# Assoc. Prof. Tarık KOÇAL

## **Personal Information**

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#### **International Researcher IDs**

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## **Education Information**

Doctorate, Yildiz Technical University, Makina Fakültesi, Makine Müh., Turkey 2012 - 2016

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Mekatronik Mühendsiliği Bölümü, Turkey 2010 - 2012

Undergraduate, Yildiz Technical University, Makina Fakültesi, Makine Mühendisliği, Turkey 2006 - 2009

## **Research Areas**

Mechanical Engineering, Machine Theory and Dynamics, Machine Dynamics, System Dynamics and Control, Mechatronics, Engineering and Technology

# **Academic Titles / Tasks**

Assistant Professor, Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Marine Engineering Operations, 2018 - Continues

Assistant Professor, Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Marine Engineering Operations, 2017 - 2018

Research Assistant PhD, Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Marine Engineering Operations, 2016 - 2017

Research Assistant, Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Marine Engineering Operations, 2010 - 2016

# Academic and Administrative Experience

Deputy Head of Department, Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Marine Engineering Operations, 2019 - 2020

Deputy Head of Department, Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Marine Engineering Operations, 2017 - 2019

## **Courses**

Basic Computer Science, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018

Engineering Mathematics, Postgraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018

Mühendislik Mekaniği, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018

Computer Aided Technical Drawing, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018

# **Advising Theses**

Koçal T., Haydarpaşa liman bölgesindeki gemi kaynaklı emisyonların incelenmesi ve hava kalitesi ölçüm sonuçlarının değerlendirilmesi, Postgraduate, M.AVCI(Student), 2020

# Published journal articles indexed by SCI, SSCI, and AHCI

I. The dynamical behavior of the moving viscoelastic plate in contact with viscous fluid with finite depth under action of time-harmonic forces

KOÇAL T.

OCEAN ENGINEERING, vol.215, 2020 (SCI-Expanded)

II. The influence of the rheological parameters on the dispersion of the flexural waves in a viscoelastic bi-layered hollow cylinder

Kocal T., AKBAROV S.

STRUCTURAL ENGINEERING AND MECHANICS, vol.71, no.5, pp.577-601, 2019 (SCI-Expanded)

III. The Influence of the Viscoelasticity on the Axisymmetric Wave Attenuation in a bi-Material Solid Cylinder

KOÇAL T., AKBAROV S.

ACTA PHYSICA POLONICA A, vol.134, no.1, pp.135-138, 2018 (SCI-Expanded)

IV. On the attenuation of the axisymmetric longitudinal waves propagating in the bi-layered hollow cylinder made of viscoelastic materials

Kocal T., AKBAROV S.

STRUCTURAL ENGINEERING AND MECHANICS, vol.61, no.1, pp.143-160, 2017 (SCI-Expanded)

V. On the dispersion of the axisymmetric longitudinal wave propagating in a bi-layered hollow cylinder made of viscoelastic materials

AKBAROV S., Kocal T., KEPCELER T.

INTERNATIONAL JOURNAL OF SOLIDS AND STRUCTURES, vol.100, pp.195-210, 2016 (SCI-Expanded)

VI. Dispersion of Axisymmetric Longitudinal Waves in A Bi-Material Compound Solid Cylinder Made of Viscoelastic Materials

AKBAROV S., Kocal T., KEPCELER T.

CMC-COMPUTERS MATERIALS & CONTINUA, vol.51, no.2, pp.105-143, 2016 (SCI-Expanded)

## Articles Published in Other Journals

I. Examination of the Operating Costs and Environmental Impact of Alternative Fuels Used in Ships Koçal T.

Journal of Transportation and Logistics, vol.5, no.2, pp.1-9, 2020 (Peer-Reviewed Journal)

II. Polimer-Viskoelastik Malzemeli Boru Hatlarındaki Eğilme Dalgalarının Dispersiyonu Koçal T.

Dokuz Eylül Üniversitesi Mühendislik Fakültesi Fen ve Mühendislik Dergisi, vol.21, no.62, pp.577-586, 2019 (Peer-Reviewed Journal)

III. Gemi İçindeki Nem ve Sıcaklık Değişiminin PID ile Kontrolü

Koçal T., Muğan A.

GMO Journal of Ship and Marine Technology, no.209, pp.46-56, 2017 (Peer-Reviewed Journal)

IV. Dispersion of Axisymmetric Longitudinal Waves in a Solid Cylinder Made of Viscoelastic Material Akbarov S., Koçal T., Kepceler T.

International Journal of Advances in Science, Engineering and Technology, vol.4, no.2, pp.70-75, 2016 (Peer-Reviewed Journal)

V. MULTI ZONES HVAC SYSTEMS' CONTROL IN SHIPS WITH SIMULINK APPLICATION

KOÇAL T., MUĞAN A., YURTSEVEN A.

