# RESUME

**Dr. Umit Necmettin ARIBAS**
Maltepe – İstanbul
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## PERSONAL INFORMATION

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|---|---|---|
| **Birth date** | **:** | 30.01.1988 |
| **Place of birth** | **:** | Canakkale/Turkey |
| **Nationality** | **:** | Turkish |
| **Marital Status** | **:** | Single |
| **Driving Licence** | **:** | Obtained on 30.11.2007 (B) |
| **Hobbies** | **:** | Swimming, Poetry, Theater. |
| **Cigarette** | **:** | Non-Smoker |
| **Membership** | **:** | Member of the construction engineering chamber since 2008 |

## EDUCATION

| | | Date | Grade |
|---|---|---|---|
| **Ph.D.** | ISTANBUL TECHNICAL UNIVERSITY<br>Construction Engineering Programme<br>**Advisor :** Mehmet Hakkı OMURTAG | 2013 – 2019 | 3.45 |
| **M.Sc.** | ISTANBUL TECHNICAL UNIVERSITY<br>Construction Engineering Programme<br>**Advisor :** Mehmet Hakkı OMURTAG | 2010 – 2012 | 3.69 |
| **B.Sc.** | ISTANBUL UNIVERSITY<br>Civil Engineering<br>**Advisor :** Namık Kemal ÖZTORUN | 2006 – 2010 | 3.15 |
| **Highschool** | HABIRE YAHSI HIGHSCHOOL<br>Highschool<br>English Preparation | 2003 – 2006<br>2002 – 2003 | 4.60<br>5.00 |

## THESIS

- Static and Dynamic Analyses of Composite Helicoidal Rods with Mixed Finite Element Method (PhD), 2019.
  - The static and dynamic analyses of orthotropic composite helicoidal Timoshenko rods including the warping effect via mixed FEM.
- Analysis of Dynamic Behavior of Viscoelastic Helicoidal Rods with Mixed Finite Element Method (*M.Sc. Thesis*), 2012.
  - The dynamic analysis of viscoelastic helicoidal Timoshenko rods using Laplace and modified Durbin Laplace transformations.
- Reaction System of Construction Department Laboratory of Istanbul University, in Turkish, (*B.Sc. Thesis*), 2010.
  - The design of monolithic concrete reaction system using SAP2000.

## INTERNATIONAL JOURNAL PUBLICATIONS

- Çömez İ., **Aribas U.N.**, Kutlu A., Omurtag M.H. (2021). An Exact Solution for Monoclinic Functionally Graded Beams. Arab J Sci Eng. https://doi.org/10.1007/s13369-021-05434-9
- **Aribas U.N.**, Ermiş M., Kutlu A., Eratlı N., Omurtag M.H. (2020). Forced vibration analysis of composite-geometrically exact elliptical cone helices via mixed FEM. *Mechanics of Advanced Materials and Structures*. https://doi.org/10.1080/15376494.2020.1824048.
- **Aribas U.N.**, Ermiş M., Eratlı N., Omurtag M.H. (2019). The Static And Dynamic Analyses of Warping Included Composite Exact Conical Helix By Mixed Fem, *Composites Part B*, 160, 285-297. doi:10.1016/j.compositesb.2018.10.018.
- **Aribas U.N.**, Omurtag M.H. (2019). The static response of sandwich exact conical helices via MFEM, *Journal of Structural Engineering & Applied Mechanics*, 2(4), 153-163. doi:10.31462/jseam.2019.04153163.
- **Aribas U.N.**, Ermiş M., Kutlu A., Eratlı N., Omurtag M.H. (2019). Elastically Damped Transient Response of Axially FG Straight Beams, *International Journal of Theoretical and Applied Mechanics*, 4, 19-25. https://www.iaras.org/iaras/home/caijtam/elastically-damped-transient-response-of-axially-fg-straight-beams.
- **Aribas U.N.**, Ermiş M., Kutlu A., Eratlı N., Omurtag M.H. (2018). Forced Vibration Analysis of Warping Considered Curved Composite Beams Resting on Viscoelastic Foundation, *Gazi University Journal of Science*, 31(4), 1093-1105. http://dergipark.gov.tr/gujs/issue/40684/388317.

### Submitted for Publication:

- **Aribas U.N.**, Atalay M., Omurtag M.H. The Static Analysis of FG Elliptic Beams.
- **Aribas U.N.**, Ermis M., Omurtag M.H. The Warping Included Stresses of Axially Functionally Graded Exact Super-elliptical Beams via Mixed FEM.

