

## Prof. Abdul Hayir

### Personal Information

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### International Researcher IDs

ORCID: 0000-0001-7498-4629

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### Education Information

Doctorate, Istanbul Technical University, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, Turkey 1994 - 1998

Postgraduate, Istanbul Technical University, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, Turkey 1991 - 1994

Undergraduate, Yıldız Technical University, Faculty Of Civil Engineering, Civil Engineering Department, 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, Istanbul Technical University, İnşaat, İnşaat Mühendisliği, 2010 - Continues

### Academic and Administrative Experience

AzMIU, Istanbul Technical University, İnşaat, İnşaat Mühendisliği, 2023 - Continues  
Djibouti, Istanbul Technical University, İnşaat, İnşaat Mühendisliği, 2023 - Continues  
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  
Katılarda 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

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

- I. **Intensity of scattered wave energy in the slab having a discontinuity**  
Hayir A.  
WAVES IN RANDOM AND COMPLEX MEDIA, 2021 (SCI-Expanded)
- 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 (SCI-Expanded)
- III. **Scenarios of tsunami amplitudes in the north eastern coast of Sea of Marmara generated by submarine mass failure**  
Hayir A., Seseogulları B., Kılinc I., Erturk A., Cıgızoğlu H. K., Kabdaşlı M. S., Yağcı O., Day K.  
COASTAL ENGINEERING, vol.55, no.5, pp.333-356, 2008 (SCI-Expanded)
- 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 (SCI-Expanded)
- 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 (SCI-Expanded)
- 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 (SCI-Expanded)
- 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 (SCI-Expanded)
- 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 (SCI-Expanded)
- 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 (SCI-Expanded)

- 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 (SCI-Expanded)
- 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 (SCI-Expanded)
- 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 (SCI-Expanded)
- 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 (SCI-Expanded)
- 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 (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 (Peer-Reviewed Journal)

## 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  
Soil Dynamics and Earthquake Engineering, SCI Journal, June 2017  
Applied Mathematical Modelling, 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

## Metrics

Publication: 53  
Citation (WoS): 194  
Citation (Scopus): 263  
H-Index (WoS): 8  
H-Index (Scopus): 9

## 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  
İSTANBUL TEKNİK UNIVERSİTESİ  
İSTANBUL TEKNİK UNIVERSİTESİ

ISTANBUL TEKNİK UNIVERSİTESİ  
UNIVERSITY OF SOUTHERN CALIFORNIA  
İSTANBUL TEKNİK ÜNİVERSİTESİ  
İSTANBUL TEKNİK ÜNİVERSİTESİ