

## **ÖZGEÇMİŞ (CANFUAD DELALE)**

- |    |                        |                    |
|----|------------------------|--------------------|
| 1. | <b>Adı Soyadı</b>      | : Canfuad DELALE   |
| 2. | <b>Doğum Tarihi</b>    | : 29.06.1954       |
| 3. | <b>Unvanı</b>          | : Profesör Dr.     |
| 4. | <b>Öğrenim Durumu</b>  | : Doktora          |
| 5. | <b>Çalıştığı Kurum</b> | : MEF Üniversitesi |

Derece	Alan	Üniversite	Yıl
Lisans	Makine Mühendisliği	İstanbul Teknik Üniversitesi	1976
Y. Lisans	Fizik	Lehigh Üniversitesi, ABD	1979
Doktora	Mühendislik/Akışkanlar Mekaniği ve Termodinamik Grubu	Brown Üniversitesi, ABD	1983

### **5. Akademik Unvanlar**

- |                           |        |
|---------------------------|--------|
| Yardımcı Doçentlik Tarihi | : 1984 |
| Doçentlik Tarihi          | : 1987 |
| Profesörlük Tarihi        | : 1994 |

### **6. Yönetilen Yüksek Lisans ve Doktora Tezleri**

#### **6.1. Yüksek Lisans Tezleri**

**Bahar Zafer**, Second Order Asymptotics for Propeller Noise and Application to Helicopter Rotor Blades, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, 2005.

**Sarper Arün**, Numerical Simulation of Nonlinear Wave Propagation in Bubbly Liquids, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, 2006.

**A. Levent Şen**, Asymptotic Predictions and Full Numerical Solution of Helicopter Rotor Noise in the Far Field, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, 2008.

#### **6.2. Doktora Tezleri**

**Şenay Pasinlioğlu**, Kabarcıklı Sıvılarda Kavitasyonlu Daimi Lüle Akışlarının Kararlılığı ve Soliton Oluşumu, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, 2009.

**Zafer Başkaya**, Sanki-Bir-Boyutlu Lülelerde Daimi Olmayan Kavitasyonlu Kabarcıklı Akışların Sayısal Benzetimi, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, 2011.

**Bahar Zafer**, Prediction Methods for Helicopter Rotor Blade Noise and Flow-Sound Interaction for Nozzle Flow, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, 2012.

## 7. Yayınlar

### 7.1. Uluslararası hakemli dergilerde yayınlanan makaleler (SCI,SSCI,Arts and Humanities)

1. C.F.Delale, Lower Bound Estimate for Droplet Size in Two-Phase Dispersed Flow, *ASME Journal of Heat Transfer* **102** (1980) 501-507.
2. C.F.Delale, The Hilbert Expansion to the Boltzmann Equation for Steady Flow, *Journal of Statistical Physics* **28** (1982) 589-602.
3. C.F.Delale, The H Theorem and Irreversible Thermodynamics, *Journal of Statistical Physics* **37** (1984) 451-463.
4. C.F.Delale, Irreversible Thermodynamics of Kinetic Processes in Multiple Gas Mixtures, *Journal of Chemical Physics* **83**(6) (1985) 3062-3068.
5. C.F.Delale, The Hilbert Theory of Transport Phenomena in Multiple Gas Mixtures, *Journal of Chemical Physics* **83**(6) (1985) 3069-3076.
6. C.F.Delale, The Generalized H Theorem in the Hilbert Theory, *Journal of Chemical Physics* **84**(2) (1986) 971-975.
7. J.H.Clarke and C.F.Delale, Nozzle Flows with Nonequilibrium Condensation, *Physics of Fluids* **29**(5) (1986) 1398-1413.
8. J.H.Clarke and C.F.Delale, Supercritical Shocks in Nozzle Flows with Nonequilibrium Condensation, *Physics of Fluids* **29**(5) (1986) 1414-1418.
9. J.H.Clarke and C.F.Delale, Expansion Flows on Walls with Nonequilibrium Condensation, *Quarterly of Applied Mathematics* Vol. **XLVI** No. 1 (1988) 121-143.
10. C.F.Delale, An Exactly Solvable Two-Fold Cayley Tree Model, *International Journal of Modern Physics B* Vol. **3** No. 10 (1989) 1523-1537.
11. C.F.Delale, On the Transition from Ferromagnetism to Antiferromagnetism on Two-Fold Cayley Tree, *Il Nuovo Cimento* Vol. **14D** (1992) 261-270.
12. C.F.Delale, G.H.Schnerr and J.Zierep, The Mathematical Theory of Thermal Choking in Nozzle Flows, *Z Angew Math Phys (ZAMP, Journal of Applied Mathematics and Physics)* Vol. **44** (1993) 943-976.
13. C.F.Delale, G.H.Schnerr and J.Zierep, Asymptotic Solution of Transonic Nozzle Flows with Homogeneous Condensation. I.Subcritical Flows, *Physics of Fluids A* **5** (1993) 2969-2981.
14. C.F.Delale, G.H.Schnerr and J.Zierep, Asymptotic Solution of Transonic Nozzle Flows with Homogeneous Condensation. II.Supercritical Flows, *Physics of Fluids A* **5** (1993) 2982-2995.
15. C.F.Delale and G.E.A.Meier, A Semi-Phenomenological Droplet Model of Homogeneous Nucleation from the Vapor Phase, *Journal of Chemical Physics* **98** (1993) 9850-9858.
16. C.F.Delale and G.H.Schnerr, Near Critical Transonic Nozzle Flows with Homogeneous Condensation, *Acta Mechanica Suppl.* **4** (1994) 125-131.

