PROF.DR. HİLMİ DEMİRAY
Işık Üniversitesi
Fen-Edebiyat Fakültesi Matematik Bölümü Öğretim Üyesi

demiray@isikun.edu.tr

1. Adı Soyadı : Hilmi Demiray

2. Doğum Tarihi : **10.02.1942**

3. Unvanı : Profesör

4. Öğrenim Durumu :

Derece	Alan	Üniversite	Yıl
Lisans	İnşaat	İ.T.Ü.	1966
Y. Lisans	Mekanik	İ.T.Ü.	1967
Doktora	Continuum Theory of Charged Particles	Princeton University	1971

5. Akademik Unvanlar

Ünvan	Ana Bilim Dalı	Üniversite	Başl.ve Mez.Yıl
Yardımcı Doçent	-		
Doçent	Sürekli Ortamlar Mekaniği	İ.T.Ü	1976
Profesör	Sürekli Ortamlar Mekaniği	İ.T.Ü.	1982

Doçent unvanını aldığı tarih: Kasım 1976

6. Yönetilen Yüksek Lisans ve Doktora Tezleri

6.1 Yüksek Lisans Tezleri.....

6.2 Doktora Tezleri.....

7. Yayınlar

7.1 Uluslararası hakemli dergilerde yayınlanan makaleler

1. Small torsional oscillations of an initially twisted circular cylinder (E. S. Şuhubi ile birlikte), *Int. J. Engng. Sci*., **8**, 19-30, 1970.

2. Small flexural oscillations of an initially stretched circular cylinder, *Int. J. Nonlinear Mechanics*, **6,** 135-141, 1971.

3. On the nonlocal theory of quasi-linear elastic dielectrics, *Int. J. Engng. Sci.*, **10**, 285-292, 1972.

4. The application of mechanics to some problems in rubber industry (M. Levinson ile birlikte*), Symposium on Application of Solid Mechanics*, University of Waterloo, Kanada, 1972(proceedings, s. 1-28).

5. On the elasticity of soft biological tissues*, J. Biomechanics*, **5**, 309-311, 1972.

6. The long fluid storage bag: A contact problem for a closed membrane (M. Levinson ile birlikte), *Int. J. Mech. Sci*., **14,** 431-439, 1972.

7. On the linear constitutive equations of transversely isotropic, incompressible and elastic materials (M. Levinson ile birlikte), *Rubber Chemistry and Technology***, 45,** 1104-1110, 1972.

8. Constitutive equations of a plasma with bound charges (A. C. Eringen ile birlikte), *Plasma Physics*, **15**, 889-901, 1073.

9. Continuum theory of a slightly ionized plasma (A. C. Eringen ile birlikte), *Plasma Physics*, **15**, 903-920, 1973.

10. A continuum theory of solids with diatomic structure, *Int. J. Engng. Sci*., **11**, 1237-1246, 1973.

11. A continuum theory of diatomic elastic dielectrics, *Letters in Appl. And Engng. Sci*., **1**, 505-516, 1973.

12. A continuum theory of polar elastic dielectrics (A. C. Eringen ile birlikte), *Letters in Appl. and Engng. Sci.*, **1**, 517-527, 1973.

13. Pure flexure of a layered orthotropic shell-elasticity study of a tire related problem (M. Levinson ve S. C. Scheung ile birlikte), *Rubber Chemistry and Technology,* **46**, 294-304, 1973.

14. Motion of electron gas in elastic conducting solids (A. C. Eringen ile birlikte), *Plasma Physics,* **16**, 589-602, 1974.

15. Inertia controlled theory of elastic conductors, *J. Pure and Appl. Sci*., (O.D.T.Ü), **7**, 195-210, 1974.

16. On the contact problems for reinforced cylindrical membranes, *Bull. Tech. U. Ist.,* **27**, 11-23, 1974.

17. Constitutive equations of a binary mixture of dense gases, *Letters in Appl. and Engng. Sci*., **2**, 189-202, 1974.

18. On the constitutive equations of biological materials*, J. Appl. Mech., ASME*. **42** Series E, 242-243, 1975.

19. Axially symmetric motions of a two-layered cylindrical shell, *Bull. Tech. U. Ist*., **28**, 21-31, 1975.

20. On the stress-strain relations of a composite made of two transversely isotropic media, *J. Pure and Appl. Sci*., (O.D.T.U), **8**, 63-68, 1975.

21. Deformation of an infinite elastic dielectric due to rigid conducting sphere with surface charge, *Bull. Pol. Acad. Sci.,* **23**, 75-79, 1975.

22. A simple model for laminated tires under pure bending, *Bull. Tech. U. Ist.,* **28**, 40-59, 1975.

23. A stability analysis of rubber-like sandwich beams (F. Güzeltan ile birlikte), *Letters in Appl. and Engng. Sci*., **3**, 143-153, 1975.

