

CRRICULUM VITAE

NAME: Roman Koplatadze

DATE OF BIRTH: 01.01.1942

PLACE OF BIRTH: Village of Basileti, Georgia, Nationality: Georgian

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AFFILIATION: I. Vekua Institute Applied Mathematics

of Iv. Javakhishvili Tbilisi State University,
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PRESENT POSITION: Department of Mathematics of Tbilisi State University,
Associate Professor

AND SCIENTIFIC DEGREE:

1961-1967 - Student of Tbilisi State University, faculty of Mech. Mathematics

1967-1969 - Post-graduate student of Tbilisi State University

DEGREE: 1974 – Candidate of Sciences (Ph.D) Tbilisi State University

1995 - Doctor of Sciences A. Razmadze Mathematical Institute Georgian Academy of Sciences

LANGUAGES: Georgian, Russian, English (satisfactory)

POSITIONS HELD AND ACADEMIC EXPERIENCE:

1970 – 1976 - Junior Researcher I. Vekua Institute of Applied Mathematics of Tbilisi State University

1976 – 1983 - Senior Researcher of the same department

1983 – 1990 - Leading Researcher of the same department

1991 – 1995 - Head of the same department

1996 – 2006 - Leading Researcher of A. Razmadze Mathematical Institute of Georgian Academy of Sciences, Professor

2006 – - Leading Researcher I. Vekua Institute of Applied Mathematics of Iv. Javakhishvili Tbilisi State University;

Department of Mathematics of Iv, Javakhishvili Tbilisi State University,
Associte Professor

RESEARCH INTERESTS: Ordinary differential equations, functional differential equations, difference equations, oscillation theory, boundary value problems.

NUMBER OF THE PUBLICATIONS: 121

LIST OF PUBLICATIONS:

1. On oscillatory solutions of second order delay differential inequalities. *J. Math. Anal. Appl.* **42** (1973), No. 1, 148-157.
2. The existence of oscillatory solutions of second order nonlinear differential equations with retarded argument. (Russian) *Dokl. Akad. Nauk SSSR* **210** (1973), No. 2, 260-262.
3. A note on the conjugate of the solutions of higher order differential inequalities and equations with retarded argument. (Russian) *Differentsial'nye Uravneniya* **10** (1974), No. 8, 1400-1405.



4. Some properties of the solutions of nonlinear differential inequalities and equations with retarded argument. (Russian) *Differentsial'nye Uravneniya* **12** (1976), No. 11, 1971-1984, 2108.
5. On oscillatory properties of differential equations with a deviating argument. (Russian) *Izdat. Tbilis. Univ., Tbilisi*, 1977, 115 pp. (with T.A. Chanturia) (Monography).
6. On asymptotic behavior of solutions of second order linear differential equations with a delayed argument. (Russian) *Differentsial'nye Uravneniya* **16** (1980), No. 11, 1963-1966.
7. Oscillating and monotone solutions of first-order differential equations with deviating argument. (Russian) *Differentsial'nye Uravneniya* **18** (1982), No. 8, 1463-1465 (with T.A. Chanturia).
8. On oscillatory properties of n-th order differential equations with a delayed argument. (Russian) *Uspekhi Mat. Nauk* **41** (1986), No. 4, 1399.
9. Differential equations with deviating argument that have the properties **A** and **B**. (Russian) *Differentsial'nye Uravneniya* **25** (1989), No. 11, 1897-1909; English transl.: *Differential Equations* **25** (1989), No. 11, 1332-1342 (1990).
10. On oscillation of solutions of n-th order differential equations with a deviating argument. (Russian) *Differentsial'nye Uravneniya* **25** (1989), No. 12, 2184.
11. On the oscillation of solutions of first order delay differential inequalities and equations. *Georgian Math. J.* **1** (1994), No. 6, 675-685 (with G.Kvinikadze).
12. On oscillatory properties of solutions of functional differential equations. *Mem. Differential Equations Math. Phys.* **3** (1994), 3-179 (Monography).
13. Oscillation properties of solutions of functional-differential equations. (Russian) *Dokl. Akad. Nauk* **340** (1995), No. 4, 473-475.
14. On oscillatory properties of solutions nonlinear of functional-differential equations. (Russian) *Differentsial'nye Uravneniya* **31** (1995), No. 9, 1594-1595.
15. An analogue of Nehari's theorem for high order deviating differential equations. (Russian) *Differentsial'nye Uravneniya* **33** (1997), No. 11, 1572-1573.
16. Oscillation properties of the solutions of the second order differential equations with a delayed argument. (Russian) *Differentsial'nye Uravneniya* **33** (1997), No. 10, 1312-1320; English transl.: *Differential Equations* **33** (1997), No. 10, 1318-1326 (1998) (jointly with N. Partsvania).
17. Comparison theorems for ordinary differential equations with high order. *Differentsial'nye Uravneniya*. **34** (1998), No. 11, 1572-1573.
18. Oscillatory behavior of solutions of two- dimensional differential systems with deviated arguments. *Georgian Math. J.* **6**(1999), No. 4, 335-346 (jointly with N. Partsvania).
19. Properties **A** and **B** of n th order linear differential equations with deviated argument. *Georgian Math. J.* **6**(1999), No. 6, 553-566 (jointly with G. Kvinikadze and I. P. Stavroulakis).
20. On a problem of I. T. Kiguradze and T. A. Chanturia. *Differentsial'nye Uravneniya*. **35** (1999), No. 11, 1571-1572.
21. n th order neutral differential equations. *Georgian Math. J.* **7**(2000), No. 2, 287-298 (jointly with M. K. Grammatikopoulos).
22. Linear functional differential equations with Property **A**. *J. Math. Anal. Appl.* **284** (2003), No. 1, 294-314 (jointly with M. K. Grammatikopoulos and G. Kvinikadze).
23. On the oscillation of solutions of first order differential equations with retarded arguments. *Georgian Math. J.* **10** (2003), No. 1, 63-76 (with M. K. Grammatikopoulos and I. P. Stavroulakis).
24. On higher order functional differential equations with Property **A**. *Georgian Math. J.* **11** (2004), No. 2, 307-336.

