BIBLIOGRAPHY

[1] **R.P.Agarwal**, *Difference Equations and Inequalities*, Marcel Dekker, New York, 2000.

[2] **R.P.Agarwal, M. Bohner, S.R.Grace and D.O'Regan**, *Discrete Oscillation Theory*, Hindawi Publ. Corporation, New York,2005.

[3] **R.P.Agarwal, M. Bohner, W.S.Cheung and S.R.Grace**, *Oscillation criteria for first and second order forced difference equations with mixed nonlinearities*, Math. Comput. Modelling **45** (2007), 965-973.

[4] **R.P.Agarwal and S.R.Grace**, *The oscillation of certain difference equations*, Math. Comput. Modelling, **30**(1999),77-83.

[5] **R.P.Agarwal and S.R.Grace**,*Oscillation theorems for certain difference equations*, Dynam. Syst. Appl. **9**(2000),299-308.

[6] **R.P.Agarwal, S.R.Grace and D.O'Regan**, *Oscillation Theory For Difference And Functional Differential Equations*, Kluwer Acad. Publ. Dordrecht, 2000.

[7] **R.P.Agarwal, S.R.Grace and T. Smith**, *Oscillation criteria for first order forced nonlinear difference equation*, Adv. Difference Eqn. 2006(2006),1-16.

[8] **A. Bellen, N. Guglielmi and A. E. Ruchli**, *Methods for linerar systems of circuit delay differential equations of neutral type*, IEEE Trans. Circ. Syst - I, **46** (1999), 212 - 216.

[9] **T.Candan and R.S.Dahiya,** *Oscillation of mixed neutral*

differential equations with forcing term, Proc.Fourth Inter. Con. Dyn.Sys.Diff.Eqn.(2002),Wilmington,U.S.A.167 - 172.

[10] **T. Candan, R.S. Dahiya** , *Positive solutions of first-order neutral differential equations*, Applied Mathematics Letters, **22**(2009),1266-1270.

[11] **G.E.Chatzarakis, R.Koplatadze and I. P. Stavroulakis**, *Oscillation criteria of first order linear difference equation with delay arguments*, Nonlinear Anal. **68**(2008),994-1005.

[12] **J. Cheng**, *Existence of a nonoscillatory solution of a second order linear difference equation*,Appl. Math. Lett. **20**(2007), 892 - 899.

[13] **S. S.Cheng, T. C.Yan and H. J. Li**, *Oscillation criteria for second order difference equation*, Funkcial. Ekvac. **34** (1991), 223-239.

[14] **S.S.Cheng and W.T.Patula**, *An existence theorem for a nonlinear difference equations*, Nonlinear Anal.**20**

(1993),193-203.

[15] **Q.Chuanxi, G.Ladas**, *Oscillatory behavior of difference equations with positive and negative coefficients*, Matematiche (Catania) **44** (1989), 293-310.

[16] **R. S. Dahiya and T.M.Abu.Kaff**, *On oscillation and nonoscillation behavior of bounded solutions of n-th order delay differential equations*, Forrum Math. **2**(1990), 35 - 43.

[17] **R.S.Dahiya and B.Singh,** *Certain results on nonoscillation and asymptotic nature on delay equations*, Hiroshima Math.J. **5**(1975), 7 - 15.

[18] **L.Debnath and J.C.Jiang**, *Bounded oscillation criteria for second order nonlinear delay difference equations of unstable type*, Comput. Math. Appl. **56**(2008),1797-1807.

[19] **J.Dzurina and S.Kulcsar**, *Oscillation criteria for second order neutral functional differential equations*, Publ. Math.Debrecen, **59**(2001),25-33.

[20] **L.Erbe and B. G.Zhang**, *Oscillation of difference equations with delay in differential equations and applications*, **Vol. I** (A. R. Aftabizadeh, Ed.), Ohio U. Press, Athens, 1989, 257-263.

