

# Dr. Mehmet Hakkı OMURTAG



## 1. CURRICULUM VITAE

*Name* Mehmet Hakkı Omurtag  
*Present Address* Istanbul Technical University,  
Faculty of Civil Engineering,  
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*Date and Place of Birth* April 8, 1954, İstanbul  
*Citizenship* Turkish Republic  
*Marital status* Married, two children

### Academic Degrees

**Ph.D.** June 1990 Istanbul Technical University  
Faculty of Civil Engineering, Istanbul-Turkey  
Subject “*Mixed Finite Element Analysis of Stiffened Variable Cross-Sectional Cylindrical Shells*”

**M.Sc.** September 1980 Bosphorus University  
Faculty of Engineering, Department of Civil Engineering,  
Istanbul-Turkey  
Subject “*Comparison of Some Methods for the Analyses of Frame Shear Wall Systems*”

**B.Sc.** February 1978 Bosphorus University  
Faculty of Engineering, Department of Civil Engineering,  
Istanbul-Turkey

### Academic Positions

2000-cont. Prof.Dr.  
*Istanbul Technical University,  
Faculty of Civil Engineering, Istanbul-Turkey*

1993-2000 Associate Professor.Dr.  
*Istanbul Technical University,  
Faculty of Civil Engineering, Istanbul-Turkey*

1991-1993 Assistant Professor Dr.  
*Istanbul Technical University,  
Faculty of Civil Engineering, Istanbul-Turkey*

1990-1991 Teaching Assistant Dr.  
*Istanbul Technical University,  
Faculty of Civil Engineering, Istanbul-Turkey*

1981-1990 Teaching Assistant  
*Istanbul Technical University,  
Faculty of Civil Engineering, Istanbul-Turkey*

## 2. LIST OF PUBLICATIONS

### 2.1. Published Books (In Turkish)

1. OMURTAG, M.H., *Strength of materials – Vol 1*, 4th Ed, Birsen Publication, İstanbul 2012 (The Turkish Academy of Sciences award).
2. OMURTAG, M.H., *Strength of materials – Vol 2*, 3rd Ed., Birsen Publication, İstanbul 2013 (The Turkish Academy of Sciences award).
3. OMURTAG, M.H., *Strength of materials solved problems– Vol 1*, 4th Ed, Birsen Publication, İstanbul 2012.
4. OMURTAG, M.H., *Strength of materials solved problems – Vol 2*, 3rd Ed, Birsen Publication, İstanbul 2013.
5. OMURTAG, M.H., *Statics*, 5th Ed, Birsen Publication, İstanbul 2012 (The Turkish Academy of Sciences award).
6. OMURTAG, M.H., *Statics - solved problems*, 5th Ed., Birsen Publication, İstanbul 2013 (The Turkish Academy of Sciences award).
7. OMURTAG, M.H., *Statics and strenght of materials*, 4th Ed., Nobel Publication, İstanbul, 2012.
8. OMURTAG, M.H., *Statics and strenght of materials - solved problems*, 4th Ed, Nobel Publication, İstanbul, 2013.
9. OMURTAG, M.H., *Beam finite elemets*, Birsen Publication, İstanbul 2010 (The Turkish Academy of Sciences award).
10. OMURTAG, M.H. and ERATLI N., *Beam finite elemets – solved problems*, Birsen Publication, İstanbul 2010
11. OMURTAG, M.H., *Dynamics*, 2nd Ed., Birsen Publication, İstanbul 2013
12. OMURTAG, M.H., *Dynamics – solved problems*, 2nd Ed., Birsen Publication, İstanbul 2013.

### EDITORIAL ACTIVITIES

13. *Third Turkish National Conference on Computational Mechanics*, Eds: BODUROĞLU, M.H., BAKIOĞLU, M. and OMURTAG, M.H., İstanbul-Turkiye, November 16-18, 1998.
14. *XVII<sup>th</sup> National Mechanics Congress*, Eds: ENGİN H, OMURTAG M.H, DELALE C.F, ANTAR N, Elazığ-Turkiye, September 5-9, 2011.

