

## Prof. KAĞAN TUNCAY

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**Birthyear:** 1969

**Place of birth:**

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## Education Information

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- Doctorate, Texas A&M University, Civil Engineering, United States Of America 2010 - 2014
- Post Graduate, Middle East Technical University, Faculty of Engineering, Department of Engineering Sciences, Turkey 1991 - 1993
- Under Graduate, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, Turkey 1987 - 1991

## Dissertations

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- Doctorate, Wave propagation in single- and double-porosity deformable porous media saturated by multiphase fluids, Texas A&M University, Civil Engineering, 1995
- Post Graduate, Improved transmitting boundaries by the use of the residual variable method, Orta Doğu Teknik Üniversitesi, Faculty of Engineering, Department of Engineering Sciences, 1993

## Research Areas

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Mechanical, Structure

## Academic Titles / Tasks

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- Professor, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2014 - Continues
- Professor, Atılım Üniversitesi, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2013 - 2014
- Professor, Middle East Technical University, Odtu Kuzey Kıbrıs Kampüsü (Kktc-Güzelyurt), İnşaat Mühendisliği Bölümü, 2009 - 2013
- Associate Professor, Middle East Technical University, Odtu Kuzey Kıbrıs Kampüsü (Kktc-Güzelyurt), İnşaat Mühendisliği Bölümü, 2007 - 2009
- Associate Professor, Indiana University Bloomington, Arts And Sciences, Chemistry, 2002 - 2007
- Assistant Professor, Universiteit Utrecht, Earth Sciences, Hydrogeology, 2002 - 2002
- Assistant Professor, Indiana University Bloomington, Arts And Sciences, Chemistry, 2001 - 2001
- Research Assistant, Indiana University Bloomington, Arts And Sciences, Chemistry, 1996 - 2001
- Assistant Professor, İzmir Yüksek Teknoloji Enstitüsü, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 1995 - 1996
- Research Assistant, Texas A&M University, Engineering, Civil Engineering, 1993 - 1995
- Research Assistant, Middle East Technical University, Faculty of Engineering, Department of Engineering Sciences, 1992 - 1993

## Professional Experience

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- Head of Department, Middle East Technical University, Odtu Kuzey Kıbrıs Kampüsü (Kktc-Güzelyurt), İnşaat Mühendisliği Bölümü, 2007 - 2009

## Advising Theses

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- TUNCAY K., TÜYDEŞ YAMAN H., DETECTING QUEUE LENGTH ON URBAN ARTERIALS USING FLOATING CAR DATA (FCD), Doctorate, O. ALTINTAŞI(Student), 2018
- TUNCAY K., Explicit nonlinear analysis for quasi-static behavior of frame structures with pid control and mass scaling, Post Graduate, K. KOCAMAZ(Student), 2018
- TUNCAY K., BİNİCİ B., Overlapping lattice modeling for concrete fracture simulations using sequentially linear analysis, Post Graduate, B. BESTAMİ(Student), 2017

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

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- **Simulation of the in-plane structural behavior of unreinforced masonry walls and buildings using DEM**  
Pulatsu B., Erdogmus E., Lourenço P. B., Lemos J. V., TUNCAY K.  
Structures, vol.27, pp.2274-2287, 2020 (Journal Indexed in SCI)
- **Transmission dynamics of Covid-19 in Italy, Germany and Turkey considering social distancing, testing and quarantine**  
GÜL S., TUNCAY K., BİNİCİ B., AYDIN B. B.  
JOURNAL OF INFECTION IN DEVELOPING COUNTRIES, vol.14, pp.713-720, 2020 (Journal Indexed in SCI)
- **Numerical modeling of the tension stiffening in reinforced concrete members via discontinuum models**  
Pulatsu B., Erdogmus E., Lourenco P. B., Lemos J., TUNCAY K.  
COMPUTATIONAL PARTICLE MECHANICS, 2020 (Journal Indexed in SCI)
- **An approximate procedure for estimating the member demands in mid-rise reinforced concrete buildings**  
Akpinar U., BİNİCİ B., YAKUT A., TUNCAY K.  
Bulletin of Earthquake Engineering, 2020 (Journal Indexed in SCI)
- **Quality of floating car data (FCD) as a surrogate measure for urban arterial speed**  
Altintasi O., Tüydeş Yaman H., Tuncay K.  
CANADIAN JOURNAL OF CIVIL ENGINEERING, vol.46, pp.1187-1198, 2019 (Journal Indexed in SCI)
- **Simulation of Reinforced Concrete Member Response Using Lattice Model**  
Aydın B. B., Tuncay K., Binici B.  
JOURNAL OF STRUCTURAL ENGINEERING, vol.145, 2019 (Journal Indexed in SCI)
- **Overlapping Lattice Modeling for concrete fracture simulations using sequentially linear analysis**  
Aydın B. B., Tuncay K., Binici B.  
STRUCTURAL CONCRETE, vol.19, pp.568-581, 2018 (Journal Indexed in SCI)
- **Near-Optimal Design of Scalable Energy Harvester for Underwater Pipeline Monitoring Applications With Consideration of Impact to Pipeline Performance**  
Qureshi F. U., Muhtaroglu A., TUNCAY K.  
IEEE SENSORS JOURNAL, vol.17, pp.1981-1991, 2017 (Journal Indexed in SCI)
- **Strength of various sands in triaxial and cyclic direct shear tests**  
ÇABALAR A. F., Dulundu K., TUNCAY K.