[21] **H. A. El-Morshedy**, New oscillation criteria for second order linear difference equations with positive and negative coefficients, (Submitted For Publication).

[22] **D.A. Georgiou, E.A. Grove and G. Ladas**, *Oscillations of neutral difference equations*, Appl. Anal. **33** (1989). 243-253.

[23] **D.Georgiou, E.A.Grace and G.Ladas**, *Oscillation of neutral difference equations with variable coefficients,* Lecture Notes In Pure Appl. Math. 127, Dekker, New York, 1991,165-173.

[24] **S.R.Grace**, *Oscillation of certain difference equations of mixed type*, J.Math.Anal.Appl. **224**(1998),241-254.

[25] **S.R.Grace and S.Dontha**, *Oscillation of a higher order neutral difference equations of mixed type*, Dynam.Systems Appl. **12**(2003),521-532.

[26] **S.R.Grace and B.S.Lalli**, *Oscillation theorems for second order neutral difference equations*, Appl.Math.Comput. **62**(1994),47-60.

[27] **S. R. Grace and B. S. Lalli**, *Oscillation theorems for forced neutral difference equations*, J. Math.Anal. Appl. **187** (1994), 91–106.

[28] **J.R.Graef and E.Thandapani**, *Oscillatory and asymptotic behavior of fourth order nonlinear delay difference equations*, Fasc. Math. **31**(2001),23-36.

[29] **I.Gyori and G.Ladas**, *Oscillation Theory of Delay Differential Equations*, Clarendan Press, Oxford, 1991.

[30] **J.K.Hale**, *Theory of Functional Differential Equations*, Springer-Verlog, New York,1977.

[31] **G.H.Hardy, J.E.Littlewood and G.Polya**, *Inequalities*, Second ed. Cambridge Univ. Press, Cambridge, 1988.

[32] **P.Hartman**, *Difference Equations: Disconjugacy, principle solutions, Green's Functions, complete monotonicity*, Trans.Amer. Math. Soc. **246**(1978),1-30.

[33] **X.Z.He**, *Oscillatory and asymptotic behaviour of second order nonlinear difference equations*, J. Math. Anal. Appl. **175** (1993), 482-498.

[34] **J.W.Hooker and W.T.Patula**, *A second order nonlinear difference equation: oscillation and asymptotic behavior*, J.Math. Anal. Appl. **91**(1983),9-29.

[35] **J.Jaros and I. P.Stavroulakis**, *Necessary and sufficient conditions for oscillations of difference equations with several delays*, (to appear).

[36] **J. Jiang**, *Oscillation of second order nonlinear neutral delay difference equations*, Appl. Math. Comput. **146** (2003) 791-801.

[37] **C.Jinfa**, *Existence of a nonoscillatory solution of a second order linear neutral difference equation*, Appl. Math. Lett. **20**(2007),892-899.

[38] **C.Jinfa**, *Kamenev type oscillation criteria for delay difference equation*, Acta Math. Sinica, **27B**(2007),574-580.

[39] **B. Karpuz**, *Some oscillation and nonoscillation criteria for neutral delay difference equations with positive and negative coefficients*, Comp. Math. Appl. **57**(2009), 633 - 642.

[40] **B.Karpuz, Ö.Öcalan and M.K.Yildiz**, *Oscillation of a class of difference equations of second order*, Math. Comput. Modelling **49** (2009), 912-917.

[41] **W.G.Kelly and A.C.Peterson**, D*ifference Equations: An Introduction With Applications*, Academic Press, New York,2001.

[42] **G. Ladas**, *Explicit conditions for the oscillation of difference equations*, J. Math. Anal. Appl. **153** (1990), 276-287.

[43] **G. Ladas**, *Recent Developments in the Oscillations of Delay Difference Equations, Differential Eauations: Stability and Control,* Marcel Dekker, New York, 1990.