### 2.2. International Journals

1. AKÖZ A.Y, OMURTAG M.H. and DOĞRUOĞLU A.N, The mixed finite element formulation for three dimensional bars, *Int. J. Solids Structures*, **28**, 225-234, (1991).
2. OMURTAG M.H. and AKÖZ A.Y, Mixed finite element formulation of eccentrically stiffened cylindrical shells, *Comput. & Structures*, **42**(5), 751-768, (1992).
3. OMURTAG M.H. and AKÖZ A.Y, The mixed finite element solution of the helical beams with variable cross section under arbitrary loading, *Comput. & Structures*, **43**(2), 325-331, (1992).
4. OMURTAG M.H. and AKÖZ A.Y, A compatible cylindrical shell element for stiffened cylindrical shells in mixed finite element formulation, *Comput. & Structures*, **49**(2), 363-370, (1993).
5. OMURTAG M.H. and AKÖZ A.Y, Hyperbolic paraboloid shell analysis via mixed finite element formulation, *Int. J Numer. Methods Eng.*, **37**, 3037-3056, (1994).
6. OMURTAG M.H. and AKÖZ A.Y, Isoparametric mixed finite element formulation of orthotropic cylindrical shells, *Comput. & Structures*, **55**(5), 915-924,(1995).

7. OMURTAG M.H, ÖZÜTOK A, AKÖZ A.Y. and ÖZÇELİKÖRS Y, Free vibration analysis of kirchhoff plates resting on elastic foundation by mixed finite element formulation based on Gâteaux differential, *Int. J Numer. Methods Eng.*, **40**, 295-317(1997).
8. ÖZÇELİKÖRS Y, OMURTAG M.H. and DEMİR H, Analysis of orthotropic plate-foundation interaction by mixed finite element formulation using gâteaux differential, *Computers & Structures*, **62**(1), 93-106, (1997).
9. OMURTAG M.H. and KADIOĞLU F, Free vibration analysis of orthotropic plates resting on pasternak foundation by mixed finite element formulation, *Comput. & Structures*, **67**, 253-265, (1998).
10. ARTAN R. and OMURTAG M.H, Two plane punches on a nonlocal elastic half plane, *I.J. Engng. Science*, **38**, 395-403, (2000).
11. BAŞAR Y. and OMURTAG M.H, Free-vibration analysis of thin/thick laminated structures by layer-wise shell models, *Comput. & Structures*, **74**, 409-427, (2000)
12. DOĞRUOĞLU A.N, and OMURTAG M.H, Stability analysis of composite-plate foundation interaction by mixed FEM, *ASCE, J. Engng. Mechanics*, **126**(9), 928-936, (2000)
13. OMURTAG M.H. and ÇELİK M., (2005). Determination of the Vlasov foundation parameters-quadratic variation of elasticity modulus - Using FE Analysis, *Struct. Engng. Mech.*, **19**(6), 619-637, (2005)
14. SAYGUN A, OMURTAG M.H. ORAKDÖĞEN E, GİRGIN K, KÜÇÜKARSLAN S. and DARILMAZ K, A Simplified solution of the torsional rigidity of the composite beams by using FEM, *Advances in Struct. Engng.*, **10**(5), 467-473, (2007).
15. UĞURLU B, KUTLU A, ERGİN A. and OMURTAG M.H, Dynamics of a rectangular plate resting on an elastic foundation and partially in contact with a quiescent fluid, *Journal of Sound and Vibration*, **317**(1-2), 308–328, (2008).
16. SOFİYEV. A, OMURTAG M.H, and SCHNACK E, The vibration and stability of orthotropic conical shells with non-homogeneous material properties under a hydrostatic pressure, *Journal of Sound and Vibration*, *Journal of Sound and Vibration*, 319, 963-983, (2009).
17. ORAKDÖĞEN E, KÜÇÜKARSLAN S, SOFİYEV A. and OMURTAG M.H, Finite element analysis of functionally graded plates for coupling effect of extension and bending, *Meccanica*, **45**, 63-72, (2010).
18. AKSOYLAR C, ÖMERCİKOĞLU A, MECİTOĞLU Z. and OMURTAG M.H, Nonlinear Transient analysis of FGM and FML plates under blast loads by experimental and mixed FE methods, *Composite Structures*, **94**(2), 731-744, (2012).
19. KUTLU A, UĞURLU B, OMURTAG M.H and ERGİN A, Dynamic Response of Mindlin Plates Resting on Arbitrarily Orthotropic Pasternak Foundation and Partially in Contact with Fluid, *Ocean Engineering*, **42**, 112-125, (2012).
20. KUTLU A and OMURTAG M.H., Large deflection analysis of elliptic plates on orthotropic elastic foundation with mixed finite element method, *International Journal of Mechanical Sciences*, **65**, 64-74, 2012
21. SOFİYEV A.H., DENİZ A., AVCAR M., ÖZYİĞİT P. and OMURTAG M.H., Effects of the non-homogeneity and elastic medium on the critical torsional load of the orthotropic cylindrical shell, *ACTA Physica Polonica A*, **123**(4), 2013
22. ERATLI N., ARGESO H., ÇALIM F., TEMEL B. and OMURTAG M.H., Dynamic analysis of linear viscoelastic cylindrical and conical helicoidal rods using the mixed FEM, *Journal of Sound and Vibration*, **333**, 3671-3690, 2014