### Writing Phase:

- **Aribas U.N.** The Free and Forced Vibrations of FG Elliptic Beams.

## NATIONAL JOURNAL PUBLICATIONS

- **Aribas U.N.** (2019). The Analysis of Normal and Shear Stresses on Composite Curved Beams Considering the Cross Sectional Warping via Mixed Finite Element Formulation (in Turkish), *Niğde Ömer Halisdemir Üniversitesi Mühendislik Bilimleri Dergisi*, 8(3), 16-29. doi:10.28948/ngumuh.619591.

## INTERNATIONAL REFEREED CONFERENCE PUBLICATIONS

- Ermis M., **Aribas U.N.**, Kutlu A., Eratli N., Omurtag M.H., "Forced Vibration Analysis of Axially FG Straight Beams by Mixed FEM", IV. Eurasian Conference on Civil and Environmental Engineering (IV. ECOCEE), Istanbul, Turkey, 17-18 June 2019.
- **Aribas U.N.**, Ermis M., Kutlu A., Eratlı N., Omurtag M.H., "Elastically Damped Transient Response of Axially FG Straight Beams", 12th International Conference on Finite

Differences, Finite Elements, Finite Volumes, Boundary Elements (F-AND-B 19), Rome, Italy, 24-28 May 2019.

- Ermis M., **Aribas U.N.**, Kutlu A., Eratli N., Omurtag M.H., "Free Vibration Analysis of Axially FG Straight Beams by Mixed FEM", International Civil Engineering and Architecture Conference 2019 (ICEARC'19), Trabzon, Turkey, 17-20 April 2019.
- **Aribas U.N.**, Ermis M., Kutlu A., Eratli N., Omurtag M.H., "The Warping Effect on the Structural Response of Sandwich Exact Helical Rods", International Civil Engineering and Architecture Conference 2019 (ICEARC'19), Trabzon, Turkey, 17-20 April 2019.
- Ermis M., Aribas U.N., Eratli N., Omurtag M.H., "Forced Vibration Analysis of a Planar Elliptical Beam", 16th European Conference on Earthquake Engineering (16ECEE), Thessaloniki, Greece, 18-21 June 2018.
- Ermis M., **Aribas U.N.**, Eratli N., Omurtag M.H., "Free Vibration Analysis of a Planar Elliptical Beam", 16th European Conference on Earthquake Engineering (16ECEE), Thessaloniki, Greece, 18-21 June 2018. (Poster).
- **Aribas U.N.**, Yılmaz M., Eratli N., Omurtag M.H., "Static and Free Vibration Analysis of Planar Curved Composite Beams on Elastic Foundation", 8th International Conference on Theoretical and Applied Mechanics (TAM '17), Brasov, Romania, 27-29 June 2017. *International Journal of Theoretical and Applied Mechanics,* **2**, 35-42.
- Ermis M., **Aribas U.N.**, Eratli N., Omurtag M.H., "Static and Free Vibration Analysis of Composite Straight Beams on the Pasternak Foundation", 10th International Conference on Finite Differences, Finite Elements, Finite Volumes, Boundary Elements (F-and-B '17), Barcelona, Spain, 10-12 May 2017, **12**, 113-122.
- **Aribas U.N.**, Eratli N., Omurtag M.H., "Free vibration analysis of moderately thick, sandwich, circular beams", World Congress on Engineering 2016, London, England, 29 June – 1 July 2016, 1127-1130.
- **Aribas U.N.**, Kutlu A., Omurtag M.H., "Static analysis of moderately thick, composite, circular rods via mixed FEM", World Congress on Engineering 2016, London, England, 29 June – 1 July 2016, 1022-1025.
- **Aribas U.N.**, Omurtag M.H., "Mixed FE Analysis of Viscoelastic Cylindrical Helixes", 2nd International Congress on Advances in Applied Physics and Materials Science (APMAS), Antalya, Turkey, 26-29 April 2012, 1476, 61-64.
- Kutlu A., **Aribas U.N.**, Karayigit H., Omurtag M.H., "Flexure of the Moderately Thick Elliptic Plates on Arbitrarily Orthotropic Elastic Foundation", Advances in Applied Mechanics and Modern Information Technology 2011, Baku, Azerbaijan, 22-23 September 2011, 210-214.