[44] **G.Ladas**, *Recent Developments in the Oscillation of delay difference equations. In "Differential Equations, Stability and Control"* (S. Elaydi, Ed.), Lecture Notes In Pure And Appl. Math. 127, Dekker, New York, 1991, 321-332.

[45] **G.Ladas, Ch. G.Philos and Y. G..Sficas**, *Sharp conditions for the oscillation of delay difference equations*, J. Appl. Math. Sim. **2** (1989), 101-112.

[46] **G. Ladas, C.G.Philos and Y.G. Sficas**, *Necessary and sufficient conditions for the oscillation of difference equations*, Lihertas Math. **9** (1989), 121-125.

[47] **V.Lakshmikanthan and D.Trigiante**, *Theory Of Difference Equations, Numerical Methods And Applications,* Academic Press, New York, 1988.

[48] **B. S.Lalli, and B. G.Zhang**, *On Existence of positive solutions and bounded oscillations for neutral difference equations*,J. Math. Anal. Appl. **166** (1992), 272-287.

[49] **B. S.Lalli, and B. G.Zhang**, *Oscillation And comparison theorems for certain neutral difference equations*, J. Austral. Math. Soc. (to appear).

[50] **B. S.Lalli, B. G.Zhang and J. Z.Li,** *On the oscillation of solutions and existence of positive solutions of neutral difference equations*, J. Math. Anal. Appl. **158** (1991), 213-233.

[51] **Li, H. Liang, W.Dang and Z.Zhang**, *Existence of nonoscillatory solutions of higher order difference equation with positive and negative coefficients*, Bull. Korean Math. Soc. **45**(2008),23-31.

[52] **W.T.Li**, *Oscillation of higher order neutral difference equations*, Appl.Math.Lett. **11**(1998),1-8.

[53] **X.Lin**, *Oscillation of solutions of neutral difference equations with a nonlinear neutral term*, Comput. Math. Applic.**52**(2006),439-448.

[54] **X.Lin**, *Oscillation for higher order neutral superlinear delay difference equations of unstable type*, Comput. Math. Appl. **50**(2005),683-691.

[55] **X.Y.Lin and J.H.Shen**, *Bounded oscillation for a class of even order neutral difference equation*, Fasch. Math. **33**(2002),37-47.

[56] **S. C. Mallik and S. Arora**, *Mathematical Analysis*, New Age International(P) Ltd. Publishers, New-Delhi, 2001.

[57] **Q.Meng and J.Yan**, *Bounded oscillation of second order nonlinear neutral difference equation in critical and non-critical states*, J.Comput. Appl. Math. **211**(2008),156-172.

[58] **O. Ocalan**, *Oscillation for a class of nonlinear neutral difference equations*, Dynamics Cont. Discrete Impul. Syst. Series A **16**(2009), 93 - 100.

[59] **O. Ocalan and O. Duman**, *Oscillation analysis of neutral difference equations with delays*, Chaos, Solitons And Fractals **39**(2009), 261 - 270.

[60] **N. Parhi and A. K. Triripathy**, *Oscillation criteria for forced non-linear neutral delay difference equations of first order*, Diff. Eqs. And Dyn. Systems **8** (2000), 81–97.

[61] **N. Parhi and A. K. Triripathy**, *On asymptotic behavior and oscillation of forced first order nonlinear neutral difference equations*, Fasci. Math. **32** (2001), 83–95.

[62] **N. Parhi and A. K. Triripathy**, *Oscillation of forced non-linear neutral delay difference equations of first order*, Czech. Math. J. **53** (2003), 83–101.

[63] **N. Parhi and A. K. Triripathy**, *Oscillation of a class of non-linear neutral difference equations of higher order*, J. Math. Anal. Appl. **284** (2003), 756–774.

[64] **N. Parhi and A. K. Triripathy**, *Oscillation of a class of neutral difference equations of first order*, J.Diff. Eqns.

Appl. **9** (2003), 933-946.

[65] **W. T.Patula**, *Growth and oscillation properties of second order linear difference equations*, Siam J. Math. Anal. **10** (1979), 55-61.