24. On the finite torsion of biological tissues, *Letters in Appl. and Engng. Sci*., **3**, 143-153, 1975.

25. A two dimensional lettice model for composites reinforced with orthogonal fibers (A. C. Eringen ve M. N. L. Narasimhan ile birlikte), *Letters in Appl. and Engng. Sci*., **3**, 295-309, 1975.

26. A structural model for oriented materials, *Bull. Pol. Acad. of Sciences, Ser. Sci. Tech*., **23**, 493-500, 1975.

27. On the deformation of highly elastic solids, *Letters in Appl. and Engng. Sci.,* **4**, 117-126, 1976.

28. Stresses in ventricular wall, *J. Appl. Mech., ASME*, **98**, 194-197, 1976.

29. A discrete model for composites reinforced with orthogonal fibers, *J. Pure and Appl. Sci*., (O.D.T.Ü.), **9**, 15-30, 1976.

30. On the acceleration waves in reinforced composites, *Letters in Appl. and Engng. Sci.*, **4**, 227-234, 1976.

31. Large deformation analysis of soft biomaterials (R. P. Vito ile birlikte*), Int. J. Engng. Sci*., **14**, 789-793, 1976.

32. Large deformation analysis of some basic problems in biophysics, *Bull. Math. Biology*, **38**, 701-712, 1976.

33. Wave propagation in a prestressed reinforced composites, *Pol. Acad. Sci., The Engineering Transaction*, **24**, 549-558, 1976.

34. Finite elasticity of biological tissues, *J. Pure and Appl. Sci.,* (O.D.T. Ü), **10**, 45-52, 1977.

35. A continuum theory of diatomic solids: viewed as directed media*, J. Engng. Math*., **11**, 257-271, 1977.

36. A nonlocal continuum theory for diatomic solids, *Int. J. Engng. Sci*., **15**, 623-644, 1977.

37. A mixture model for wet bones: Part I (N. Güzelsu ile birlikte), *Int. J. Engng. Sci.,* **15**, 707-718, 1977.

38. Wave propagation in viscoelastic composites reinforced by orthogonal fibers (A. C. Eringen ile birlikte), *J. Sound and Vibration*, **55**, 509-519, 1977.

39. Wave propagation in orthogonally reinforced composites (A. C. Eringen ile birlikte), *Letters in Appl. and Engng. Sci.,* **5**, 433-445, 1977.

40. On nonlocal diffusion of gases (A. C. Eringen ile birlikte), *Arch. for Mechanics, Pol. Acad. Sci*., **30**, 65-77, 1978.

41. A nonlocal viscous model for plug formation in plates (A. C. Eringen ile birlikte), *Int. J. Engng. Sci.,* **16**, 287-297, 1978.

42. A continuum theory of solid state plasma, *J. Tech. Physics, Pol. Acad. Sci*., **19**, 267-276, 1978.

43. Impact of nonlocal thin elastic plates by a cylindrical projectile (A. C. Eringen ile birlikte), *Int. J. Engng. Sci*., **16**, 905-916, 1978.

44. Perforation of nonlocal visco-plastic plates by a cylindrical projetile (A. C. Eringen ile birlikte), *J. of Franklin Institute*, **306**, 209-224, 1978.

45. Penetration of nonlocal viscoelastic plates by a cylindrical projectile, *J. Pure and Appl. Sci*. (O.D.T.Ü.), **11**, 47-66, 1978.

46. Electromechanical properties and related models for bone tissues: A review (N. Güzelsu ile birlikte*), Int. j. Engng. Sci*., **17**, 813-851, 1979.

47. Constitutive equations of chemically reacting simple solid-fluid mixtures*, J. Pure and Appl. Sci*. (O.D.T.Ü.), **12**, 345-362, 1979.

48. A continuum theory of thermoelastic solids with diatomic structures, *J. Engng. Math*., **14**, 81-91, 1980.

49. The mechanics of the pericardium: Pericardial effusion (R. P. Vito ile birlikte), *Proceedings of 8th New England Bioengineering Conference*, Boston, March 27-28, 1980.

50. A nonlocal theory for nematic liquid crystals, *Archive for Mechanics*, **32**, 213-231, 1980.

51. On the constitutive equations of multiatomic solids, *Bull. Tech. U. Ist.,* **33**, 100-111, 1980.

52. A continuum theory of generalized thermoelastic solids (S. Dost ile birlikte), *J. Pure and Appl. Sci*., (O.D.T.Ü.), **13**, 285-312, 1980.

53. Some constitutive relations for soft biological tissues, *Bull. Tech. U. Ist*., **33**, 111-127, 1980.

54. A continuum theory of chemically reacting mixtures of fluids and solids, *Int. J. Engng. Sci*., **19**, 253-268, 1981.

55. A nonlocal theory of oriented media: A model to diatomic solids, *Bull. Tech. U. Ist*., **34**, 124-143, 1981.

56. A constitutive equation for nematic liquid crystals, *J. Tech. Phys*., **22**, 217-232, 1981.

57. Large deformation analysis of some soft biological tissues, *J. Biomechanical Engineering, ASME*, **103**, 73-78, 1981.

