Name of employer **National Curriculum and Assessment Centre of Georgia**  
Tbilisi, Georgia

Dates **2001 - 2006**  
Occupation or position held Teacher of Physics and Mathematics  
Main activities and responsibilities Teaching Physics and Mathematics at the high school  
Name of employer **Free Waldorf School Tbilisi**  
Tbilisi, Georgia

Dates **2000 - 2001**  
Occupation or position held Researcher  
Main activities and responsibilities Experimental works in technical thermodynamics, seminars with the students  
Name of employer **Staatliche Universität Stuttgart, Germany**  
Stuttgart, Germany

Dates **1996 - 2000**  
Occupation or position held Head of Administration  
Main activities and responsibilities Management of the administrative work  
Name of employer **Free Waldorf School Tbilisi**  
Tbilisi, Georgia

Dates **1993 - 1997**  
Occupation or position held Researcher  
Main activities and responsibilities Research in Gene and Protein Engineering, in Bio Thermodynamics. Experimental courses with the students of the university. Supervising of Master Thesis  
Name of employer **Institute of Biophysics of Academy of Science of Georgia**  
Tbilisi, Georgia

Dates **1986 - 1988**  
Occupation or position held Assistant at the department of Biophysics

Main activities and responsibilities  
 Name of employer  
 Conducting experiments in Biophysics  
**Tbilisi State University**  
 Tbilisi, Georgia

## Education

Dates  
 Title of qualification  
 awarded  
 Name and type of organisation  
 providing education and training  
**1988 - 1992**  
 PhD in Physics and mathematics  
**Institute of Protein Research of Academy of Science of Russia, Pushchino,  
 Moscow**

Dates  
 Title of qualification  
 awarded  
 Name and type of organisation  
 providing education and training  
**1981 - 1986**  
 Master of Physics, Biophysics  
**Tbilisi State University**  
 Tbilisi, Georgia

## Personal skills and competences

Mother tongue(s) **Georgian**

Other language(s)  
 Self-assessment  
 European level (\*)

**English**  
**German**  
**Russian**

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
C2	C2	C2	C2	C1
C2	C2	C2	C2	C1
C2	C2	C2	C2	C1

(\*) [Common European Framework of Reference for Languages](#)

Social skills and competences Ability to work individually and as a team member, good communication skills, open minded, ability to look for creative solutions

Organisational skills and competences Good experience in project and team management - leading workgroups and facilitation of team members as well as organizing national and international events, coordinating of international projects

Technical skills and competences Analytical thinking, good presentation skills, good experimental skills in science laboratory

Computer skills and competences MS Office – Word, Excel, Power Point, Project Manager, Outlook, Internet, Google products

## Other skills and competences

### International projects:

Dates  
Main Activities and responsibilities

HOROZON project - **METEOR**  
2024 - 2027  
Project Coordinator in Georgia

Dates  
Main Activities and responsibilities

ERASMUS project – **PRESS**  
2022-2025  
Project co-coordinator

Dates  
Main Activities and responsibilities

ERASMUS project – **ESTA**  
2020 - 2023  
Project Coordinator in Georgia

Dates  
Main Activities and responsibilities

**Linnaeus Palme** Project  
2019 - 2020  
Project Coordinator in Georgia

Dates  
Main Activities and responsibilities

ERASMUS project – **ARTIST & CO**  
2016 - 2019  
Project co-coordinator

Dates  
Main Activities and responsibilities

**Linnaeus Palme** Project  
2015 - 2016  
Project Coordinator in Georgia

Dates  
Main Activities and responsibilities

TEMPUS project - **LeAGUe**  
2013 - 2017  
Project Coordinator in Georgia

Dates  
Main Activities and responsibilities

FP7 project – **Chain Reaction**  
2013 - 2017  
Project Coordinator in Georgia

Dates  
Main Activities and responsibilities

FP7 project – **PROFILES**  
2013 - 2016  
Project Coordinator in Georgia

Dates  
Main Activities and responsibilities

TEMPUS project - **SALiS**  
2010 - 2012  
Project Coordinator

### **Lectures and Seminars held within the framework of the ERASMUS Mobility Projects**

2024 University of Bremen, Germany  
2023 Alpen-Adria University of Klagenfurt, Austria  
2023 University of Bremen, Germany  
2022 University of Ljubljana, Slovenia  
2019 Alpen-Adria University of Klagenfurt, Austria  
2019 Linnaeus University, Sweden  
2019 University of Malta, Malta  
2018 Alpen-Adria University of Klagenfurt, Austria  
2017 Linnaeus University, Sweden  
2017 University of Limerick, Ireland  
2017 University of Bremen, Germany  
2016 University of Bremen, Germany  
2014 Free University of Berlin, Germany