[66] **W. T.Patula**, *Growth, Oscillation and comparison theorems for second order linear difference equations*, Siam J. Math. Anal. **10** (1979), 1272-1279.

[67] **Ch.G.Philos**, *On oscillation of some difference equations*, Funkcial. Ekvac. **34**(1991),157-172.

[68] **Ch.G.Philos, I.K. Pournaras and I. P. Stavroulakis**, *Sufficient conditions for the oscillation of delay difference equations*, J. Difference Eqn. Appl. **10**(2004),419-435.

[69] **R. N. Rath, N. Misra, and S. K. Rath**, *Sufficient conditions for oscillatory behaviour of a first order neutral difference equation with oscillating coefficients*, Acta Mathematica Academiae Paedagogicae Nyiregyhaziensis (Amapn), **25, 1** (2009), 55-63(Www.Emis.De/Journals)

[70] **R. N. Rath, S. K. Rath and and B.L.S Barik**, *Nonoscillation criteria for the solutions of higher order functional difference equations of neutral type*, Internat. J. Difference Equations, 3, **2** (2008), 289–304.

[71] **R. N. Rath, B.L.S Barik and S. K. Rath**, *Oscillation of higher order neutral functional difference equations with positive and negative coefficients* (In The Press Of Math. Slovaca. Ref: Ms0061/2008).

[72] **S.H. Saker**, *New oscillation criteria for second order nonlinear neutral delay difference equations*, Appl. Math. Comput. **142** (2003) 99-111.

[73] **S.H. Saker**, *Oscillation theorems of nonlinear difference equations of second order*, Georgian Math. J. **10** (2003) 343-352.

[74] **S.H. Saker**, *Oscillation of second order nonlinear delay difference equations*, Bull. Korean Math. Soc. **40** (2003) 489-501.

[75] **S.H.Saker and S.S.Cheng**, *Kamenev type oscillation criteria for nonlinear difference equations*, Czech. Math. J. **54**(2004),955-967.

[76] **Y.G.Sficas and I. P. Stavroulakis**, *Oscillation criteria for first order delay difference equations*, Bull. London Math. Soc. **35**(2003),239-246.

[77] **I.P.Stavroulakis** , *Oscillation of delay difference equations*, Comput. Math. Applic. **29**(1995),83-88.

[78] **I. P. Stavroulakis**, O*scillation criteria for first order delay difference equations*, Mediterr. J. Math. **1**(2004),231-240.

[79] **I.P.Stavroulakis and J.Jaros**, *Necessary and sufficient conditions for oscillation of difference equations with several delays*, Utilitas Math. **45** (1994), 187-195.

[80] **A.Sternal and B.Szmanda**, *Asymptotic and oscillatory behavior of certain difference equations*, Le Matemat. **51**(1996),77-86.

[81] **Z. Szafranski and B. Szmanda,** *Oscillation of some difference equations*, Fasc. Math. **28** (1998) 149-155.

[82] **B.Szmanda**, *Oscillation theorems for nonlinear second order difference equations*,J. Math. Anal. Appl. **79** (1981), 90-95.

[83] **B.Szmanda**, *Nonoscillation and growth of solutions of nonlinear difference equations of second order*, J.Math.Anal. Appl. **109**(1985),22-30.

[84] **X.H.Tang**, *Bounded oscillation of second order delay difference equations of unstable type*, Comput. Math. Appl. **44**(2002),1147-1156.

[85] **X.H.Tang and Y.J.Liu,** *Oscillation for nonlinear delay difference equations*, Tamkang J.Math. **32**(4)(2001), 275-280.

[86] **X.H. Tang and Xiaoyan Lin** , *Necessary and sufficient conditions for oscillation of first-order nonlinear neutral difference equations*, Comput. Math. Applic. **55**, 2008, 1279-1292.