17. C.F.Delale and G.E.A.Meier, Real Gas Effects in Thermally Choked Nozzle Flows, *Z Angew Math Phys (ZAMP, Journal of Applied Mathematics and Physics)* **45** (1994) 245-257.
18. C.F.Delale, G.H.Schnerr and J.Zierep, Asymptotic Solution of Shock Tube Flows with Homogeneous Condensation, *Journal of Fluid Mechanics* **287** (1995) 93-118.
19. C.F.Delale, G.H.Schnerr and F.Marsik, Theory of Embedded Shock Formation in Rarefaction Waves by Homogeneous Condensation, *European Journal of Mechanics B / Fluids* **15** (1) (1996) 81-102.
20. C.F.Delale and G.E.A.Meier, A Comparison of Nucleation Theories by the Asymptotic Solution of Condensing Nozzle Flows, *Acta Mechanica* **117** (1996) 23-32.
21. C.F.Delale and G.H.Schnerr, Transient Effects of Nucleation in Steady and Unsteady Condensing Flows, *International Journal of Multiphase Flow* **22** (4) (1996) 767-781.
22. C.F.Delale, M.J.E.H.Muitjens and M.E.H.van Dongen, Asymptotic Solution and Numerical Simulation of Homogeneous Condensation in Expansion Cloud Chambers, *Journal of Chemical Physics* **105** (19) (1996) 8804-8821.
23. C.F.Delale and D.G.Crighton, Prandtl-Meyer Flows with Homogeneous Condensation. Part 1. Subcritical Flows, *Journal of Fluid Mechanics* **359** (1998) 23-47.
24. C.F.Delale and M.E.H. van Dongen, Thermal Choking in Two-Dimensional Expansion Flows, *Z Angew Math Phys (ZAMP, Journal of Applied Mathematics and Physics)* **49** (1998) 515-537.
25. C.F.Delale, G.H.Schnerr and J.Sauer, Quasi-one-dimensional Steady-state Cavitating Nozzle Flows, *Journal of Fluid Mechanics* **427** (2001) 167-204.
26. C.F.Delale and D.G.Crighton, Prandtl-Meyer Flows with Homogeneous Condensation. Part 2. Supercritical Flows, *Journal of Fluid Mechanics* **430** (2001) 231-265.
27. C.F.Delale, G.Lamanna and M.E.H. van Dongen, On the Stability of Stationary Shock Waves in Nozzle Flows with Homogeneous Condensation, *Physics of Fluids* **13** (2001) 2706-2719.
28. C.F.Delale, Thermal Damping in Cavitating Nozzle Flows, *ASME Journal of Fluids Engineering*, **124** (2002) 969-976.
29. C.F.Delale, J.Hruby and F.Marsik, Homogeneous Bubble Nucleation in Liquids: The Classical Theory Revisited, *Journal of Chemical Physics*, **118** (2003) 792-806.
30. C.F.Delale and M.Tunç, A Bubble Fission Model for Collapsing Cavitation Bubbles, *Physics of Fluids*, **16** (2004) 4200-4203.
31. C.F.Delale, K.Okita and Y.Matsumoto, Steady-state Cavitating Nozzle Flows with Nucleation, *ASME Journal of Fluids Engineering*, **127**, 770-777 (2005).
32. C.F.Delale, S.Nas and G.Tryggvason, Direct Numerical Simulation of Shock Propagation in Bubbly Liquids, *Physics of Fluids*, **17**, 121705-1-4 (2005).
33. C.F. Delale and G. Tryggvason, Shock structure in Bubbly Liquids: Comparison of Direct Numerical Simulations and Model Equations, *Shock Waves*, **17** (2008) 433-440 (DOI 10.1007/s00193-008-0126-1).