### 2.3. National Journals (Extended abstracts in English)

23. AKÖZ A.Y, and OMURTAG M.H, Mixed finite element formulation of cylindrical shells of varying cross-section, *Technical Journal, Turkish Chamber of Civil Engineers*, **3**, 156-162, (1992).

24. AKÖZ A.Y, and OMURTAG M.H, Mixed finite element formulation of three dimensional straight and circular bars, *Technical Journal, Turkish Chamber of Civil Engineers*, **3**, 171-175, (1992).
25. AKÖZ A.Y, and OMURTAG M.H, Mixed finite element formulation of eccentrically stiffened cylindrical shells, *Technical Journal, Turkish Chamber of Civil Engineers*, **3**, 186-195, (1992).
26. AKÖZ A.Y, and OMURTAG M.H, Mixed finite element solution of helical beams with variable cross-section under arbitrary loading, *Technical Journal, Turkish Chamber of Civil Engineers*, **4**, 211-213, (1993).
27. OMURTAG M.H. and AKÖZ A.Y, A new mixed finite element solution for thin cylindrical hollow shells, *Bulletin of the Technical University of Istanbul*, **46**(4), 497-519, (1993).
28. OMURTAG M.H, ÜNLÜ A, and AKÖZ A.Y, A compatible cylindrical shell element for stiffened cylindrical shells in a mixed finite element formulation, *Technical Journal, Turkish Chamber of Civil Engineers*, **6**, 309-319, (1995).
29. OMURTAG M.H, and AKÖZ A.Y, Mixed finite element analysis of hyperbolic paraboloid shells using Gâteaux differential, *Technical Journal, Turkish Chamber of Civil Engineers*, **7**, 375-380, (1996).
30. OMURTAG M.H, and AKÖZ A.Y, Mixed finite element solution of variable cross-sectional hyperbolic paraboloidal shells, *Technical Journal, Turkish Chamber of Civil Engineers*, **7**, 403-405, (1996).
31. DOĞRUOĞLU A.N, OMURTAG M.H, and KADIOĞLU F, Dynamic and stability analysis of plate-elastic foundation systems via mixed FE, *Technical Journal, Turkish Chamber of Civil Engineers*, **10**, 571-576, (1999).
32. OMURTAG M.H, Tabakalı kompozit plakların karışık SEM ile statik analizi, *TMMOB İnşaat Mühendisleri Odası, Teknik Dergi*, **12**(1), 2317-2330, (2001).
33. GİRGIN K, OLGUN O, DARILMAZ K, and OMURTAG M.H, Dynamic analysis of cylindrical and conical helices by MFE, *Journal of Turkish Chamber of Civil Engineers (Technical Journal-Digest 2006)*, **17**, 1113, (2006).