## NATIONAL REFEREED CONFERENCE PUBLICATIONS

- **Aribas U.N.**, Ermis M., Kutlu A., Eratli N., Omurtag M.H., "Warping Included Stress Distribution of Composite Curved Beams using Mixed Finite Element Method (in Turkish)", Nigde, Turkey, 2-6 September 2019.
- **Aribas U.N.**, Ermis M., Kutlu A., Eratli N., Omurtag M.H., "Dynamic Analysis of Warping Considered Curved Composite Beams Resting on Viscoelastic Foundation (in Turkish)", 20.National Mechanics Congress, Bursa, Turkey, 5-9 September 2017.
- **Aribas U.N.**, Yılmaz M., Omurtag M.H., "The Influence of Warping Considered Torsional

Rigidity of Curved Composite Beams on the Static and Dynamic Analyses (in Turkish)", 20.National Mechanics Congress, Bursa, Turkey, 5-9 September 2017.

- Eratli N., Calim F.F., **Aribas U.N.**, Omurtag M.H., "Finite element analysis of viscoelastic conical helixes for various parameters, (in Turkish)", 17. National Mechanics Congress, Elazığ, Turkey, 5-9 September 2011, 324-333.
- Kutlu A., **Aribas U.N.**, Karayigit H., Omurtag M.H., "Flexure of the Moderately Thick Elliptic Plates on Arbitrarily Orthotropic Elastic Foundation", 17. National Mechanics Congress, Elazığ, Turkey, 5-9 September 2011, 481-487.

## PROJECTS

- **TUBITAK 1001 (111M308):** "Değişken Kesitli ve Eksen Geometrisi Silindirik Olmayan Viskoelastik Helislerin Karışık Sonlu Eleman Yöntemi İle Analizi", 2011–2014.
- **ITU Scientific Research Office (40739):** "Ortotrop üç parametreli Pasternak zemine oturan iki ve üç boyutlu tabakalı kompozit çubukların zorlanmış titreşim analizi", 2017–2018.
- **ITU Scientific Research Office (3555):** "Silindirik ve Konik Yayların Viskoelastik Davranışının Sonlu Elemanlar İle Analizi", 2010–2012.

## AWARDS

- "Finite element analysis of viscoelastic conical helixes for various parameters" proceeding in 17. National Mechanics Congress awarded third prize in the field of "**Best Proceedings**", ITU (2011).

## FOREIGN LANGUAGE

English – YDS (87.5), December 2018

Russian – A1 (Certificates will be attached upon request)

## COMPUTER ABILITIES

- SAP2000 – Good
- STA4CAD – Good
- ETABS – Good
- SAFE – Good
- REVIT STRUCTURES – Moderate
- AUTOCAD – Good
- ANSYS – Good
- SOLIDWORKS – Good
- MICROSOFT OFFICE – Good
- FORTRAN – Good
- VISUAL STUDIO – Moderate
- MATLAB – Good
- MATHEMATICA – Good
- GRAPHER – Good
- COREL DESIGNER – Good
- ABAQUS – Moderate

## INTERNSHIPS – WORK EXPERIENCES

- **Assistant Professor Doctor**
  Istanbul Okan University – Tuzla, Turkey
  (18.02.2019 – ...)

- **Research Assistant**
  Istanbul Technical University – Maslak, Turkey
  (25.04.2017 – 04.02.2019)

- **Static Project Engineer**
  Endurans Yapı Mühendisliği – Kadikoy, Turkey – Head Office
  (03.08.2015 – 18.12.2015)

- **Static Project Engineer**
  Omega Konsept Proje – Fenerbahce, Turkey – Head Office
  (21.04.2014 – 14.07.2015)

- **Static Project Engineer**
  Taşyapı – Acibadem, Turkey – Head Office
  (09.09.2013 – 11.04.2014)

- **Static Project Engineer**
  Artyol Mühendislik, Kozyatagi, Turkey – Head Office
  (01.09.2012 – 01.06.2013)

- Modern Mühendislik, Kozyatagi, Turkey – Head Office, 25 workdays
  (13.07.2009 – 14.08.2009)

- Housing development administration of Turkey, Urban Regeneration Project – Workside, 45 workdays (21.07.2008 – 19.09.2008)

## REFERENCES

| | | |
|---|---|---|
| Prof. Dr. Mehmet Hakkı OMURTAG (IMU) | … | mhomurtag@medipol.edu.tr |
| Prof. Dr. Nihal ERATLI (ITU) | … | eratli@itu.edu.tr |
| Prof. Dr. Namık Kemal ÖZTORUN (IU) | … | kemal@istanbul.edu.tr |
| Asst. Prof. Dr. Akif KUTLU (ITU) | … | kutluak@itu.edu.tr |