25. On an approach to the investigation of the asymptotic properties of solution of ordinary differential equations with delay (with G. Berikelashvili and O. Jokhadze). *Differ.Uravn.* **44**(2004),no.1, 19--38, 141.
26. Nonlinear functional differential equations with Properties *A* and *B*. *J. Math. Anal. Appl.* **306** (2005), 136-160 (with J. Graef and G. Kvinikadze).
27. Quasi-linear functional differential equations with property *A*. *J. Math. Anal. Appl.* **330** (2007), 483-510.
28. On the Kneser type solutions for two-dimensional linear differential systems with deviating arguments. *J. Inequal. Appl.* 2007, 22 pp. (with A. Domoshnitsky).
29. Oscillation criteria of first order linear difference equation with delay argument (with G. E. Chatzarakis and I. P. Stavroulakis). *J. Nonlinear Analysis* **68** (2008), 994-1005.
30. Optimal oscillation criteria for first order difference equation with delay argument (with G. E. Chatzarakis and I. P. Stavroulakis). *J. Pacific Journal Mathematics.* **235** (2008), No. 1, 15-33.
31. Necessary conditions for existence of positive solutions of second order linear difference equations and sufficient conditions for oscillation of solutions. *J. Nonlinear Oscillations.* **12** (2009), No. 2, 180--194. (with G. Kvinikadze).
32. On asymptotic behavior of solutions of almost linear and essentially nonlinear differential equations. *Nonlinear Anal. Theory, Methods and Appl.* 71 (2009), e396-e400.
33. On asymptotic behavior of solutions of *n*-th order Emden-Fowler differential equations with advanced argument. *Czechoslovak Math. J.* **60(135)** (2010), no. 3, 817--833.
34. On a boundary value problem for integro-differential equations on the halfline. *Nonlinear Anal.* **72** (2010), No. 2, 836—846 (with A. Domoshnitsky).
35. On oscillation of solutions of second order nonlinear difference equations. *Neliniñni Koliv.* **15** (2012), no. 2, 194--204; *translation in J. Math. Sci. (N. Y.)* **189** (2013), No. 5, 784-794 (with S. Pinelas).
36. Oscillation criteria for higher order nonlinear functional differential equations with advanced argument. *Nonlinear Oscillations* **16** (2013), No. 1, 44-64, *translation in J. Math. Sci. (N. Y.)* **197** (2014), no. 1, 45—65.
37. On asymptotic behavior of solutions of generalized Emden-Fowler differential equations with delay argument. *Abstract and Applied Analysis* 2014, Art. ID 168425, 13 pp. (with A. Domoshnitski).
38. Oscillation criteria for first order linear difference equations with several delay arguments. *Nonlinear Oscillations* **17** (2014), N. 2, 247-267 (with S. Pinelas).
39. Oscillation criteria for differential equations with several retarded arguments. *Funkcialaj Ekvacioj* (with G. Infante, I. Stavroulakis) **58** (2015), No.3, 347-364.
40. Specific properties of solutions of first order differential equations with several delay arguments. *J. Contemporary Math. Anal.* **50** (2015) No. 5, 229-235.
41. On higher order generalized Emden-Fowler differential equation with delay argument. *Nonlinear Oscillations* **18** (2015), No. 4, 507-526 (with A. Domshnitsky).