#### **2.4. National Journals** (in Turkish)

34. AKÖZ A.Y, and OMURTAG M.H, Mixed finite element formulation of cylindrical shells with variable thickness, *Technical Journal, Turkish Chamber of Civil Engineers*, **3**(3), 539-554, (1992).
35. AKÖZ A.Y, and OMURTAG M.H, Mixed finite element formulation of straight and circular bars, *Technical Journal, Turkish Chamber of Civil Engineers*, **3**(4), 565-574, (1992).
36. AKÖZ A.Y, and OMURTAG M.H, Mixed finite element solution of stiffened cylindrical shells, *Technical Journal, Turkish Chamber of Civil Engineers*, **3**(4), 585-599, (1992).
37. AKÖZ A.Y, and OMURTAG M.H, Mixed finite element formulation of variable cross-sectional helicoidal bars, *Technical Journal, Turkish Chamber of Civil Engineers*, **4**(2), 661-673, (1993).
38. OMURTAG M.H, ÜNLÜ A, and AKÖZ A.Y, A compatible cylindrical shell element for stiffened variable cross-sectional cylindrical shells with a hole, *Technical Journal, Turkish Chamber of Civil Engineers*, **6**(3), 993-1006, (1995).
39. OMURTAG M.H, and AKÖZ A.Y, Mixed finite element formulation of hyperbolic paraboloid shells by using Gâteaux differential, *Technical Journal, Turkish Chamber of Civil Engineers*, **7**(2), 1201-1215, (1996).

40. OMURTAG M.H, and AKÖZ A.Y, Variable cross-sectional hyperbolic paraboloidal shell solutions by mixed finite element method, *Technical Journal, Turkish Chamber of Civil Engineers*, **7**(4), 1295-1304, (1996).
41. OMURTAG M.H, A new mixed finite element modeling for hyperbolic paraboloidal shells, *Technical Journal, Turkish Chamber of Civil Engineers*, **9**(4), 1763-1780, (1998).
42. DOĞRUOĞLU A.N, OMURTAG M.H, and KADIOĞLU F., Mixed finite element formulation for the stability and free vibration analysis of plate foundation interaction, *Technical Journal, Turkish Chamber of Civil Engineers*, **10**(1), 1891-1908, (1999).
43. OMURTAG M.H, Static analysis of layered composites by mixed FEM, *Technical Journal, Turkish Chamber of Civil Engineers*, **12**(1), 2317-2330, (2001)
44. GİRGIN K, OLGUN O, DARILMAZ K, and OMURTAG M.H, Dynamic analysis of cylindrical and conical helicoidals by mixed FEM, *Technical Journal, Turkish Chamber of Civil Engineers*, **17**(4), 4003-4023, (2006).
45. AKSOYLAR C. and OMURTAG M.H, Dynamic analysis of plates under blast load by mixed FEM, *Technical Journal, Turkish Chamber of Civil Engineers*, **22**(4), 5689-5712, (2011)
46. KUTLU A. and OMURTAG M.H., Non-linear analysis of laminated Mindlin plate by mixed finite element method, *Sigma*, **31**, 298-306, (2013)