- 34.** A.Acrivos and C.F.Delale, Report on IUTAM Symposium on Recent Advances in Multiphase Flows: Numerical and Experimental (11-14 June 2007, Istanbul, Turkey), *Physics of Fluids*, **20** (2008) 040501-1-11.
- 35.** C.F.Delale, G.Tryggvason and S.Nas, Cylindrical Bubble Dynamics: Exact and DNS Results, *Physics of Fluids*, **20** (2008) 040903-1-10.
- 36.** Ş. Pasinlioğlu, C.F. Delale and G.H.Schnerr, On the Temporal Stability of Steady-State Quasi-One-Dimensional Cavitating Bubbly Flow Solutions, *IMA Journal of Applied Mathematics*, **74** (2009) 230-249 (doi:10.1093/imamat/hxn036).
- 37.** C.F. Delale, B.Zafer and A.R.Aslan, A Refinement of Asymptotic Predictions and Full Numerical Solution of Helicopter Rotor Noise in the Far Field, *International Journal of Aeroacoustics*, **11**(3&4) (2012) 521-530 (doi:10.1260/1475-472X.11.3-4.521).
- 38.** B.Zafer and C.F. Delale, A Novel Nonreflecting Boundary Condition for Unsteady Flow, *International Journal for Numerical Methods in Fluids* **74** (2014) 59-72 (doi:10.1002/fld.3840, 2013).
- 39.** C.F. Delale, Ş. Pasinlioğlu, Z. Başkaya and G. H. Schnerr, Semi-analytical Solution of Unsteady Quasi-one-dimensional Cavitating Nozzle Flows, *Journal of Engineering Mathematics*, **86** (2014) 49-70 (doi: 10.1007/s10665-013-9645-6).
- 40.** C.F. Delale and Ş. Pasinlioğlu, First Iterative Solution of Thermal Behavior of Acoustic Cavitation Bubbles in the Uniform Pressure Approximation, *Journal of Physics: Conference Series*, **656** (2015) 012016 (doi:10.1088/1742-6596/656/1/012016).

## **7.2. Uluslararası diğer hakemli dergilerde yayınlanan makaleler**

1. F.Marsik, C.F.Delale and M.Sedlar, Condensation and Cavitation in Water and Water Mixtures, *Archives of Thermodynamics*, **24**(1) (2003) 3-16.
2. C.F. Delale, B.Zafer and A.R.Aslan, Computational and Asymptotic Methods in Aeroacoustics with Applications, *TWMS (TurkicWorld Mathematical Society) Journal of Applied and Engineering Mathematics*, 1 (2011) 1-26 .