58. On the viscoelasticity of diatomic solids, *Int. J. Engng. Sci*., **20**, 237-243, 1982.

59. On a class of a finite deformations of elastic soft tissues (M. Levinson ile birlikte), *Bull. Math. Biology*, **44**, 175-192, 1982.

60. An elasto-plastic theory for porous media (A. S. Çakmak ile birlikte), *Bull. Tech. U. Ist*., **35**, 195-216, 1982.

61. Diatomic theory and surface energy in solids, *Bull. Tech. U. Ist*., **35**, 213-229, 1983.

62. Electromechanical remodelling of bones*, Int. J. Engng. Sci.,* **21**, 1117-1126, 1983.

63. Incremental elastic modulus for isotropic elastic bodies with applications to arteries, *J. Biomechanical Engineering, ASME*, **105**, 308-309, 1983.

64. The effect of dielectric properties of a solid on the stress concentration around a circular hole (A. Ercengiz ile birlikte), *Bull. Tech. U. Ist*., **36**, 243-251, 1983.

65. Incremental elastic modulus for soft tissues, *The Int. J. Artificial Organs*, **6**, 220-224, 1983.

66. On large periodic motions of arteries (R. P. Vito ile birlikte), *J. Biomechanics*, **16**, 643-648, 1983.

67. Polar elastic dielectrics and surface energy, *Bull. Tech. U. Ist*., **36**, 521-530, 1983.

68. Large periodic motions of left ventricles, *Bull. Tech. U. Ist*., **37**, 183-197, 1984.

69. Incremental elastic modulus for ventricles in diastole, *J. Biomechanics*, **17**, 621-626, 1984.

70. Growth and decay of acceleration waves in a diatomic solid (H. A. Erbay ile birlikte), *Bull. Tech. U. Ist*., **37**, 331-341, 1984.

71. Incremental modulus for soft biological tissues, *Bull. Tech. U. Ist.,* **38**, 39-52, 1985.

72. Effects of twist on pulse waves in arteries, *Bull. Math. Biology*, **47**, 495-502, 1985.

73. Effect of transmural pressure on pulse waves in arteries, *J. Pure and Appl. Sci*. (O.D.T.Ü.), **18**, 1-22, 1985.

74. Torsional vibrations of nonlocal elastic bars (H. A. Erbay ile birlikte), *Bull. Tech. U. Ist*., **38**, 447-456, 1985.

75. Acceleration waves in a diatomic solid, *Int. J. Engng. Sci*., **24**, 299-307, 1986.

76. A mechanical model for passive behaviour of rats carotid artery (H. W. Weizsacker ve K. Pascal ile birlikte), *Biomedical Engineering*, **31**, 46-52, 1986.

77. Pulse wave speed in arteries, *Bull. Tech. U. Ist*., **38**, 127-139, 1986.

78. A finite deformation analysis of arteries (S. Dost ile birlikte), *Proceedings of XIII ISB Congress: Biomechanics XI-A* (edited by de Groot, G., Hollander, A. P. Huijing, P. A. and Van Ingen Schenau, G. J.) s.537-541, 1987.

79. Pulse waves in prestressed arteries (H. A. Erbay ve S. Erbay ile birlikte), *Bull. Math. Biology*, **49**, 289-305, 1987.

80. An orthotropic elastic model for a rat abdominal aorta (H. A. Erbay, S. Erbary ile birlikte*), Math. Modelling*, **9**, 651-658, 1987.

81. Effect of prestress on pulse waves in arteries (H. A. Erbay ve S. Erbay ile birlikte), *ZAMM*, **67**, 473-485, 1987.

82. Pulse velocities in initially stressed arteries, *J. Biomechanics*, **21**, 55-58, 1988.

83. A stress-strain relation for a rat abdominal aorta (H. W. Weizsacker, K. Pascal ve H. A. Erbay ile birlikte), *J. Biomechanics*, **21**, 369-374, 1988.

84. A two layered cylindrical shell modell for a dog's thoracic aorta (R. P. Vito ile birlite), *Bull. Tech. U. Ist*., **40**, 1-12, 1988.

85. A variational formulation of diatomic elastic dielectrics (S. Dost ile birlikte), *Int. J. Engng. Sci*., **26**, 865-871, 1988.

86. The role of adventitia in aortic mechanics (R. P. Vito ile birlikte), *Bull. Tech. U. Ist.*, **42**, 29-41, 1989.

87. Diatomic elastic dielectrics with polarization inertia (S. Dost ile birlikte), *Int. J. Engng. Sci*., **27**, 1275-1284, 1989.

88. Pulse waves in a prestressed elastic tube (S. Dost ile birlikte), *Int. J. Engng. Sci,* **28**, 1-9, 1990.

89. A layered cylindrical shell model for an aorta (R. P. Vito ile birlikte), *Int. J. Engng. Sci*., **29**, 47-54, 1991.