## 2.5. International Conference Contributions

47. ÇELİK M. and OMURTAG M.H, (2004). Determination of Vlasov foundation parameters for plate-elastic foundation interaction by FEM, *Advances in Civil Engineering (ACE 2004)*, İstanbul, Vol. 1, 286-295.
48. KUTLU A, AKSOYLAR C, ÇELİK M, and OMURTAG M.H, Determination of Vlasov parameters for Mindlin plates resting on elastic foundation, *Advances in Civil Engineering (ACE 2006)*, İstanbul 11-13 Ekim, ACE06-634 (2006).
49. GİRGIN K, and OMURTAG M.H, Free vibration analysis of helicoidal bars by Mixed FEM, *Advances in Civil Engineering (ACE 2006)*, İstanbul 11-13 Ekim, ACE06-064 (2006).
50. AKSOYLAR C, and OMURTAG M.H, Non-Linear Dynamic Analysis of Composite Plates with Mixed FEM, *International Symposium of on Engineering an Architectural Sciences of Balkan, Caucasus and Turkic Republics*, 1-7, Isparta (2009).
51. KUTLU A, and OMURTAG M.H, Free Vibration of Mindlin Plates interaction with Arbitrarily Orthotropic Two Parameter Foundation, *International Symposium of on Engineering an Architectural Sciences of Balkan, Caucasus and Turkic Republics*, 118-122, Isparta (2009).
52. ARGESO H, ERATLI N, ÇALIM F.F, ARIBAŞ Ü.N. and OMURTAG M.H, *Analysis of viscoelastic conical helixes via mixed finite element method*, *International Symposium on "Advances in Applied Mechanics and Modern Information Technology 2011" (AAM&MIT'11)*, 102-106, Baku, (2011)
53. KUTLU A, ARIBAŞ Ü.N, KARAYIĞIT H. and OMURTAG M.H, *Flexure of the Moderately Thick Elliptic Plates on Arbitrarily Orthotropic Elastic Foundation*, *International Symposium on "Advances in Applied Mechanics and Modern Information Technology 2011" (AAM&MIT'11)*, 210-214, Baku, (2011)
54. ARIBAŞ Ü.N, and OMURTAG M.H, *Mixed FE Analysis of Viscoelastic Cylindrical Helixes*, *2nd International Advances in Applied Physics and Material Sciences Congress*, 307, April 26-29, Antalya, (2012)
55. SOFIEV A.H., DENİZ A., AVCAR M., ÖZYIĞIT P., TUĞLU M., OMURTAG M.H., Effects of the non-homogeneity and elastic medium on the critical torsional load of the orthotropic

cylindrical shell, 2nd International Advances in Applied Physics and Material Sciences Congress, 72, April 26-29, Antalya, 2012

56. KUTLU A, UĞURLU B, OMURTAG M.H and ERGİN A, Natural frequencies of elliptical fluid storage tanks supported by elastic foundation, ACE06-1229, İstanbul, (2014)
57. ERMİŞ M., ERATLI N. and OMURTAG M.H., Static and dynamic analysis of elastic cylindrical helixes with arbitrary cross-sections by using the mixed finite element method, 11<sup>th</sup> International Congress on Advances in Civil Engineering, Istanbul, Turkey, 21-25 October 2014.
58. ERMİŞ M., ERATLI N., ARGESO H., ÇALIM F.F. and OMURTAG M.H., Quasi-static and dynamic analyses of viscoelastic conical helixes with a squared box cross-section, 11<sup>th</sup> International Congress on Advances in Civil Engineering, Istanbul, Turkey, 21-25 October 2014.