### **International Funding**

2024 **Visiting Research Fellowship, Center for Advanced Studies,**  
Ludwig Maximilian University of Munich, Germany

2021-22 **Visiting Professor Program, Bavarian State Ministry of Science, Research and the Arts**  
Technical University of Munich, Germany

2018 **Weiser Professional Development Program Award,**  
University of Michigan, USA

2014 **DAAD Research Fund,**  
Free University of Berlin, Germany

### **Grants of Rustaveli National Science Foundation**

2023 - 2026 **Relevance of Science Education\_Second (ROSES) - Fundamental Research State Grant**  
Coordinator of the project

2019 - 2022 **Students Science Laboratories – Science popularization project**

Coordinator of the project

2018 - 2020 **School Physics course based on technology innovation**  
Project mentor

2018 - 2020 **Do good explained lesson plans improve students performance?**  
Project mentor

2019 **Travel Grant**

## Member of the editorial board of international peer – reviewed journals

1. Eurasia Journal of Mathematics, Science and Technology Education  
<https://www.ejmste.com/home/editorial-office>
2. Eurasian Journal of Physics and Chemistry Education  
<http://ijpce.org/>
3. American Journal of Educational Research  
<http://www.sciepub.com/journal/EDUCATION/editors>

## Founder and Editor of an international peer – reviewed journal

- Action Research and Innovation in Science Education  
<http://www.arisejournal.com/>

## Member of International and National Educational Organizations

1. Georgian Physics Teacher Association - Founder and head of the association board
2. ESERA – European Science Education Research Association  
<https://www.esera.org/>
3. GIREP – International Research Group on Physics Teaching  
<https://girep.org/>
4. Science on Stage Europe – European Network for STEM teachers - Coordinator in Georgia  
<https://www.science-on-stage.eu/page/display/2/2/2106/GE/Georgia>

## Participation at International and National Conferences

1. 4<sup>th</sup> Word Conference on Physics Education, Krakow, Poland, August, 2024
2. ICoMSE (International Conference on Mathematics and Science Education), 2024, Malang, Indonesia, July, 2024
3. Summer Symposium on Science Education, Munich-Bremen, Virtual, June, 2024
4. 1<sup>st</sup> International Scientific Conference, Telavi, June, 2024
5. 1<sup>st</sup> National Conference of Physics Teachers Association in Georgia, Tbilisi, June, 2024
6. ESERA (European Science Education Research Association) 2023, Cappadocia, Turkey, August, 2023
7. GIREP Conference, Ljubljana, Slovenia, July, 2022

8. ICSME (International Consortium for Research in Science & Mathematics Education), Virtual Conference, March 2022
9. 3<sup>rd</sup> Word Conference on Physics Education, Hanoi, Vietnam, December, 2021
10. ESERA (European Science Education Research Association) 2019, Bologna, Italy, August, 2019
11. GIREP Conference, Budapest, Hungary, July, 2019
12. HERE (Higher Education Reform Experts) Annual Conference 2018, Rome, Italy, December, 2018
13. 24<sup>th</sup> Symposium on Chemistry and Science Education, University of Bremen, Germany, June, 2018
14. IMST (Innovationen machen Schulen Top) Conference, Vienna, March, 2018
15. ESERA (European Science Education Research Association) 2017, Dublin, Ireland, August 2017
16. GIREP-ICPE-EPEC Conference, Dublin, Ireland, 3 – 7 July 2017
17. GIREP Seminar, Krakow, Poland, Jagiellonian University, August-September, 2016
18. 23<sup>rd</sup> Symposium on Chemistry and Science Education, University of Dortmund, Germany, May, 2016
19. National Conference of Science Education Research Centre, April, 2016, Tbilisi, Georgia
20. 11. Jahrestagung der Schülerlabor, University of Saarbrücken, Germany, March, 2016
21. Science Education and Green Chemistry for a Sustainable Future, Haifa, Israel, December, 2015
22. ESERA (European Science Education Research Association) 2015 Conference, Helsinki, Finland, September, 2015
23. IOSTE Symposium, Istanbul, Turkey, April, 2015
24. 2<sup>nd</sup> International PROFILES Conference, Berlin, Germany, August, 2014
25. 22<sup>nd</sup> Symposium on Chemistry and Science Education, University of Bremen, June, 2014
26. National Conference of Science Teachers, Tbilisi, Georgia, May, 2014
27. ESERA (European Science Education Research Association) 2013 Conference, Nicosia, Cyprus, September, 2013
28. The International Conference on Physics Education, ICPE – EPEC, Prague, Czech Republic, August, 2013
29. PROFILES National Conference, May, Tbilisi, Georgia, 2013
30. 1<sup>st</sup> International PROFILES Conference, Berlin, Germany, September, 2012
31. Word Conference on Physics Education, Istanbul, Turkey, July, 2012
32. 22-nd International Conference in Chemistry Education, Rome, Italy, July, 2012
33. 21<sup>th</sup> Symposium on Chemical and Science Education, Dortmund, Germany, Mai, 2012
34. ESERA (European Science Education Research Association) 2011 Conference, Lyon, France, September, 2011
35. Gesellschaft für Didaktik der Chemie und Physik, Jahrestagung, Potsdam, Deutschland, September, 2010
36. 20<sup>th</sup> Symposium on Chemical and Science Education, Bremen, Germany, Mai, 2010
37. Gesellschaft für Didaktik der Chemie und Physik, Jahrestagung, Dresden, Deutschland, September, 2009
38. ESERA (European Science Education Research Association) Conference, Istanbul, Turkey, September, 2009