90. Wave propagation in a prestressed elastic tube filled with a viscous fluid (A. Ercengiz ile birlikte), *Int. J. Engng. Sci*., **29**, 575-585, 1991.

91. Torsional waves in a stressed elastic tube filled with a viscous fluid, *Int. J. Engng. Sci*., **30**, 771-780, 1992.

92. Wave propagation in an artery filled with a viscous fluid, *Proceedings of the 1992 Engineering Systems Design and Analysis Conference*, s. 51-56, 29 Haziran – 3 Temmuz 1992, Istanbul.

93. Wave propagation through a viscous fluid contained in a prestressed thin elastic tube, *Int. J. Engng. Sci*., **30**, 1607-1620, 1992.

94. Non-symmetrical waves in a prestressed elastic tube filled with an inviscid fluid (A. Ercengiz ile birlikte*), Int.J. Engng. Sci*., **32**, 605-616, 1994.

95. A viscoelastic model for arterial wall materials*, Int. J. Engng. Sci*., **32**, 1567-1578, 1994.

96. Propagation of harmonic waves in a prestressed elastic tube filled with a viscous fluid, *Bull. Tech. U. Ist*., **47**, 151-166, 1994.

97. Harmonic waves in a prestressed viscoelastic tube filled with a viscous fluid (A. Ecengiz ile birlikte), *Int. J. Engng. Sci*., **33**, 105-117, 1995.

98. Non-symmetrical wave propagation in arteries (A. Ercengiz ile birlikte), *Acta Mchanica*, **112**, 135-148, 1995.

99. Finite axisymmetric deformations of elastic tubes: An approximate method (H. A. Erbay ile birlikte), *J. Engng. Math*., **29**, 451-472, 1995.

100. The effect of quadrupole on bone remodelling (S. Dost ile birlikte), *Int. J. Engng. Sci*., **34**, 257-268, 1996.

101. An evaluation of pulse speed in arteries, *Bull. Math. Biology*, **58**, 129-140, 1996.

102. Propagation of harmonic waves in an initially stressed thin elastic tube filled with an inviscid fluid (S. Dost ile birlikte), *Canadian Society of Mechanical Engineering Transactions*, **37**, 1-15, 1996.

103. A quasi-linear constitutive relation for arterial wall materials, *J. Biomechanics,* **29**, 1011-1014, 1996.

104. Effects of initial stress and wall thickness on wave charactreistics in elastic tubes (N. Antar ile birlikte), *ZAMM*, **76**, 521-530, 1996.

105. Solitary waves in fluid-filled elastic tubes, *Bull. Math. Biology*, **58**, 939-955, 1996.

106. Nonlinear waves in a prestressed thick elastic tube filled with an inviscid fluid, *Int. J. Engng. Sci*., **34**, 1519-1530, 1996.

107. Electromechanical modelling of living bones (T. Sarıoğlu ile birlikte), *Bull. Tech. Univ. Istanbul*, **49**, 45-60, 1996.

108. Small bul finite amplitude waves in a prestressed viscoelastic thin tube filled with an inviscid fluid, *Int. J. Engng. Sci*., **35**, 353-363, 1997.

109. Waves in initially stressed fluid-filled thick elastic tubes*, J. Biomechanics*, **30**, 273-276, 1997.

110. Nonlinear waves in an inviscid fluid contained in an prestressed viscoelastic thin tube (N. Antar ile birlikte), *ZAMP*, **48**, 325-340, 1997.

111. The effects of initial twist on wave characteristics in a prestressed fluid-filled thin elastic tube, *Applied Mathematical Modelling*, **21**, 181-191, 1997.

112. Solitary waves in initially stressed thin elastic tubes, *Int. J. Nonlinear Mech.,* **32**, 1165-1176, 1997.

113. On the equivalence of Flügge-Koiter buckling equations to those derived in current literature, *J. Engng. Math*., **31**, 439 448, 1997.

114. Propagation of nonlinear waves in a prestressed thin viscoelastic tube filled with an inviscid fluid, *ARI (formerly, Bulletin of Istanbul Technical University),* **40**, 66-72, 1997.

115. The effect of shear stress on solitary waves in arteries, *Bull. Math. Biology*, **59**, 993-1012, 1997.

116. Solitary waves in a prestressed thick elastic tube containing an inviscid fluid, *ZAMM*, **77**, 741-750, 1997.

117. Wave propagation in a viscous fluid contained in a prestressed viscoelastic thin tube (G. Akgün ile birlikte), *Int. J. Engng. Sci*., **35**, 1065-1079, 1997.

118. Harmonic waves in an elastic tube filled with a viscous fluid (N. Antar ile birlikte), *J. Engng. Math*., **32**, 305-320, 1997.

119. Nonlinear wave modulation in a prestressed thin elastic tube filled with an inviscid fluid, *IMA, J. Appl. Math*., **59**, 165-181, 1997.

120. Axial and transverse solitary waves in a prestressed thin elastic tube (S. Dost ile birlikte) *ARI (formerly, Bulletin of Istanbul Tchnical University*), **50**, 201-210, 1998.