## **7.3. Uluslararası bilimsel toplantılarında sunulan ve bildiri kitabında basılan bildiriler**

1. C.F.Delale, (invited) An Asymptotic Predictive Method for Gas Dynamics with Nonequilibrium Condensation, *Proceedings of IUTAM Symposium on "Adiabatic Waves in Liquid-Vapor Systems"*, 28 August-1 September 1989, Göttingen, (eds.) Meier,G.E.A and Thompson,P.A., (Springer-Verlag, Berlin and Heidelberg, 1990) 143-157.
2. G.H.Schnerr and C.F.Delale, On Thermally Choked Nozzle Flows, *Proceedings of ISAIF International Symposium on Experimental and Computational Aerothermodynamics of Internal Flows*, Prague, July 12-15, 1993, (eds.) R.Dvorak and J. Kvapilova, Vol. **2**, Society of Czech Mathematicians and Physicists, 485-490 (1993).
3. C.F.Delale, G.H.Schnerr and J.Zierep, Shock Tube Flows with Homogeneous Condensation, *Proceedings of 2nd International Conference on Fluid Mechanics (ICFM-II)*, Beijing, July 7-10, 1993. (ed.) Z. Fenggan, Peking University Press, 293-298 (1993).

4. C.F.Delale and G.H.Schnerr, On the Onset of Condensation in Rarefaction Waves in Shock Tubes, *Shock Waves Marseille III, Shock Waves in Condensed Matter and Heterogeneous Media (Proceedings of the 19th International Symposium on Shock Waves , Marseille, July 26-30, 1993)* (eds.) R.Brun, L.Z.Dumitrescu. Springer-Verlag, 131-134 (1995).
5. C.F.Delale and G.H.Schnerr, (invited) Theoretical Investigation of Condensation Dynamics in Shock Tubes, *Fluid Mechanics and its Applications Vol. 31 (Proceedings of IUTAM Symposium "Waves in Gas-Liquid and Gas-Particle Two- Phase Systems", Kyoto, May 9-13, 1994.)* (eds.) S.Morioka and L. van Wijngaarden, Kluwer Academic Publishers, 365-375 (1995).
6. C.F.Delale, F.Marsik and G.H.Schnerr, On the Formation of Embedded Shock Waves in Rarefaction Waves by Homogeneous Condensation, *Proceedings of the 20<sup>th</sup> International Symposium on Shock Waves Vol.II*, Pasadena, California,USA, July 23-28, 1995 (eds.) B.Sturtevant, J.E.Shepherd & H.G.Hornung, World Scientific, Singapore, 1237-1242 (1996).
7. C.F.Delale, (invited) Shock Formation in Flows with Nucleation and Condensation, *Proceedings of Metastable Behavior of Fluids and Critical Phenomena*, Prague, October 30-31, 1996 (ed.) F.Marsik, Institute of Thermomechanics, Academy of Sciences of the Czech Republic, 7-24 (1996).
8. C.F.Delale and G.H.Schnerr, Asymptotic Solution of Flows with Nucleation and Condensation, *Proceedings of the Second International Conference on "Asymptotics in Mechanics AIM'96 "*, Saint Petersburg State Marine Technical University, Saint Petersburg, Russia, October 13-16, 1996 (eds.) Ali H. Nayfeh and Kirill V. Rozhdestvensky, Saint Petersburg, 81-88 (1996).
9. C.F.Delale and G.H.Schnerr, Quasi-one-dimensional Cavitating Nozzle Flows. *Proceedings of Third International Conference on Multiphase Flow (CD ROM)* 615-620, June 8-12, 1998, Lyon, France (eds.) J. Bataille, A. Joia (1998).
10. C.F.Delale, Continuum Modelling of Flows with Nucleation and Condensation, *Proceedings of Continuum Models and Discrete Systems 9 (CMDS9)*, Istanbul, 29 June-3 July 1998, (eds.) E. Inan and K.Z. Markov, World Scientific Publishing Co., pp. 14-21 (1998).
11. C.F.Delale, Thermal Damping in Cavitating Nozzle Fows, *Proceedings of the Fourth International Symposium on Cavitation*, Pasadena, California, USA, June 19-23, 2001 (ed.) C.E. Brennen (2001) (online at <http://cav2001.library.caltech.edu>).
12. F.Marsik, C.F.Delale and M.Sedlar, (Keynote Lecture) Condensation and Cavitation in Water and Water Mixtures, *Proceedings of HEAT 2002, the Third International Conference on Transport Phenomena in Multiphase Systems*, Kielce, Poland, June 24-27, 2002, pp. 61-68.
13. C.F. Delale, J.Hraby and F. Marsik, The Classical Theory of Homogeneous Bubble Nucleation Revisited, *Fifth International Symposium on Cavitation*,Osaka, Japan, November 1-4, 2003. Paper No.: Cav03-GS-1-002 (CD ROM and online at <http://flow.me.es.osaka-u.ac.jp/cav2003/>).
14. M.Tunç and C.F. Delale, Energy Dissipation due to Fission of Cavitating Bubbles, *Fifth International Symposium on Cavitation*, Osaka, Japan, November 1-4, 2003. Paper No : Cav03-GS-2-003 (CD ROM and online at <http://flow.me.es.osaka-u.ac.jp/cav2003/>).