## 2.5. National Conference Contributions (In Turkish)

59. OMURTAG M.H, and AKÖZ A.Y, Finite element formulation of orthotropic cylindrical shells, *VII<sup>th</sup> National Mechanics Conference*, 421-430, Antalya-Turkiye (1991).
60. OMURTAG M.H, and AKÖZ A.Y, Mixed Finite element formulation of hyperbolic paraboloid shells, *VIII<sup>th</sup> National Mechanics Conference*, 468-477, Antalya-Turkiye (1993).
61. OMURTAG M.H, ÖZÇELİKÖRS Y, ÖZÜTOK A, and AKÖZ A.Y, Mixed finite element of analysis of plates resting on elastic foundation by Gâteaux Differential, *IX<sup>th</sup> National Mechanics Conference*, **2**, 502-511, Ürgüp-Turkiye (1995)
62. OMURTAG M.H, ÖZÜTOK A, ÖZÇELİKÖRS Y, and AKÖZ A.Y, Free vibration analysis of plates resting on elastic foundation by mixed finite elements, *IX<sup>th</sup> National Mechanics Conference*, **2**, 512-521, Ürgüp-Turkiye, (1995)
63. OMURTAG M.H, Dynamic analysis of plates and shells by mixed finite element, *Prof.Dr. Rifat Yarar Symposium*, 433-445, İstanbul-Turkiye, (1997).
64. OMURTAG M.H. and BAŞAR Y, A refined kinematic model for implementing thickness vibrations of thin/thick laminated structures, *X<sup>th</sup> National Mechanics Conference*, 345-356, İstanbul-Turkiye, (1998).
65. DOĞRUOĞLU A.N, and OMURTAG M.H, Stability analysis of plate-Pasternak foundation interaction by mixed finite element method, *Third Turkish National Conference on Computational Mechanics*, 25-32, İstanbul-Turkiye, (1998).
66. KADIOĞLU F, and OMURTAG M.H, Free vibration analysis of orthotropic plate-orthotropic foundation interaction by mixed FEM, *Third Turkish National Conference on Computational Mechanics*, 81-88, İstanbul-Turkiye, (1998).
67. OMURTAG M.H, and ÖNOL R, Orthotropic foundation plate interaction analysis by mixed FE using nine noded element, *Third Turkish National Conference on Computational Mechanics*, 121-128, İstanbul-Turkiye, November (1998).
68. OMURTAG M.H, and DOĞRUOĞLU A.N, Stability analysis of layered composite plate-elastic foundation (two-parameter) interaction by mixed FEM, *XI<sup>th</sup> National Mechanics Conference*, 485-494, Bolu-Turkiye, (2000).
69. OMURTAG M.H, and FETTAHOĞLU A, Determination of Vlasov parameters due to interacting plates resting on elastic foundation, *XIII. National Mechanics Conference*, 589-598, Gaziantep-Turkiye, (2004).
70. KUTLU A, and OMURTAG M.H, Free vibration of Mindlin plates resting on Arbitrarily orthotropic Pasternak foundation., *XVI<sup>th</sup> National Mechanics Conference*, 847-851, Vol. 2, Kayseri (2009).

71. AKSOYLAR C, ÖMERCİKOĞLU A, MECİTOĞLU Z, and OMURTAG M.H, Nonlinear dynamic analysis of plates by mixed finite elements, *XVI<sup>th</sup> National Mechanics Conference*, 165-174, Vol. 1, Kayseri (2009).
72. ÖMERCİKOĞLU A, AKSOYLAR C, MECİTOĞLU Z, and OMURTAG M.H, Experimental and numerical analysis of Hybrid and layered composite plates under blast load, *XVI<sup>th</sup> National Mechanics Conference*, 893-902, Vol. 2, Kayseri (2009).
73. ERATLI N, ÇALIM F. F, ARIBAŞ Ü.N. and OMURTAG M.H, Analysis of viscoelastic helices for various parameters by FEM, *XVII<sup>th</sup> National Mechanics Conference*, 324-333, ISBN 978-975-6315-03-3, Elazığ (2011).
74. AKSOYLAR C. and OMURTAG M.H, Analysis of FGM plates with mixed FEM, *XVII<sup>th</sup> National Mechanics Conference*, 79-86, ISBN 978-975-6315-03-3, Elazığ (2011).
75. ARGEŞO H, ERATLI N, DARILMAZ K. and OMURTAG M.H, Analysis of cylindrical helices for various viscoelastic models by FEM, *XVII<sup>th</sup> National Mechanics Conference*, 112-120, ISBN 978-975-6315-03-3, Elazığ, 2011.
76. KUTLU A, ARIBAŞ Ü.N, KARAYİĞİT H. and OMURTAG M.H, Static analysis of elliptical plates resting on orthotropic Pasternak foundation by Mixed FEM, *XVII<sup>th</sup> National Mechanics Conference*, 481-487, ISBN 978-975-6315-03-3, Elazığ (2011).
77. KUTLU A, and OMURTAG M.H, Analysis of Large Deflection Problem of Laminated Plates by Mixed FEs, *XVIII<sup>th</sup> National Mechanics Conference*, Manisa, 2013
78. KUTLU A, and OMURTAG M.H, Mixed FE analysis of Large Deflection and Plate-Foundation Interaction Problem, *XVIII<sup>th</sup> National Mechanics Conference*, Manisa, 2013
79. ERMiŞ M., ERATLI N. and OMURTAG M.H, Mixed FE analysis of Helicoidal Bars with Thin and Thick Box Section, *XVIII<sup>th</sup> National Mechanics Conference*, Manisa, 2013
80. KUTLU A, UĞURLU B., OMURTAG M.H, and ERGİN A., Dynamic Analysis of Mindlin Plates Resting on Pasternak foundation and Partially in Contact with Fluid, *XVIII<sup>th</sup> National Mechanics Conference*, Manisa, 2013