39. Annual Conference of ASE (The Association of Science Education), Reading, UK, January, 2009
40. Gesellschaft für Didaktik der Chemie und Physik, Jahrestagung, Schwäbisch Gmünd, Deutschland, September, 2008.
41. 19<sup>th</sup> Symposium on Chemical and Science Education, Dortmund, Germany, May, 2008;

## Main Publications:

1. Feldman, A., Belova, N., Eilks, I., Kapanadze, M., Mamlok-Naaman, R., Rauch, F., & Taşar, M. F. (2025). **Science Teacher Action Research in Top Tier Science Education Journals: A Review of the Literature**. *Journal of Science Teacher Education*, 36(1) 1-27. <https://doi.org/10.1080/1046560X.2024.2366713>
2. Mgeladze, A., Kapanadze, M., & Chakhaia, L. (2024). **From Measuring to Action: The Next Steps in Physics Teachers' Technological Pedagogical Content Knowledge**. *Science Education International*, 35(4), 429-438.
3. Javakhishvili, N., Kapanadze, M., & Dzagania, L. (2024). **Individual, Vocational, and Societal Dimensions of Relevance of Science Education**. *Science Education International*, 35(1), 40-53.
4. Kapanadze, M., Javakhishvili, N., & Dzagania, L. (2023). **Investigating the relationship between students' interest in physics and environmental attitudes in Georgia**. *EURASIA Journal of Mathematics, Science and Technology Education*, 19(8), em2308. <https://doi.org/10.29333/ejmste/13429>
5. Kapanadze, M., Jonas-Ahrend, G., Mazzolini, A., and Joubran, F. (2023) **Evaluation of Physics Textbooks**, in *The International Handbook of Physics Education Research: Special Topics*, edited by M. F. Taşar and P. R. L. Heron. (pp. 17-1–17-30), AIP Publishing, Melville, New York.
6. Feldman, A., Belova, N., Eilks, I., Kapanadze, M., Mamlok-Naaman, R., Rauch, F., & Taşar, M. F. (2022). **Action Research: A Promising Strategy for Science Teacher Education**. In *Handbook of Research on Science Teacher Education* (pp. 352-362). Routledge.
7. Slovinsky, E., Kapanadze, M., & Bolte, C. (2021). **The Effect of a Socio-Scientific Context-Based Science Teaching Program on Motivational Aspects of the Learning Environment**. *EURASIA Journal of Mathematics, Science and Technology Education*, 17(8), em1992. <https://doi.org/10.29333/ejmste/11070>
8. Nadiradze, L., Kapanadze, M., Kvirkvelia, B. (2020) **Use of Technologies, as the effective instrument for enhancing of motivation in the process of Physics Teaching**, *INTED2020 Proceedings*, ISBN: 978-84-09-17939-8, ISSN: 2340-1079, doi: 10.21125/inted.2020.0828, (pp. 2768-2773)
9. Eilks, I., Frerichs, N., Kapanadze, M., Laudonia, I., Krause, M. und Rauch, F. (2020) **ARTIST – Eine internationale Kooperation zur Stärkung von Aktionsforschung in der Lehrer/innenbildung**. In: A. Habicher, C. Juen-Kretschmer, T. Kosler, C. Lechner, C. Oberhauser, A. Oberrauch, M. Tursky-Philadelphly, F. Rauch, & A. Schuster (Ed.), *Nachhaltige Bildung*, Wien:Präsens (2020), (pp. 169 – 183)
10. Kapanadze, M. (2019) **Implementation of the Chain Reaction project in Georgia**. In: S. Bevins (eds.), L. Lehane (eds.) & J. Booth (eds.), *Comparative Perspectives on Inquiry-Based Science Education*. IGI Global Publishing, DOI 10.4018/978-1-5225-5439-4
11. Eilks, I., Frerichs, N. & Kapanadze, M. (2018) **Action Research to Innovate Science Teaching**. In: I. Eilks, S. Markic & B. Ralle (eds.), *Building Bridges Across Disciplines*, Publisher: Aachen, Shaker, (pp. 191-196)