121. Nonlinear waves in a fluid filled thick elastic tube, *Int. J. Nonlinear Mech*., **33**, 363-375, 1998.

122. Nonlinear waves in a thick walled viscoelastic tube filled with an inviscid fluid, *Int. J. Engng. Sci*., **36**, 359-362, 1998.

123. On the propagation of solitary waves in a prestressed thin elastic tube filled with an inviscid fluid, *ZAMP*, **49**, 538-557, 1998.

124. Nonlinear wave modulation in a fluid filled thick elastic tube*, Int. J. Engng. Sci*., **36**, 1061-1082, 1998.

125. Solitary waves in a thick walled elastic tube (S. Dost ile birlikte), *Appl. Math. Modelling*, **22**, 583-599, 1998.

126. Slowly varying solitary waves in an elastic tube filled with a viscous fluid, *ARI (formerly, Bulletin of Istanbul Technical University)*, **51**, 98-102, 1998.

127. Nonlinear wave modulation in a prestressed fluid filled thin elastic tube (N. Antar ile birlikte), *Int. J. Nonlinear Mechanics*, **34**, 123-138, 1999.

128. Dressed solitary waves in fluid-filled tubes, *Int. J. Nonlinear Mech*., **34**, 185-196, 1999.

129. Nonlinear wave modulation in a prestressed viscoelastic thin tube filled with an inviscid fluid (G. Akgün ile birlikte), *Int. J. Nonlinear Mech*., **34**, 571-588, 1999.

130. Amplitude modulation of nonlinear waves in a thick walled elastic tube filled with an inviscid fluid, *ZAMP*, **50**, 222-243, 1999. (Bu makale ile, ayrıca, 1998 yılı İ.TÜ. Vakfı Bilim ve Teknoloji Ödülü alınmıştır.)

131. A modified reductive perturbation method as applied to non-linear ion-acoustic waves, *Journal of Physical Society of Japan*, **68**, 1833-1837 (1999).

132. Dressed solitary waves in thick walled elastic tubes, *ARI*, **51**, 228-234 (1999).

133. Propagation of weakly nonlinear waves in a fluid-filled thick viscoelastic tubes, *Applied Math. Modelling*, **23**, 779-798 (1999).

134. Modulation of nonlinear waves in a thin elastic tube filled with a viscous fluid, *Int. J. Engng. Sci*., **37**, 1877-1890 (1999).

135. Weakly nonlinear waves in a prestressed thin elastic tube containing a viscous fulid (N. Antar ile birlikte), *Int. J. Engng. Sci*., **37**, 1859-1875 (1999).

136. Propagation of weakly nonlinear waves in a fluid-filled thin elastic tube, *CSME Transactions*, **23**, 253-265 (1999).

137. A method for higher order expansion in nonlinear ion-acoustic waves, *Int. J. Nonlinear Mechanics*, **35**, 347-353, 2000.

138. On the contribution of higher order terms in solitary waves in fluid-filled elastic tubes, *ZAMP*, **51**, 75-91, 2000.

139. Modulation of nonlinear axial and transverse waves in a fluid-filled thin elastic tube (G. Akgün ile birlikte), *Int. J. Nonlinear Mech*., **35**, 597-611, 2000.

140. The boundary layer approximation and nonlinear waves in elastic tubes, *Int. J. Engng. Science*, **38**, 1441-1457, 2000

141. Solitary waves in fluid-filled elastic tubes: Weakly dispersive case, *Int. J. Engng. Sci*., **39**, 439-451, 2001.

142. Modulation of nonlinear waves in a viscous fluid contained in an elastic tube, *Int. J. Nonlinear Mech*., **36**, 85-97, 2001.

143. Interactions of nonlinear acoustic waves in a fluid-filled elastic tube, *Int. J. Engng. Sci.*, **39** 563-581, 2001.

144. Solitary waves in elastic tubes filled with a layered fluid, *Int. J. Engng. Sci.,* **39**, 629-630, 2001.

145. Localized traveling waves in a prestressed thick elastic tube, *Int. J. Nonlinear Mech.,* **36**, 1085-1095, 2001.

146. Nonlinear waves in a viscous fluid contained in a viscoelastic tube, *ZAMP,* **52**, 899-912, 2001.

147. A note on the traveling wave solution to the perturbed Burgers' equation, *Appl. Math. Modelling,* **26**, 37-40, 2002.

148. Nonlinear waves in a prestressed elastic tube filled with a layered fluid, *Int. J. Engng. Sci.,* **40**, 713-726, 2002.

149. Weakly nonlinear waves in elastic tubes filled with a layered fluid, *Int. J. Nonlinear Science and Numerical Simulations,* **3**, 98, 2002.

150. A note on the solution of perturbed Koteweg-de Vries equation, *Applied Mathematics and Computation,* **132**, 643-647, 2002.