### 3. RESEARCH PROJECTS

#### 3.1. International

Project: “Nonlinear dynamic analysis of laminated composite shells under seismic loads by FE method”

Supported by : KFA Jülich GmbH (Germany)  
 Approved by : TÜBİTAK (Turkey)  
 Director : Prof.Dr. Yavuz Başar (RUB-Germany)  
 Prof.Dr. Yalçın Aköz (İTÜ-Turkey)  
 Assoc.Prof.Dr. Mehmet Omurtag (İTÜ-Turkey)  
 Duration : 1996-1998

Project: “Damage Analysis in Multi-layered Shell Structure Elastic Foundation Interaction for Seismic Problems”

Supported by : KFA Jülich GmbH (Germany)  
 Approved by : TÜBİTAK (Turkey)  
 Director : Prof.Dr. Yavuz Başar (RUB-Germany)  
 Prof.Dr. Mehmet Omurtag (İTÜ-Turkey)  
 Duration : 2000-2002

### 3.2. National

Project: “*Nonlinear dynamic behavior of nonhomogenous/heterogeneous plates under blast loading with finite elements*”

Supported by : TÜBİTAK (Turkey)  
Director : Prof.Dr. Mehmet H. Omurtag  
Coworker : Prof.Dr. Zahit Mecitoğlu  
Duration : 2007-2009

Project: “*Analysis of noncylindrical, variable cross-sectional viscoelastic helicoidal bars with Mixed FEM*”

Supported by : TÜBİTAK (Turkey)  
Director : Prof.Dr. Mehmet H. Omurtag  
Coworkers : Asoc.Prof.Dr. Nihal Eratı  
Asoc.Prof.Dr. Faruk Çalım  
Asist.Prof.Dr. Hakan Argeşo  
Duration : 2011-2014

Project: “*The solution of the nonlinear dynamic buckling and vibration problems of laminated truncated conical shells containing functionally graded layers subjected to time dependent axial loads*”

Supported by : TÜBİTAK (Turkey)  
Director : Prof.Dr. Abdullah Avey  
Coworker : Prof.Dr. Mehmet H. Omurtag  
Duration : 2008-2010

Project: “*Stability analysis of composite laminated plates and shells by mixed FE method*”

Supported by : Resarch Fund of İstanbul Technical University.  
Director : Assoc.Prof.Dr. Mehmet H. Omurtag  
Coworker : Dr. Ali N. Doğruoğlu  
Duration : 1998-2000



#### **4. LECTURES**

1. Statics (STA 201) (undergraduate courses in Turkish)
2. Dynamics (DIN 201) "
3. Strength of Materials – I (MUK 201) "
4. Strength of Materials – II (MUK 202) "
5. Modelling of beams by finite element method (INS 459) "
6. Finite elements (INS 538E) (graduate course in English)

#### **5. AWARDS**

1. DAAD (Deutscher Akademischer Austausch Dienst) Scholarship (July-August 1999)
2. The Turkish Academy of Science, "University Text Book Award 2008"
3. The Turkish Academy of Science, "University Text Book Award 2009"
4. The Turkish Academy of Science, "University Text Book Award 2011"