12. Sheety, A., Kapanadze, M. & Joubran, F., (2017) **High School Teachers' Perceptions Regarding Inquiry-Based Curricula in United States, Georgia, and Israel**. In: C. Roofe, C. Bezzina (eds.), *Intercultural Studies of Curriculum*, DOI 10.1007/978-3-319-60897-6\_4, Palgrave, Macmillan
13. Kapanadze, M., Slovinsky E. & Bagatrishvili, N., (2016) **Pupils Research Briefs – Implementation of the project Chain Reaction in Georgia**. In: I. Eilks, S. Markic & B. Ralle (eds.), *Science Education Research and Practical Work*, Publisher: Aachen, Shaker, (pp. 71 -80)
14. Kapanadze, M., Bolte, C., Schulte, Th., Slovinsky, E., (2015) **Stakeholders' Views on Science Education - Curricular Delphi Study in Georgia**. *American Educational Research Journal* 3(7), (pp. 897-906)
15. Kapanadze, M., Bolte, C., Schneider, V., Slovinsky, E., (2015) **Enhancing Science Teachers' Continuous Professional Development in the Field of IBSE and other Aspects of Innovative Science Lessons**. *Journal of Baltic Science Education*, 2015, Vol.14, (2), (pp. 254 -266)
16. Kapanadze, Marika, Slovinsky Ekaterine; (2014) **Science Education for Sustainable Development and Project Chain Reaction in Georgia**, In: I. Eilks, S. Markic, & B. Ralle (eds.), *Science Education Research and Education for Sustainable Development*, Publisher: Aachen: Shaker (2014), (pp. 291-296)
17. Kapanadze, M., & Slovinsky, E., (2014). **Stakeholders' Views on Science Education in Georgia – Curricular Delphi Study**. In: C. Bolte, J. Holbrook, R., Mamlok-Naaman, & F. Rauch, (Eds.). *Science Teachers' Continuous Professional Development in Europe. Case Studies from the PROFILES Project* (pp. 24 - 30). Berlin: Freie Universität Berlin (Germany) / Klagenfurt: Alpen-Adria-Universität Klagenfurt (Austria)
18. Kapanadze, M., & Slovinsky, E., (2014). **Teacher' Ownership towards developing new PROFILES Modules**. In: C. Bolte, & F. Rauch, (Eds.). *Enhancing Inquiry-based Science Education and Teachers' Continuous Professional development in Europe: Insights and Reflections on the PROFILES Project and other PROJECTS funded by the EUROPEAN Commission*. (pp. 118 - 121) Berlin: Freie Universität Berlin (Germany) / Klagenfurt: Alpen-Adria-Universität Klagenfurt (Austria).
19. Kapanadze, M., Eilks, I.; (2014) **Supporting Reform in Science Education in Central and Eastern Europe - Reflections and Perspectives from the Project TEMPUS-SALiS**, *Eurasia Journal of Mathematics, Science & Technology Education*, 2014, 10(1), (pp. 47-58)
20. Kapanadze, M., & Slovinsky, E., (2014). **Inquiry-based Science Education within the Project PROFILES in Georgia**. In: C. Bolte, & F. Rauch, (Eds.). *Enhancing Inquiry-based Science Education and Teachers' Continuous Professional development in Europe: Insights and Reflections on the PROFILES Project and other PROJECTS funded by the EUROPEAN Commission*. (pp. 112 - 118). Berlin: Freie Universität Berlin (Germany) / Klagenfurt: Alpen-Adria-Universität Klagenfurt (Austria).
21. Kapanadze, Marika; Markic Silvija., (2013) **A broad view on Georgian science teachers' and science student teachers' beliefs about teaching and learning**. *Eurasia Journal of Mathematics, Science & Technology Education*, 2013, 9(2), (pp. 143-154)
22. Eilks, I., Kapanadze, M., (2013) **Student Active Learning in Science (SALiS) - The theoretical and organisational framework of a TEMPUS IV project**. In: *Chimica nella Scuola* (2013)
23. Schneider, V., Kapanadze, M., Bolte, C., Slovinsky, E.: (2013) **Project PROFILES and Development of In-service Teachers' "Stages of Concerns" Regarding IBSE in the Context of the Implementation of PROFILES Modules in Georgia**. *Proceedings of the International Conference on Physics Education, ICPE-EPEC, 2013, Prague*, (pp.1039 – 1043)
24. Shulte Theresa; Bolte Claus; Kapanadze Marika & Co. (2013) **A Comparative Analysis of Stakeholders' Views on Science Education from five Different PROFILES Partner Countries – Results of the Second Round of the PROFILES Curricular Delphi Study on Science Education**. In: *Proceedings of the 10th ESERA Conference, 2013, Nicosia*