151. Propagation of weakly nonlinear waves in fluid-filled thin elastic tubes, *Applied Mathematics and Computation,* **133**, 29-41, 2002.

152. Modulation of nonlinear waves in a viscous fluid contained in a tapered elastic tube, *Int. J. Engng. Sci.,* **40**, 1897-1918, 2002.

153. Contribution of higher order terms in non-linear ion-acoustic waves: Strongly dispersive case, *J. Phys. Soc. Japan,* **71**, 1921-1930, 2002.

154. A note on the analytical solution to the modified perturbed Korteweg-de Vries equation, *Applied Mathematics and Computation,* **134**, 501-505, 2003.

155. On the derivation of some nonlinear evolution equations and their progressive wave solutions, *Int. J. Nonlinear Mech.,* **38**, 63-70, 2003.

156. Contributions of higher order terms to nonlinear waves in fluid-filled elastic tubes: Strongly dispersive case, *Int. J. Engng. Sci.,* **41**, 1387-1403, 2003.

157. Amplitude modulation of nonlinear waves in a fluid-filled tapered elastic tube, *ZAMM,* **83**, 397-408, 2003.

158. An analytical solution to dissipative nonlinear Schrödinger equation, *Applied Mathematics and Computation,* **145**, 179-184, 2003.

159. Nonlinear wave modulation in a fluid-filled linearly tapered elastic tube, *European J. Mechanics: A/Solids,* **22**, 603-615, 2003.

160. A note on the exact traveling wave solution to the KdV-Burgers equation, *Wave Motion,* **38**, 367-369, 2003.

161. Amplitude modulation of non-linear waves in fluid-filled tapered tubes (İ. Bakırtaş ile birlikte), *Theoretical and Mathematical Physics,* **137**, 1636-1644, 2003.

162. Solitary waves in a tapered prestressed fluid-filled elastic tube, *ZAMP,* **55**, 282-294, 2004.

163. Modulation of nonlinear waves near the marginal state of instability in fluid-filled elastic tubes (İlkay Bakırtaş ile birlikte), *Applied Mathematics and Computation,* **149**, 83-101. 2004.

164. The effect of a bump on wave propagation in a fluid-filled elastic tube, *Int. j. Engng. Sci.,* **42**, 203-215, 2004.

165. Weakly nonlinear waves in a linearly tapered elastic tube filled with a fluid, *Mathematical and Computer Modelling,* **39**, 151-162, 2004.

166. Amplitude modulation of nonlinear waves in a fluid-filled tapered elastic tube (I. Bakırtaş ile birlikte), *Applied Mathematics and Computation,* **154/3**, 747/767, 2004.

167. A traveling wave solution to the KdV-Burgers equation, *Applied Mathematics and Computation,* **154/3**, 665-670, 2004.

168. On the existence of some evolution equations in fluid-filled elastic tubes and their progressive wave solutions, *Int. J. Engng. Sci.,* **42**, 1693-1706, 2004.

169. Modulation of nonlinear waves in fluid-filled elastic tube with stenosis, *Int. J. Mathematics and Mathematical Sciences*, **2204:60,** 3205-3218, 2004..

170. On some nonlinear waves in fluid-filled viscoelastic tubes: Weakly dispersive case, *Comm. In Nonlinear Science and Numerical Simulations,* **10**, 425-440, 2005.

171. Higher order approximations in reductive perturbation method: Strongly dispersive case, *Comm. In Nonlinear Science and Numerical Simulations,* **10/5**, 549-558, 2005.

172. Complex traveling wave solutions to the KdV and Burgers equations, *Applied Mathematics and Computation,* **162/2**, 925-930, 2004.

173. Weakly non-linear waves in a tapered elastic tube filled with an inviscid fluid (İ. Bakırtaş ile birlikte), *Int. J. Nonlinear Mechanics,* **40**, 785-793, 2005.

174. The modified reductive perturbation method as applied to Boussinesq equation: Strongly dispersive case, *Applied Mathematics and Computation,* **162**, 925-930, 2005.

175. Head-on-collision of solitary waves in fluid-filled elastic tubes, *Applied Mathematics Letters ,* **18,** 941-950, 2005. .

176. A complex traveling wave solution to the KdV-Burgers equation, *Physics Letters A,***344(6),** 418-422, 2005.

177. Weakly nonlinear waves in a viscous fluid contained in a viscoelastic tube, *European Journal of Mechanics A/ Solids*. **24**, 337-347, 2005.

178. Nonlinear waves in a viscous fluid contained in an elastic tube with variable cross-section, *Int. J. Non-linear Mech*., **41**, 258-270, 2006.

179. Interaction of nonlinear waves governed by Boussinesq equation, *Chaos, Solitons and Fractals***,** **30**, 1185-1189, 2006.

180. Reflection and transmission of nonlinear waves from arterial branching, *Int. J. Engr. Sci*., **44**, 1164-1172, 2006.

181. The effect of higher order approximation in a fluid-filled elastic tube with stenosis, *Zeitschrift für Naturforschung*, **61A**, 641-651, 2006.