- ENGINEERING GEOLOGY, vol.156, pp.92-102, 2013 (Journal Indexed in SCI)  
**Field measurements and modeling of groundwater flow and biogeochemistry at Moses Hammock, a backbarrier island on the Georgia coast**  
Porubsky W. P., Joye S. B., Moore W. S., TUNCAY K., Meile C.
- BIOGEOCHEMISTRY, vol.104, pp.69-90, 2011 (Journal Indexed in SCI)  
**Modeling biogeochemical dynamics in porous media: Practical considerations of pore scale variability, reaction networks, and microbial population dynamics in a sandy aquifer**  
King E. L., TUNCAY K., Ortoleva P., Meile C.
- JOURNAL OF CONTAMINANT HYDROLOGY, vol.112, pp.130-140, 2010 (Journal Indexed in SCI)  
**In Silico Geobacter sulfurreducens Metabolism and Its Representation in Reactive Transport Models**  
King E. L., TUNCAY K., Ortoleva P., Meile C.
- APPLIED AND ENVIRONMENTAL MICROBIOLOGY, vol.75, pp.83-92, 2009 (Journal Indexed in SCI)  
**Flow and nutrient dynamics in a subterranean estuary (Waquoit Bay, MA, USA): Field data and reactive transport modeling**  
Spiteri C., Slomp C. P., Charette M. A., TUNCAY K., Meile C.
- GEOCHIMICA ET COSMOCHIMICA ACTA, vol.72, pp.3398-3412, 2008 (Journal Indexed in SCI)  
**Modeling biogeochemical processes in subterranean estuaries: Effect of flow dynamics and redox conditions on submarine groundwater discharge of nutrients**  
Spiteri C., Slomp C. P., TUNCAY K., Meile C.
- WATER RESOURCES RESEARCH, vol.44, 2008 (Journal Indexed in SCI)  
**Chromosome segregation in Escherichia coli division: A free energy-driven string model**  
Fan J., Tuncay K., Ortoleva P. J.
- COMPUTATIONAL BIOLOGY AND CHEMISTRY, vol.31, pp.257-264, 2007 (Journal Indexed in SCI)  
**Closure to "landfill settlement with decomposition and gas generation" by Ertan Durmusoglu, M. Yavuz Corapcioglu, and Kagan Tuncay**  
Durmusoglu E., Corapcioglu M. Y., Tuncay K.
- JOURNAL OF ENVIRONMENTAL ENGINEERING-ASCE, vol.133, pp.785, 2007 (Journal Indexed in SCI)  
**Cancer onset and progression: A genome-wide, nonlinear dynamical systems perspective on onconetworks**  
Qu K., Haidar A. A., Fan J., Ensman L., Tuncay K., Jolly M., Ortoleva P.
- JOURNAL OF THEORETICAL BIOLOGY, vol.246, pp.234-244, 2007 (Journal Indexed in SCI)  
**Transcriptional regulatory network discovery via multiple method integration: application to e. coli K12**  
Sun J., Tuncay K., Haidar A. A., Ensman L., Stanley F., Treliński M., Ortoleva P.
- ALGORITHMS FOR MOLECULAR BIOLOGY, vol.2, 2007 (Journal Indexed in SCI)  
**Transcriptional regulatory network refinement and quantification through kinetic modeling, gene expression microarray data and information theory**  
Sayyed-Ahmad A., Tuncay K., Ortoleva P. J.
- BMC BIOINFORMATICS, vol.8, 2007 (Journal Indexed in SCI)  
**Time domain Gauss-Newton seismic waveform inversion in elastic media**  
Sheen D., Tuncay K., Baag C., Ortoleva P. J.
- GEOPHYSICAL JOURNAL INTERNATIONAL, vol.167, pp.1373-1384, 2006 (Journal Indexed in SCI)  
**Parallel implementation of a velocity-stress staggered-grid finite-difference method for 2-D poroelastic wave propagation**  
Sheen D., Tuncay K., Baag C., Ortoleva P. J.
- COMPUTERS & GEOSCIENCES, vol.32, pp.1182-1191, 2006 (Journal Indexed in SCI)  
**Modeling of settlement in saturated and unsaturated municipal landfills**  
Durmusoglu E., Corapcioglu M., Tuncay K.
- International Journal of Geomechanics, vol.6, pp.269-278, 2006 (Journal Indexed in SCI)  
**GCLgrid: A three-dimensional geographical curvilinear grid library for computational seismology**  
Fan C., Pavlis G., Tuncay K.