25. Kapanadze, Marika; Janashia, Simon; Makashvili, Malkhaz; Eilks, Ingo; Stuckey, Marc; Markic, Silvija., (2012) **Promoting student-active and inquiry-based science learning by the project SALiS**. In: Proceedings of the 9th ESERA Conference, Lyon 2011
26. Kapanadze, Marika; Janashia, Simon; Makashvili, Malkhaz; Eilks, Ingo; Stuckey, Marc; Markic, Silvija., (2012) **Schüleraktives und Inquiry-orientiertes Lehren und Lernen fördern im TEMPUS-Projekt SALiS**. In: D. Höttecke (Hrsg.), Konzepte fachdidaktischer Strukturierung für den Unterricht, Münster: Lit (2012), (pp. 586-588)
27. Kapanadze, Marika; Janashia, Simon; Eilks, Ingo., (2012) **Science teacher education by the cross regional TEMPUS-project SALiS**. In: S. Markic, I. Eilks, D. di Fuccia, & B. Ralle (eds.), Heterogeneity and Cultural Diversity in Science Education and Science Education Research, Aachen: Shaker (2012), (pp. 215-218)
28. Eilks, Ingo; Kapanadze, Marika; Childs, Peter E., (2012) **Student Active Learning in Science (SALiS) - An introduction to the special issue**. In: Chemistry in Action 97 (2012), (pp. 5-7a)
29. Kapanadze, Marika., (2012) **The Impact of the TEMPUS-project SALiS from the Perspective of Georgia**. In: Chemistry in Action 97 (2012), (pp. 35-36)
30. Eilks, Ingo; Kapanadze, Marika., (2012) **Student Active Learning in Science (SALiS) The theoretical and organisational framework of a TEMPUS IV project**. In: Collection of papers of the SALiS final conference, Tbilisi/GE (2012), (pp. 6-9)
31. Kapanadze, M., (2011), **Computersimulationen in Unterricht**, GDGP Jahrestagungsband, Potsdam, In: D. Höttecke (Hrsg.), Naturwissenschaftliche Bildung als Beitrag zur Gestaltung partizipativer Demokratie, Berlin: Lit (2011), (pp. 525-527)
32. Kapanadze M, Eilks I, Janashia S, Markis S, Stucky M, (2011) SALiS: **Promoting Student Active Learning in Science**, GDGP Jahrestagungsband, Oldenburg, Deutschland, 2011
33. Kapanadze M., Tsereteli M. (2010) **Naturwissenschaftliches Denken in der Lehrerbildung von Georgien**, GDGP Jahrestagungsband, Dresden, In: D. Höttecke (Hrsg.), Entwicklung naturwissenschaftlichen Denkens zwischen Phänomen und Systematik, Berlin: Lit (2010), (pp. 464-466)
34. Kapanadze, M., Janashia, S., Eilks, I., (2010) **From science education in the soviet time, via national reform initiatives, towards an international network to support inquiry-based science education - The case of Georgia and the project SALiS**. In: I. Eilks & B. Ralle (eds.), Contemporary science education, Aachen: Shaker (2010), (pp. 237-242)
35. Kapanadze M., Slovinskaya E., Saginadze N. (2009) **Schwerpunkte der Entwicklung der Lehrerstandards in Georgien**, GDGP Jahrestagungsband, Schwebisch-Gmuend, In: D. Höttecke (Hrsg.), Chemie- und Physikdidaktik für die Lehramtsausbildung, Berlin: Lit (2009), (pp. 472-473)
36. Griko Yu.V, Kapanadze M.Z. (1995) **Purification and characterization of human pancreatic polypeptide expressed in E. coli.**, Biochemical and biophysical research communications, V. 213 (1), USA, 1995
37. Kapanadze M.Z., Griko Yu.V., Privalov P.L. (1993) **Production of Human Pancreatic Polypeptide in E. coli as a fusion of CRO repressor pfae  $\lambda$** . Proceedings of 37th Annual Conference of Biophysical Society, Washington, USA, 1993