- 15.** C.F. Delale, K. Okita and Y. Matsumoto , Steady-State Cavitating Nozzle Flows with Nucleation, *Fifth International Symposium on Cavitation*, Osaka,Japan, November 1-4, 2003. *Paper No.: Cav03-GS-4-001* (CD ROM and online at <http://flow.me.es.osaka-u.ac.jp/cav2003/>).
- 16.** C.F.Delale, (invited) A Cavitating Bubbly Flow Model with Bubble/Bubble Interactions, Thermal Damping and Bubble Fission, in *Proceedings of Second International Summer Scientific School on High Speed Hydrodynamics*, Cheboksary, Russia , June 27-July 3, 2004, (ed.) A. Terentiev (2005) pp. 65-72.
- 17.** C.F. Delale, S.Nas and G.Tryggvason, (invited) Direct Numerical Simulations of Shock Propagation in Bubbly Liquids, *IUTAM Symposium on Computational Approaches to Disperse Multiphase Flow*, Argonne National Laboratory, USA, 4-7 October 2004 ( Fluid Mechanics and its Appplications Kluwer-Springer series, 2006, pp. 323-330, eds. S. Balachander and A.Prosperetti, pp. 323-330).
- 18.** C.F. Delale and G. Tryggvason, Shock structure in bubbly liquids: Comparison of Direct Numerical Simulations and Model Equations, *CAV2006 Sixth International Symposium on Cavitation Paper No. : 94* , 11-15 September 2006, Wageningen, The Netherlands (CD ROM, ed. G. Kuiper and online at <http://www.cav2006.com> ).
- 19.** C.F. Delale, G.H.Schnerr and S. Pasinlioglu, Model Evolution Equations for Unsteady Cavitating Nozzle Flows and Their Applications, *CAV2006 Sixth International Symposium on Cavitation Paper No. : 112*, 11-15 September 2006, Wageningen, The Netherlands (CD ROM, ed. G. Kuiper and online at <http://www.cav2006.com> ).
- 20.** C.F. Delale, G.H.Schnerr and S. Pasinlioglu, On the Temporal Stability of Steady-State Cavitating Nozzle Flow Solutions, *ICMF2007 Sixth International Symposium on Multiphase Flows Paper No. : 112*, 11-15 July 2007, Leipzig, Germany (CD ROM, ed. M.Sommerfeld and online at <http://www.icmf2007.com> ).
- 21.** C.F. Delale, Z.Başkaya, S.J.Schmidt and G.H.Schnerr, Unsteady Bubbly Cavitating Nozzle Flows, *CAV2009 Seventh International Symposium on Cavitation Paper No. : 18*, 17-22 August 2009, Ann Arbor, Michigan, USA (USB, ed. S. Ceccio).
- 22.** C.F. Delale, Z.Başkaya and S.J.Schmidt, Non-Barotropic Models of Cavitation and Their Applications, *ICMF2010 Seventh International Conference on Multiphase Flow Paper No. : DelaleBS-ICMF2010* , 30 May-4 June 2010, Tampa, Florida, USA (USB, eds. J.S.Curtis and S.Balachander).
- 23.** C.F. Delale, Z.Başkaya, Ş. Pasinlioğlu, M. Sen and E.Ayder, A Quasi-One-Dimensional Bubbly Cavitating Flow Model and Comparison with Experiments. *ETC9 Nineth European Turbomachinery Conference, Paper No. 300, ETC9*, 21- 25 March 2011, Istanbul, Turkey (CD ROM, ed. M.Şen).
- 24.** C.F. Delale, On the Fundamental Equations of Two-Dimensional Bubbly Cavitating Flows, *WIMRC Third International Cavitation Forum*, 4-6 July 2011, University of Warwick, UK (USB, ed. S.Li).
- 25.** C.F. Delale, A Semi-analytical Solution of Unsteady Bubbly Cavitating Nozzle Flows, *Proceedings of International Workshop on Hydrodynamics of Moving Objects*, pp.33-42, 23-30 April 2012, Kiev, Ukraine (ed. O. Limarchenko).