- COMPUTERS & GEOSCIENCES, vol.32, pp.371-381, 2006 (Journal Indexed in SCI)
  - **Scale dependence of reaction rates in porous media**  
Meile C., Tuncay K.
- ADVANCES IN WATER RESOURCES, vol.29, pp.62-71, 2006 (Journal Indexed in SCI)
  - **Landfill settlement with decomposition and gas generation**  
Durmusoglu E., Corapcioglu M., Tuncay K.
- JOURNAL OF ENVIRONMENTAL ENGINEERING, vol.131, pp.1311-1321, 2005 (Journal Indexed in SCI)
  - **Solute-specific pore water irrigation: Implications for chemical cycling in early diagenesis**  
Meile C., Berg P., Van Cappellen P., Tuncay K.
- JOURNAL OF MARINE RESEARCH, vol.63, pp.601-621, 2005 (Journal Indexed in SCI)
  - **Efficient solution technique for solving the Poisson-Boltzmann equation**  
Sayyed-Ahmad A., Tuncay K., Ortoleva P.
- JOURNAL OF COMPUTATIONAL CHEMISTRY, vol.25, pp.1068-1074, 2004 (Journal Indexed in SCI)
  - **Quantitative basin modeling: present state and future developments towards predictability**  
Tuncay K., Ortoleva P.
- GEOFLUIDS, vol.4, pp.23-39, 2004 (Journal Indexed in SCI)
  - **Classical density functional theory of orientational order at interfaces: Application to water**  
Jaqaman K., Tuncay K., Ortoleva P.
- JOURNAL OF CHEMICAL PHYSICS, vol.120, pp.926-938, 2004 (Journal Indexed in SCI)
  - **Estimating tectonic history through basin simulation-enhanced seismic inversion: geoinformatics for sedimentary basins**  
Tandon K., Tuncay K., Hubbard K., Comer J., Ortoleva P.
- GEOPHYSICAL JOURNAL INTERNATIONAL, vol.156, pp.129-139, 2004 (Journal Indexed in SCI)
  - **Toward automated cell model development through information theory**  
Sayyed-Ahmad A., Tuncay K., Ortoleva P.
- JOURNAL OF PHYSICAL CHEMISTRY A, vol.107, pp.10554-10565, 2003 (Journal Indexed in SCI)
  - **Interplay of gouge, fluid pressure and porosity in fault zones**  
Tuncay K., Ozkan G., Ortoleva P.
- JOURNAL OF GEOCHEMICAL EXPLORATION, pp.191-195, 2003 (Journal Indexed in SCI)
  - **Explicit representation of spatial heterogeneity in reactive transport models: application to bioirrigated sediments**  
Meile C., Tuncay K., Van Cappellen P.
- JOURNAL OF GEOCHEMICAL EXPLORATION, pp.231-234, 2003 (Journal Indexed in SCI)
  - **The Karyote® Physico-Chemical Genomic, Proteomic, Metabolic Cell Modeling System**  
Ortoleva P., Berry E., Brun Y., Fan J., Fontus M., Hubbard K., Jaqaman K., Jarymowycz L., Navid A., Sayyed-Ahmad A., et al.
- OMICS A Journal of Integrative Biology, vol.7, pp.269-283, 2003 (Journal Indexed in SCI Expanded)
  - **Pits, outgrowths, and inclusions as coated grain kinetic instabilities**  
Tuncay K., Puckett J., Al-Shaeib Z., Ortoleva P.
- GEOCHIMICA ET COSMOCHIMICA ACTA, vol.66, pp.3901-3912, 2002 (Journal Indexed in SCI)
  - **Failure, memory, and cyclic fault movement**  
Tuncay K., Khalil A., Ortoleva P.
- BULLETIN OF THE SEISMOLOGICAL SOCIETY OF AMERICA, vol.91, pp.538-552, 2001 (Journal Indexed in SCI)
  - **Salt tectonics as a self-organizing process: A reaction, transport, and mechanics model**  
Tuncay K., Ortoleva P.
- JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH, vol.106, pp.803-817, 2001 (Journal Indexed in SCI)
  - **Sedimentary basin deformation: an incremental stress approach**  
Tuncay K., Park A., Ortoleva P.
- TECTONOPHYSICS, vol.323, pp.77-104, 2000 (Journal Indexed in SCI)
  - **A forward model of three-dimensional fracture orientation and characteristics**  
Tuncay K., Park A., Ortoleva P.

- JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH, vol.105, pp.16719-16735, 2000 (Journal Indexed in SCI)  
**A reaction-transport-mechanical approach to modeling the interrelationships among gas generation, overpressuring, and fracturing: Implications for the Upper Cretaceous natural gas reservoirs of the Piceance basin, Colorado**  
Payne D., Tuncay K., Park A., Comer J., Ortoleva P.  
AAPG BULLETIN-AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS, vol.84, pp.545-565, 2000 (Journal Indexed in SCI)
- **Electrophoretic repair of impoundment leaks: Analysis and verification with experimental data**  
Corapcioglu M., Kambham K., Tuncay K.  
ENVIRONMENTAL SCIENCE & TECHNOLOGY, vol.32, pp.3778-3784, 1998 (Journal Indexed in SCI)
- **Self-weight subsidence of saturated soft porous media**  
Tuncay K., Kambham K., Corapcioglu M.  
JOURNAL OF ENGINEERING MECHANICS-ASCE, vol.124, pp.630-638, 1998 (Journal Indexed in SCI)
- **Wave propagation in poroelastic media saturated by two fluids**  
Tuncay K., Corapcioglu M.  
JOURNAL OF APPLIED MECHANICS-TRANSACTIONS OF THE ASME, vol.64, pp.313-320, 1997 (Journal Indexed in SCI)
- **Dynamics of submerged shells of arbitrary geometry using improved transmitting boundaries**  
Akkas N., Tuncay K.  
COMPUTERS & STRUCTURES, vol.63, pp.827-835, 1997 (Journal Indexed in SCI)
- **Body waves in poroelastic media saturated by two immiscible fluids**  
Tuncay K., Corapcioglu M.  
JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH, vol.101, pp.25149-25159, 1996 (Journal Indexed in SCI)
- **Consolidation of elastic porous media saturated by two immiscible fluids**  
Tuncay K., Corapcioglu M.  
JOURNAL OF ENGINEERING MECHANICS, vol.122, pp.1077-1085, 1996 (Journal Indexed in SCI)
- **Wave propagation in fractured porous media**  
Tuncay K., Corapcioglu M.  
TRANSPORT IN POROUS MEDIA, vol.23, pp.237-258, 1996 (Journal Indexed in SCI)
- **Body waves in fractured porous media saturated by two immiscible Newtonian fluids**  
Tuncay K., Corapcioglu M.  
TRANSPORT IN POROUS MEDIA, vol.23, pp.259-273, 1996 (Journal Indexed in SCI)
- **Oil mound spreading and migration with ambient groundwater flow in coarse porous media**  
Corapcioglu M., Tuncay K., Ceylan B.  
WATER RESOURCES RESEARCH, vol.32, pp.1299-1308, 1996 (Journal Indexed in SCI)
- **Effective stress principle for saturated fractured porous media**  
Tuncay K., Corapcioglu M.  
WATER RESOURCES RESEARCH, vol.31, pp.3103-3106, 1995 (Journal Indexed in SCI)
- **A SEMIANALYTICAL ANALYSIS OF COMPRESSIBLE ELECTROPHORETIC CAKE FORMATION**  
KAMBHAM K., TUNCAY K., CORAPCIOGLU M.  
WATER RESOURCES RESEARCH, vol.31, pp.1421-1428, 1995 (Journal Indexed in SCI)
- **ANALYTICAL EXPRESSIONS TO ESTIMATE THE FREE PRODUCT RECOVERY IN OIL-CONTAMINATED AQUIFERS**  
CORAPCIOGLU M., TUNCAY K., LINGAM R., KAMBHAM K.  
WATER RESOURCES RESEARCH, vol.30, pp.3301-3311, 1994 (Journal Indexed in SCI)