182. Solitary waves in a fluid-filled thin elastic tube with variable cross-section, *Com. Nonlinear Science and Numerical Simulation*, **12**, 735-744, 2007.

183 Waves in fluid-filled elastic tubes with a tenosis:Variable coefficient KdV equation, *J. Computational and Appl. Math***., 202**, 328-338, 2007.

184. Interactions of nonlinear waves in fluid-filled elastic tubes, *Zeitschrift für Naturforschung***, 62A**, 21-28, 2007.

185. Interactions of nonlinear ion-acoustic waves in collisionless plasma, *J. Computational and Appl. Math***., 206**.826-831, 2007.

186. The effect of a bump on wave propagation in a viscous fluid of variable viscosity, *Appl. Math. Computation*, **187**, 1574- 1583, 2007.

187. The modified reductive perturbation method as applied to Boussinesq equation, *Zeitschrift für Naturforschung***, 62 A**, 347-352, 2007

188. Weakly nonlinear waves in a fluid with variable viscosity contained in a prestressed elastic tube, *Chaos, Solitons and Fractals*, **36,** 196-202, 2008.

189. Forced Korteweg-deVries-Burgers equation in an elastic tube filled with a variable viscosity fluid (with Tay Kim Gaik), *Chaos, Solitons and Fractals* ,**38**, 1134-1145, 2008.

190. Nonlinear wave modulation in a fluid-filled elastic tube with stenosis, *Zeitschrift für Naturforschung*, **63A**, 24-34, 2008.

191. Nonlinear waves in a fluid-filled inhomogeneous elastic tube with variable radius, *International Journal of Nonlinear Mechanics*, **43**, 241-245, 2008.

192. Nonlinear waves in an elastic tube with variable prestretch filled with a fluid of variable viscosity, *Int. J. Engr. Sci*., **46**, 949-957, 2008.

193. Weakly nonlinear waves in a fluid-filled elastic tube with variable stretch, *Int. J. Nonlinear Mech*., **43,** 887-891,2008.

194. Modified reductive perturbation method as applied to long water waves: The Korteweg-deVries hierarchy, *Int. J. Nonlinear Sci.* ,**6,** 11-20, 2008.

195. Head-on-collision of nonlinear waves in a fluid of variable viscosity contained in an elastic tube, *Chaos, Solitons and Fractals*, **41**, 1578-1586, 2009.

196. Variable coefficient modified KdV equation in fluid-filled elastic tubes, *Chaos, Solitons and Fractals,* **42**, 358-364, 2009.

197. Waves in an elastic tube filled with a heterogeneous fluid of variable viscosity, *Int. J. Nonlinear Mech*., **44**, 590-595, 2009.

198. Forced KdV equation in a fluid-filled elastic tube with variable initial stretch, *Chaos, Solitons and Fractals***, 42**, 1388-1395, 2009.

199. Higher order perturbation expansion of waves in water of variable depth, *Computers and Mathematics with Applications,* **59,** 298-304, 2010.

200. Multiple scale formalism and its applications to long water waves, *Applied Mathematical Modelling,* **34**, 1187-1193, 2010.

201. Weakly nonlinear waves in water of variable depth: Variable coefficient Korteweg-deVries equation, *Computers and Mathematics with Applications*, **60**, 1747-1755, 2010.

202. Multiple-scale expansion for nonlinear ion-acoustic waves, *International Journal of Nonlinear Sciences and Numerical Simulation,* **11,** 603-609, 2010.

203.Modulation of generalized symmetric requlerized long-wave equation:Generalized Nonlinear Schrödinger Equation, *International Journal of Nonlinear Sciences and Numerical Simulation,* **11**, 1121-1130, 2010.

204. A note on the wave propagation in water of variable depth, *Applied Mathematics and Computation*, **218**, 2294-2299, 2011.

205. An application of modified reductive perurbation method to long water waves, *Int. J. Engineering Sciences***, 49,** 1397-1403, 2011.

206.An application of modified reductive perturbation method to symmetric regularized long-wave equations, *TWMS, J. Appl. and Engr. Math.,* **1**, 49-57, 2011.

207. An application of multiple-time scale perturbation method to nonlinear ion-acoustic waves*, Journal of the Physical Society of Japan,* **81,** 024003-1-024003-4, 2012.

208. Dissipative non-linear Schrödinger equation with variable coeffficient in a stenosed elastic tube filled with a viscous fluid (K.G. Tay, Y. Y. Choy ve C. T. Ong
İle birlite), *Int. J. Engnr. Science and Technology***, 2(4),** 708-723 , 2010.

209. A note on the wave propagation in water of variable depth, *Applied Mathematics and Computation*, **218**, 2294-2299, 2011.

210. An application of modified reductive perurbation method to long water waves, *Int. J. Engineering Sciences***, 49,** 1397-1403, 2011

211. An application of modified reductive perturbation method to symmetric regularized-long-wave equation*, TWJM Appl. and Engr. Math.**, 1**, 49-57 , 2011*..