**26.** C.F. Delale, Ş. Pasinlioğlu and P. Zima, A Criterion for the Occurrence of Bubble Fission and its Modelling, *Proceedings of Eighth International Symposium on Cavitation (CAV2012)*, pp.78-82, 13-16 August 2012, Singapore (CD ROM, eds. C.D. Ohl, E. Klaseboer, S.W. Ohl, S.W. Gong and B.C. Khoo) <http://cav2012.sg/proceedings/index.html>

#### **7.4. Yazılan uluslararası kitaplar veya kitaplarda bölümler**

**1.C.F.Delale** (Editor) Bubble Dynamics and Shock Waves (*Shock Waves Science and Technology Reference Library 8*) Springer, Berlin, Heidelberg, 2013  
ISBN 978-3-642-34296-7

**2. C.F.Delale**, G.H.Schnerr and M.E.H. van Dongen, Condensation Discontinuities and Condensation Induced Shock Waves. *Shock Waves Science and Technology Reference Library. Vol. 1 Multiphase Flows* (ed. M.E.H.van Dongen) pp.187-230, Springer,Berlin, Heidelberg, February 2007 ISBN 978-3-540-35845-9

**3.C.F.Delale**, Ş.Pasinlioğlu and Z. Başkaya, Mathematical Theory and Numerical Simulations of Bubbly Cavitating Nozzle Flows. *Supercavitation: Advances and Perspectives*. (ed. Igor Nesteruk), pp.1-25, Springer, Berlin, Heidelberg, 2012  
ISBN 978-3-642-23655- 6 (DOI:10.1007/978-3-642-23656-3)

**4.C.F.Delale**, G.H.Schnerr and Ş. Pasinlioğlu, Shocks in Quasi-One-Dimensional Bubbly Cavitating Nozzle Flows. *Bubble Dynamics and Shock Waves (Shock Wave Science and Technology Reference Library 8)*, (ed. C.F. Delale) pp.208-230, Springer, Berlin, Heidelberg, 2013 ISBN 978-3-642-34296-7

#### **7.5. Ulusal hakemli dergilerde yayınlanan makaleler**

#### **7.6. Ulusal bilimsel toplantılarında sunulan ve bildiri kitabında basılan bildiriler**

**1.** C.F.Delale, Tersinmezlik, Mekanik ve Termodinamik, *V. Ulusal Mekanik Kongresi*, 7-11 Eylül 1987, Kirazliyayla, Bursa, (editörler) M.Dikmen and E.İnan (İTÜ İnşaat Fakültesi, İstanbul, 1990) .

**2.** C.F.Delale, Yoğuşma Halinde Gaz Dinamiği, *VI.. Ulusal Mekanik Kongresi*, 11-15 Eylül 1989, Kirazliyayla, Bursa, (editörler) M.Dikmen and E.İnan (İTÜ İnşaat Fakültesi, İstanbul, 1990) 268-278.

**3.** C.F.Delale, Boltzmann Denkleminin Hilbert Çözümü, *3. Diferansiyel Denklemler Sempozyumu*, 26-28 Ekim 1989, Trakya Üniversitesi, Edirne, (editörler) M.Dikmen ve O. Çelebi (Boğaziçi Üniversitesi Matbaası, İstanbul, 1990) 33-44.

#### **7.7. Diğer yayınlar**

## **8. Projeler**

### **A. TÜBA (Türkiye Bilimler Akademisi) Destekli Projeler :**

- Kabarcıklar için Homojen Çekirdekleşme Kuramı. (2002-2003) Telif hakkı olarak TÜBA'nın öngördüğü destek alınmıştır.
- Hidrodinamik Kavitasyon. (1998-2003) Telif hakkı olarak TÜBA'nın öngördüğü destek alınmıştır.
- Yoğuşmadan Kaynaklanan Şok Dalgalarının Kararlılığı (1999-2000) Telif hakkı olarak TÜBA'nın öngördüğü destek alınmıştır.
- Faz Geçişleri Halinde Prandtl-Meyer Akışları (1995-1998) Telif hakkı olarak TÜBA'nın öngördüğü destek alınmıştır.

