

## Prof. Abdul Hayır

### Personal Information

**Fax Phone:** [+90 212 285 6587](tel:+902122856587)

**Office Phone:** [+90 212 285 3759](tel:+902122853759)

**Email:** [ahayir@itu.edu.tr](mailto:ahayir@itu.edu.tr)

**Other Email:** [abdul.hayir41@itu.edu.tr](mailto:abdul.hayir41@itu.edu.tr)

**Web:** <https://avesis.itu.edu.tr/ahayir>

**Address:** İTÜ İnşaat Fakültesi İnşaat Mühendisliği Bölümü, Maslak İstanbul

### Education Information

Doctorate, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, Turkey 1994 - 1998

Postgraduate, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, Turkey 1991 - 1994

Undergraduate, Yıldız Teknik Üniversitesi, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, Turkey 1987 - 1991

### Foreign Languages

English

### Dissertations

Doctorate, Boşluklu Dalga Klavuzunda SH dalgası Saçılımı, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, 1998

Postgraduate, Yad-Türdeş Dalga Klavuzunda Harmonik Dalgalar, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, 1994

### Research Areas

Mechanics of Solid Bodies, Civil Engineering, Hydromechanics, Mechanical, Structural Mechanics, Building Dynamics, Structure, Structural Engineering, Earthquake Engineering, Engineering and Technology

### Academic Titles / Tasks

Professor, İstanbul Technical University, İnşaat, İnşaat Mühendisliği, 2010 - Continues

### Academic and Administrative Experience

İstanbul Teknik Üniversitesi, Deprem Mühendisliği Ve Afet Yönetimi Enstitüsü, 2015 - 2016

İstanbul Teknik Üniversitesi, Deprem Mühendisliği Ve Afet Yönetimi Enstitüsü, 2012 - 2015

### Courses

Bilimsel Araştırma, Etik ve Seminer, Doctorate, 2020 - 2021

Katlarda Dalga Yayılımı, Doctorate, 2017 - 2018

## **Jury Memberships**

Associate Professor Exam, YÖK Doçentlik Sınavı, Doçentlik Sınavı, January, 2015

Associate Professor Exam, Doçentlik Sınavı, Doçentlik Sınavı, January, 2011

## **Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes**

- I. **Intensity of scattered wave energy in the slab having a discontinuity**  
Hayir A.  
WAVES IN RANDOM AND COMPLEX MEDIA, 2021 (Journal Indexed in SCI)
- II. **Wave dispersion study for tsunami propagation in the Sea of Marmara**  
Kilinc I., Hayir A., Cıgızoğlu H. K.  
COASTAL ENGINEERING, vol.56, no.9, pp.982-991, 2009 (Journal Indexed in SCI)
- III. **Scenarios of tsunami amplitudes in the north eastern coast of Sea of Marmara generated by submarine mass failure**  
Hayir A., Seseogulları B., Kilinc I., Erturk A., Cıgızoğlu H. K., Kabdaşlı M. S., Yağcı O., Day K.  
COASTAL ENGINEERING, vol.55, no.5, pp.333-356, 2008 (Journal Indexed in SCI)
- IV. **The near-field tsunami amplitudes caused by submarine landslides and slumps spreading in two orthogonal directions**  
Hayir A.  
OCEAN ENGINEERING, vol.33, pp.654-664, 2006 (Journal Indexed in SCI)
- V. **A note on a plate having a circular cavity excited by plane harmonic SH waves**  
Hayir A., Bakirtas I.  
JOURNAL OF SOUND AND VIBRATION, vol.271, pp.241-255, 2004 (Journal Indexed in SCI)
- VI. **Ocean depth effects on tsunami amplitudes used in source models in linearized shallow-water wave theory**  
Hayir A.  
OCEAN ENGINEERING, vol.31, pp.353-361, 2004 (Journal Indexed in SCI)
- VII. **The effects of variable speeds of a submarine block slide on near-field tsunami amplitudes**  
Hayir A.  
OCEAN ENGINEERING, vol.30, no.18, pp.2329-2342, 2003 (Journal Indexed in SCI)
- VIII. **A note on tsunami caused by submarine slides and slumps spreading in one dimension with nonuniform displacement amplitudes**  
Trifunac M., Hayir A., Todorovska M.  
SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, vol.23, no.3, pp.223-234, 2003 (Journal Indexed in SCI)
- IX. **Was Grand Banks event of 1929 a slump spreading in two directions?**  
Trifunac M., Hayir A., Todorovska M.  
SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, vol.22, no.5, pp.349-360, 2002 (Journal Indexed in SCI)
- X. **A note on the effects of nonuniform spreading velocity of submarine slumps and slides on the near-field tsunami amplitudes**  
TRIFUNAC M., Hayir A., TODOROVSKA M.  
SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, vol.22, no.3, pp.167-180, 2002 (Journal Indexed in SCI)
- XI. **A note on tsunami amplitudes above submarine slides and slumps**  
Todorovska M., Hayir A., Trifunac M.  
SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, vol.22, no.2, pp.129-141, 2002 (Journal Indexed in SCI)
- XII. **Antiplane response of a dike with flexible soil-structure interface to incident SH waves**

Hayir A., Todorovska M., Trifunac M.

SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, vol.21, no.7, pp.603-613, 2001 (Journal Indexed in SCI)

**XIII. Antiplane response of a dike on flexible embedded foundation to incident SH-waves**

Todorovska M., Hayir A., Trifunac M.

SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, vol.21, no.7, pp.593-601, 2001 (Journal Indexed in SCI)

**XIV. Scattering of SH waves by fixed rigid nearly circular cylinder**

Hayir A., BAKIRTAŞ İ.

Mathematical&Computational Applications, vol.0, no.6, pp.37-0, 2001 (Journal Indexed in SCI Expanded)

## Articles Published in Other Journals

**I. Soil Structure Interaction for a Wedge Shaped Structure Supported by a Flexible Embedded Foundation for Incident SH**

Hayir A.

The Turkish Journal of Engineering & Environmental Sciences, vol.29, pp.1-6, 2005 (Refereed Journals of Other Institutions)

## Supported Projects

Hayir A., Project Supported by Higher Education Institutions, Kıyıya Yakın Bölgede Deniz Tabanında Bulunan Heyelanının Oluşturacağı Tsunamilerin Kıyıya Varış Süresi için Parametrik Denklemler, 2011 - 2018

Hayir A., Project Supported by Higher Education Institutions, winkler zeminine oturan elastic kirişin dinamik davranışı, 2010 - 2018

Hayir A., Project Supported by Higher Education Institutions, ELASTİK ZEMİNE OTURAN UZUN KANALIN SH DALGALARI İLE ZORLANMASI DURUMUNDA DİNAMİK DAVRANIŞI, 2009 - 2018

Hayir A., Project Supported by Higher Education Institutions, Tsunami Propagation Around and Inside Tuzla Harbor Constructed in the North -East Sea of Marmara in Turkey, 2008 - 2018

Hayir A., Project Supported by Higher Education Institutions, Güç Zemin Hareketi Esnasında İki Yapının Etkileşimi, 2007 - 2018

## Activities in Scientific Journals

Journal of Computational Engineering, Publication Committee Member, 2008 - Continues

International Journal of Mechanics Solids IJM S , Publication Committee Member, 2002 - 2015

## Memberships / Tasks in Scientific Organizations

ASCE ELASTICITY COMMITTEE, Associate Member, 2019 - Continues, United States Of America

Teorik ve Uygulamalı Türk Milli Komitesi, Member, 2005 - Continues

## Scientific Refereeing

Soil Dynamics and Earthquake Engineering, SCI Journal, October 2017

Soil Dynamics and Earthquake Engineering, SCI Journal, October 2017

Soil Dynamics and Earthquake Engineering, SCI Journal, July 2017

Applied Mathematical Modelling, SCI Journal, June 2017

Soil Dynamics and Earthquake Engineering, SCI Journal, June 2017

Soil Dynamics and Earthquake Engineering, SCI Journal, May 2017  
Soil Dynamics and Earthquake Engineering, SCI Journal, February 2017  
Composite Structures, SCI Journal, January 2017  
Soil Dynamics and Earthquake Engineering, SCI Journal, May 2016  
Soil Dynamics and Earthquake Engineering, SCI Journal, April 2016  
Soil Dynamics and Earthquake Engineering, SCI Journal, March 2016  
Soil Dynamics and Earthquake Engineering, SCI Journal, February 2016  
Soil Dynamics and Earthquake Engineering, SCI Journal, January 2016  
Journal of Thermal Engineering, Other Indexed Journal, January 2016  
Bulletin of the Seismological Society of America, SCI Journal, May 2015  
Acta Mechanica, SCI Journal, April 2015  
Ocean Engineering, SCI Journal, February 2015  
Soil Dynamic and Earthquake Engineering, SCI Journal, January 2015  
Soil Dynamics and Earthquake Engineering, SCI Journal, May 2014  
International Journal of Solid and Structures, SCI Journal, January 2014  
TUBITAK Project, April 2006  
Moment Solution Wedge Shape Half Space, Other Indexed Journal, December 2003

## **Scientific Consultations**

EXİMBANK, Scientific Consultancy, Istanbul Technical University, İnşaat, İnşaat Mühendisliği, Turkey, 2020 - 2020

## **Citations**

Total Citations (WOS):189

h-index (WOS):8

## **Scholarships**

Doktora Sonrası Araştırma Bursu, University, 2000 - Continues

NATO-B1, NATO, 2000 - Continues

Lisans Başarı Bursu (Eylül 1988-Haziran 1991), Foundation, 1988 - Continues

## **Non Academic Experience**

Public Corporation, Istanbul Technical University, İnşaat Mühendisliği