212. An application of multiple-time scale perturbation method to nonlinear ion-acoustic waves*, Journal of the Physical Society of Japan,* **81,** 024003-1-024003-4, 2012.

213. Contribution of higher order terms to the nonlinear shallow water waves, *TWMS J. Appl .and Engr. Math.* **, 2** ,210-218, 2012.

214. A note on the amplitude modulation of symmetric regularized long-wave equation with quartic nonlinearity, *Journal of Engineering Mathematics,* **77(1)**, 181-186, 2012.

215. An application of the modified reductive perturbation method to generalized Boussinesq equation, *Int. J. Nonlinear Sci. and Numerical Simulation,* **14,** 27-31, 2013.

216. Extended reductive perturbation method and its relation to the re-normalization method, *Int. J. Nonlinear Sci. and Numerical Simulation,* **14,** 389-394, 2013.

217. A study of higher order terms in shallow water waves via modified PLK method, *Int. J. Nonlinear Sci. and Numerical Simulation,* **15,** 129-134, 2014.

218. A note on the interactios of nonlinear waves governed by generalized Boussinesq equation, *Applied and Computational Mathematics*, **13**(3), 376-380, 2014.

219. A note on the progressive wave solution of the perturbed Korteweg-deVrie equation with variable dissipation, *Applied Mathematics and Computation*, **248**, 562-566, 2014.

220. Contribution of higher order terms in electron-acoustic solitary waves with vortex electron distribution, *ZAMP*, **65**(6), 1223-1231, 2014.

221. Re-visiting the head-on collision problem between two solitary waves in shallow water (with A. E. Ozden), *International Journal of Nonlinear Mechanics,* **69,** 66-70, 2015.

222. Interactions of nonlinera electron-acoustic solitary waves with vortex electron Distribution, *Physics of Plasmas*, **22**, 022114(1-6), 2015.

223. Modulation of electron-acoustic waves in a plasma with vortex electron distribution, *Int. J. Nonlinear Sci. Numerical Simulation,* **16**, 61-66, 2015.

224. An analysis of higher order terms for ion-acoustic wavesw by use of the modified PLK method*, Indian Journal of Pure and Applied Mathematics* , **46**, 669-678, 2015.

225. On head-on collision between two solitary waves in shallow water: the use of the extended PLK method (with A. E. Ozden), *Nonlinear Dynamics ,* **82**, 73-84, 2015..

226. A note on the cylindrical solitary waves in electron-acoustic plasma with vortex electron distribution (Cihan Bayındır ile birlikte*), Physics of Plasmas*, **22**(9) 092105(2015).

227. Modulation of electron-acoustic waves in a plasma with kappa distribution, *Physics of Plasmas*, **23** (3) , 032109(2016).

7.2 Uluslararası bilimsel toplantılarda sunulan ve bildiri kitabında (Proceeedins) basılan bildiriler.

7.3 Yazılan uluslararası kitaplar veya kitaplarda bölümler

7.4 Ulusal hakemli dergilerde yayımlanan makaleler

7.5 Ulusal bilimsel toplantılarda sunulan ve bildiri kitabında basılan bildiriler

7.6 Diğer yayınlar

8. Projeler

9. İdari Görevler

10. Bilimsel Kuruluşlara Üyelikler

-Member of Turkish Academy of Science (TÜBA).
-International Union of Theoretical and Applied Mechanics.
-Turkish Physical Society.
-Turkhish Mathematical Society.
-International Society of Engineering Science.
-On consultirip editor of Mathemstical Reviews, and Zentrolblatl für Mathematik.
-Associate Editor for International Journal of Engineering Science and ARI (formerty, Bullatin of Technical University of Istanbul).

11. Ödüller

-The Science Award of the Foundation of Istanbul Tecnical University, 1998.
-The Best Paper Awad of Canadian Society of Mechanical Engineers (1996).
-The Science Award of the Scientific and Technical Research Coincil of Turkey, 1984.
-Fulbright Researrch Scholarslip,1982.
-The Prize of Sedat Simavi Foundation in Sciences, 1978
-Young Turkish Scientists award given by the Scientific and Technical Research Council of Turkey, 1974.
-The Certificate of the Associationof Civil Engineers in Turkey for his merits during undergraduate education,1967.
-The scholarship given by the Technical University of Istanbul,for his perfonmance during the university entrence exam 1962.

12. Son iki yılda verilen lisans ve lisansüstü düzeydeki

Akademik Yıl	Dönem	Dersin Adı	Haftalık Saati		Öğrenci Sayısı
			Teorik	Uygulama	
2005-2006	Güz	Calculus I	3	2	50
		Differential Equations	3	2	46
	İlkbahar	Calculus II	3	2	54
		Linear Algebra	3	0	47
					62
2006-2007	Güz	Calculus III	3	2	
		Linear Algebra	3	0	40
	İlkbahar	Differential Equations	3	2	64
		Math. Theory of Elasticity	3	0	14