### **B. İTÜ Destekli Araştırma Projeleri :**

- Daimi Olmayan Kavitasyonlu Akışlar (23 Temmuz 2001 – 23 Temmuz 2003) Proje No. 1874. Bütçesi : 5 Milyar 650 Milyon TL.

### **C. TÜBİTAK 1001 Kodlu Araştırma Projesi (105M035 No.lu Proje):**

- Sıvılaştırılmış Yakıtlı Türbopompaların Tasarımı ve Kavitasyon Optimizasyonu (1 Eylül 2005 -1 Mart 2008) Proje No. 105M035 TÜBİTAK MAG ,  
Bütçesi :147 640,- YTL.

## **9. İdari Görevler**

<b>Görevi</b>	<b>Görev Yeri</b>	<b>Yıl</b>
Uçak ve Uzay Bilimleri Fakültesi Senatörü	İstanbul Teknik Üniversitesi	2002-2009
Uçak ve Uzay Bilimleri Fakülte Kurulu Üyesi	İstanbul Teknik Üniversitesi	2001-2009
Uçak ve Uzay Bilimleri Fakülte Yönetim Kurulu Üyesi	İstanbul Teknik Üniversitesi	2002-2005
Anabilim Dalı Başkanı	İTÜ Fen Bilimleri Enstitüsü Disiplinlerarası Uçak ve Uzay Mühendisliği Programı	2007- 2008
Mühendislik Fakültesi Fakülte Kurulu Üyesi	İşık Üniversitesi	2012-2014
Mühendislik Fakültesi Senatörü	MEF Üniversitesi	2014-devam ediyor
Mühendislik Fakültesi Fakülte Yönetim Kurulu Üyesi	MEF Üniversitesi	2015-devam ediyor
Mühendislik Fakültesi Makine Mühendisliği Bölüm Başkanı	MEF Üniversitesi	2014-devam ediyor

## **10. Bilimsel ve Mesleki Kuruluşlara Üyelikler**

1. Bilim Akademisi Derneği (2013 - devam ediyor).
2. American Physical Society (2007-devam ediyor).
3. TÜBA (Türkiye Bilimler Akademisi) Assosiyə Üye (1995-2003)
4. EUROMECH (European Mechanics Society) , 1998-devam ediyor.
5. Teorik ve Uygulamalı Mekanik Türk Milli Komitesi ,1987-devam ediyor.
6. Türk Matematik Derneği (1986-devam ediyor).

## **11. Ödüller**

Ödülün Adı	Alındığı Kuruluş	Yılı
<b>SEDAT SİMAVİ FEN BİLİMLERİ ÖDÜLÜ</b>	Sedat Simavi Vakfı	<b>1984</b>
<b>TÜBİTAK TEŞVİK ÖDÜLÜ</b>	TÜBİTAK Başkanlığı	<b>1991</b>
<b>TÜBA (Türkiye Bilimler Akademisi) Asosiyə Üyeliyi</b>	TÜBA Genel Kurulu	<b>1995</b>
<b>BA (Bilim Akademisi) Aslı Üyeliyi</b>	BA Genel Kurulu	<b>2013</b>

## **12. Son iki yılda verdığınız lisans ve lisansüstü düzeydeki dersler için aşağıdaki tabloyu doldurunuz (MEF ÜNİVERSİTESİ'NDE)**

Akademik Yıl	Dönem	Dersin Adı	Haftalık Saati		Öğrenci Sayısı
			Teorik	Uygulama	
2014-2015	Güz	Calculus I	3		36
	İlkbahar	Calculus II	3		32
2015 -2016	Güz	Calculus I	3		39
		Calculus II	3		23
		Differential Equations	3		8
	İlkbahar	Calculus II	3		72

**Not:** Açılmışsa, yaz döneminde verilen dersler de tabloya ilave edilecektir.