[87] **E. Thandapani**, *Asymptotic behavior of solutions of a class of second order nonlinear difference equation*, Indian J. pure appl. Math.**32**(2001), 915 - 929.

[88] **E.Thandapani**, *Asymptotic and oscillatory behavior of solutions of a second order nonlinear neutral delay difference equation*, Riv. Mat. Univ. Parma,**1** (1992), 105-113.

[89] **E.Thandapani,R.Arul and P.S.Raja**,*Oscillation of first order neutral delay difference equations*, Appl.Math.E.Notes **3**(2003),88-94.

[90] **E.Thandapani,R.Arul and P.S.Raja**,*The asymptotic behavior of nonoscillatory solutions of nonlinear neutral type difference equations*, Math. Comput. Modelling, **39**(2004),1457-1465.

[91] **E.Thandapani,R. Arul and P.S.Raja**,*Bounded oscillation of second order unstable neutral type difference equations*, J. Appl. Math. & Computing, **16**(2004), 79 - 90.

[92] **E.Thandapani and K.Mahalingam**, *Existence of nonoscillatory solution of a second order difference equations of neutral type*, Indian J. Pure Appl. Math. **33**(2002), 625 - 633.

[93] **E.Thandapani and K.Mahalingam**,*Oscillation and nonoscillation of second order neutral delay difference equations*, Czech. Math.J. **53**(2003),935-947.

[94] **E.Thandapani, S.Pandian and R.K.Balasubramaniam**, *Oscillation of solutions of nonlinear neutral difference equations with nonlinear neutral term*, Far East J. Appl. Math.**15**(2004),47-62.

[95] **E.Thandapani, S.Pandian and R.K.Balasubramanian**, *Oscillatory behavior of second order unstable type neutral difference equations*, Tamkang J. Math. **36**(2005),57-68.

[96] **E.Thandapani,K.Thangavel and E.Chandrasekaran**, *Oscillatory behavior of second order neutral difference*

equations with positive and negative equations, Elec. J. Diff.Eqns. **2009**(2009) No.145,1-8.

7] **E.Thandapani, Z.S.Liu,R.Arul and P.S.Raja**, *Oscillation and asymptotic behavior of second order difference equations with nonlinear neutral terms,* Appl. Math. E-Notes **4** (2004), 59-67.

'8] **C. J.Tian and S.S.Cheng**, *Oscillation criteria for delay neutral difference equations with positive and negative coefficients*, Bul. Soc. Parana Math. **21**(2003), 1 - 12.

[99] **P. J. Y. Wong and R. P. Agarwal**, *Oscillation and nonoscillation of half linear difference equation generated by deviating arguments*, Comput. Math. Appl. **36**(1998), 11 - 26.

[100] **A.Yang and C.Di**, *Oscillation and nonoscillation of higher order difference equations with nonlinear neutral term*, J. Korean Soc. Math. Edu. Sec. Pure Appl. Math. **14**(2007),49-62.

[101] **S. H. Wu and Z. Y. Hou**, *Oscillation criteria for a class of neutral difference equations with continuous variable*, J. Math. Anal. Appl. **290** (2004), 316-323.

[102] **M.R.Xu, B. Shi and X.Y.Zang**, *Asymptotic behavior for nonoscillatory solutions of difference equations with several delays in the neutral term*, J. Appl.Math.Comput. **27**(2008),33-45.

[103] **J. S. Yu and X. H. Tang**, *Sufficient conditions for the oscillation of linear delay difference equations with oscillating coefficients*, J. Math. Anal. Appl. **250** (2000), 735-742.

[104] **J. S. Yu and Z. C.Wang**, *Asymptotic behavior and oscillation in neutral delay difference equations*, Funk. Ekvac. **37** (1994), 241–248.

[105] **J. S. Yu, B. G. Zhang and X. Z. Qian**, *Oscillations of delay difference equation with oscillating coefficients*, J. Math. Anal. Appl. **177** (1993), 432-444.