JOURNAL OF MARITIME TRANSPORT AND ENGINEERING, vol.2, no.1, pp.13-20, 2013 (Peer-Reviewed Journal)

VI. WELDING TECHNOLOGIES IN SHIPBUILDING INDUSTRY

Turan E., Koçal T., Ünlügençoğlu K.

TOJSAT: The Online Journal of Science and Technology, vol.1, no.4, pp.24-30, 2011 (Peer-Reviewed Journal)

# Refereed Congress / Symposium Publications in Proceedings

I. Design of River Mouth Floating Trash Trap Systems for Istanbul Golden Horn Area Çevik H., KOÇAL T.

II International Ankara Conference of Scientific Research, 6 - 08 March 2020, pp.287-288

II. Investment Analysis Investigation of Solar Power Plant in Nevşehir Hamzalı District Koçal T.

International Congress of Academic Research, Bolu, Turkey, 17 - 19 February 2020, pp.139-140

III. Estimation of Shipping Emissions; a case study for the Region of Haydarpaşa Port in Istanbul Avcı M., Koçal T., Ünlügençoğlu K.

4th International Energy & Engineering Congress, Gaziantep, Turkey, 24 - 25 October 2019, pp.1101-1102

IV. Applying Fuzzy Analytic Hierarchy Process Approach for a Ship Type Selection DEMİREL H., KOÇAL T., BALİN A.

I. Uluslararası GAP Matematik - Mühendislik Fen ve Sağlık Bilimleri Kongresi, Şanlıurfa, Turkey, 4 - 07 October 2018, pp.327-334

V. The influence of the viscoelasticity on the axisymmetric wave attenuation in a bi-material solid cylinder

Koçal T., Akbarov S., Aydın Z.

7th International Advances in Applied Physics and Materials Science Congress, Muğla, Turkey, 22 - 26 April 2017, pp.69

VI. DISPERSION OF AXISYMMETRIC LONGITUDINAL WAVES IN A SOLID CYLINDER MADE OF VISCOELASTIC MATERIAL

Akbarov S., Kocal T., Kepceler T.

61st The IIER International Conference, Osaka, Japan, 16th February 2016, Osaka, Japan, 01 February 2016, pp.24-29

VII. Viskoelastik Malzemeden Yapilmiş İki Katlı İçi Boş Dairesel Silindirde Eksenel Simetrik Boyuna Dalgaların Dispersiyonu

Akbarov S., Koçal T., Kepceler T.

XIX. Ulusal Mekanik Kongresi, Trabzon, Turkey, 24 - 28 August 2015, vol.1, pp.1-12

VIII. Torsional Wave Propagation in a Bi-Layered Hollow Cylinder Made of Viscoelastic Material AKBAROV S., KEPCELER T., KOCAL T.

XVIII International Conference on Mechanics of Composite Materials, Riga, Latvia, 2 - 06 June 2014, pp.22

 $IX. \quad \textbf{Multi Zones HVAC Systems' Control in Ships with Simulink Application} \\$ 

KOÇAL T., MUGAN A., YURTSEVEN A.

15th International Conference Maritime Transport and Infrastructure, Riga, Latvia, 25 - 26 April 2013, pp.35

X. Alternative Automation Technologies To Reduce Waste And Pollutants Of Processes In Shipyards

Çelebi U. B., Yıldız B., Koçal T., Turan E.

ISTEC 2010, Gazimagusa, Cyprus (Kktc), 27 - 29 October 2010, pp.77-81

## XI. Welding Technologies in Shipbuilding Industry

Turan E., Koçal T., Ünlügençoğlu K.

International Science and Technology Conference (ISTEC 2010), Famagusta, Turkish Republic of Northern Cyprus, October 27-29, 2010, Gazimagusa, Cyprus (Kktc), 27 - 29 October 2010, pp.875-881

# XII. Yıldız Technical University Marine Engineering Operations Department and Its Position in Maritime Education of Turkey

Ünlügençoğlu K., Yıldız B., Koçal T.

International Conference on New Horizons in Education-2010 (INTE 2010), Famagusta, Turkish Republic of Northern Cyprus, June 23-25, 2010, Gazimagusa, Cyprus (Kktc), 23 - 25 June 2010, pp.950-956

## XIII. Mechatronics Engineering Education and Its Importance of Turkey

Koçal T., Yıldız B., Ünlügençoğlu K.

International Conference on New Horizons in Education-2010 (INTE 2010), Famagusta, Turkish Republic of Northern Cyprus, June 23-25, 2010, Gazimagusa, Cyprus (Kktc), 23 - 25 June 2010, pp.532-536

# Scientific Refereeing

Dokuz Eylül Üniversitesi Mühendislik Fakültesi Fen ve Mühendislik Dergisi, National Scientific Refreed Journal, October 2018

Structural Engineering and Mechanics, An International Journal, SCI Journal, June 2018

## **Metrics**

Publication: 25 Citation (WoS): 24 Citation (Scopus): 22 H-Index (WoS): 4 H-Index (Scopus): 4