[106] **A.Zafer and R.S.Dahiya**, *Oscillation of neutral delay difference equations*, Appl.Math.Lett.**6**(1993),71-74.

[107] **A. Zafer, R.S. Dahiya**, *Oscillation of Bounded solutions of Neutral Differential equations*, Appl. Math. Lett. **6**(1993), 43-46.

[108] **G.Zhang**, *Oscillation for nonlinear neutral difference equations*, Appl. Math. E- Notes,**2**(2002),22-24.

[109] **B.G.Zhang and S.S.Cheng**, *On a class of nonlinear difference equations*, J.Diff.Eqns. Appl.**1**(1995),391-411.

[110] **B.G.Zhang and S.S.Cheng**, *Oscillation criteria and comparision theorems for delay difference equation*, Fasc. Math. **25**(1995),13-32.

[111] **B.G. Zhang and Q.L.Li,** *Oscillation theorems for second order advanced functional difference equations*, Comput.Math.Appl.**36**(1998),11-18.

[112] **B.G.Zhang and S.H.Saker**, *Kamenev - Type Oscillation criteria for nonlinear neutral delay difference equations*, Indian J. Pure Appl. Math. **34**(2003),1571-1584.

[113] **B. G. Zhang, J. Yan and S. K. Choi**, *Oscillation for difference equations with continuous variable*, Comput. Math. Appl. **36** (1998), 11-18.

[114] **B. G. Zhang and H. Wang**, *The Existence Of oscillatory and non oscillatory solutions of neutral difference equations*, Chinese J. Math. **24** (1996), 377–393.

[115] **Y. Zhang and J. Yan**, *Oscillation criteria for diference equations with continuous arguments*, Acta Math. Sinica **38** (1995) 406-411.

[116] **Y. Z. Zhang, J. R. Yan and A. M. Zhao**, *Oscillation criteria for difference equation*, Indian J. Pure and Appl. Math. **28** (1997) 1241-1249.

[117] **Z. G. Zhang and Y. H. Yu**, *Oscillation of solutions for a class of nonlinear second order difference equations*, J.

Math. Res. Exposition **19(4)** (1999), 699-703.

[118] **Z. Zhang, B. Peig and W. Dong**, *Oscillatory of unstable type second order neutral difference equations*, J. Appl. Math. & Computing,**9** (2002) 87 - 99

[119] **Z. Zhang, J. Chen and C. Zhang**, *Oscillation of solutions for second-order nonlinear difference equations with nonlinear neutral term*, Comput. Math. Appl. **41** (2001) 1487-1494.

[120] **Z. G. Zhang, W. L. Dong and B. Ping**, *Oscillatory behavior of the second order nonlinear neutral difference equations*, Comput. Math. Appl. **8** (2001), 111-128.

[121] **Z. G. Zhang, Ping Bi and Jianfeng Chen**, *Oscillation of second order nonlinear difference equation with continuous variable*, J. Math. Anal. Appl. **255** (2001), 349-357.

[122] **X.Zhong and Y. Gao**, *Positive solutions of higher order nonlinear difference equation*, J.Sys.Sci. and Math. Sci. **19**(1999),157-167.

[123] **X.Zhou**, *Oscillatory and asymptotic properties of higher order nonlinear neutral difference equation with oscillating coefficients*, Appl.Math. Lett. **21**(2008),1142-1148.

Papers covering the context of the Thesis

- Oscillation of Unstable type neutral difference equation with nonlinear neutral term, Tamkang J. Math . (to appear)

- Oscillatory behavior of neutral difference equation with nonlinear neutral term, Kungpook Math. J. (to appear)

- Oscillatory behavior of neutral difference equation with mixed type, Far East J. Math. Sciences (to appear)

- Oscillatory behavior of neutral difference equation with mixed nonlinearities, Far East Journal of Mathematical Sciences (communicated)

- Oscillatory behavior of neutral difference equation with positive and negative coefficients, International J. Pure Applied Math. (communicated)