## Articles Published in Other Journals

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- **Transcriptional regulatory networks via gene ontology and expression data**

- Tuncay K., Enzman L., Sun J., Haidar A. A., Stanley F., Trelinski M., Ortoleva P.  
In Silico Biology, vol.7, pp.21-34, 2007 (Refereed Journals of Other Institutions)
- Efficient finite difference calculation of partial derivative seismic wavefield using reciprocity and convolution**
- Sheen D., Tuncay K., Baag C., Ortoleva P. J.  
SEG Technical Program Expanded Abstracts, vol.23, pp.1850-1853, 2004 (Refereed Journals of Other Institutions)
- Wave propagation in poroelastic media: A velocity-stress staggered-grid finite-difference method with perfectly matched layers**
- Sheen D., Tuncay K., Baag C., Ortoleva P. J.  
SEG Technical Program Expanded Abstracts, vol.22, pp.2295-2298, 2003 (Refereed Journals of Other Institutions)
- Chapter 5 Propagation of waves in porous media**
- Corapcioglu M. Y., Tuncay K.  
Advances in Porous Media, vol.3, pp.361-440, 1996 (Refereed Journals of Other Institutions)

## Books & Book Chapters

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- Monitoring Urban Traffic from Floating Car Data (FCD): Using Speed or a Los-Based State Measure**
- ALTINTAŞI O., TÜYDEŞ YAMAN H., TUNCAY K.  
in: Directions of Development of Transport Networks and Traffic Engineering, Macioszek E., Sierpiński G., Editor, Springer, Cham, pp.163-173, 2019

## Refereed Congress / Symposium Publications in Proceedings

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- Seismic Assessment of Mid-Rise Reinforced Concrete Buildings by Using a Modified Stiffness Approach**
- BİNİÇİ B., AKPINAR U., YAKUT A., TUNCAY K.  
Australian Earthquake Engineering Society Conference 2019, 29 November - 01 December 2019
- LATTICE APPROACH FOR NONLINEAR ANALYSIS FOR REINFORCED CONCRETE FRAMES**
- AYDIN B. B., TUNCAY K., BİNİÇİ B.  
5th INTERNATIONAL CONFERENCE ON EARTHQUAKE ENGINEERING AND SEISMOLOGY, 8 - 11 November 2019
- A two-step procedure for seismic assessment of mid-rise reinforced concrete buildings**
- Uğur A., BİNİÇİ B., YAKUT A., TUNCAY K., Cenikli S.  
5th International Conference on Earthquake Engineering and Seismology, 8 - 11 October 2019
- ANALYSES OF DAM – RESERVOIR SYSTEMS USING THE COUPLED MODIFIED APPLIED – FINITE ELEMENT METHODS**
- Soysal B. F., Tuncay K., Arıcı Y.  
5. International Conference on Earthquake Engineering and Seismology, Ankara, Turkey, 8 - 11 October 2019
- EVALUATING QUALITY AND PENETRATION RATE RELATION FOR COMMERCIALLY AVAILABLE FLOATING CAR DATA (FCD)**
- ALTINTAŞI O., TÜYDEŞ YAMAN H., TUNCAY K.  
TRB 2019 Annual Meeting, Washington, Kiribati, 13 - 17 January 2019
- Overlapping Lattice Approach for Nonlinear Analysis of Reinforced Concrete Columns**
- AYDIN B. B., TUNCAY K., BİNİÇİ B.  
13th International Congress on Advances in Civil Engineering, Izmir, Turkey, 12 - 14 September 2018
- Experimental Studies on Reinforced Concrete Pressure Tunnels**
- Kalaycıoğlu M., Albostan U., İşık G., CANBAY E., ARICI Y., BİNİÇİ B., TUNCAY K.  
13th International Congress on Advances in Civil Engineering, Izmir, Turkey, 12 - 14 September 2018
- Numerical Modeling of Reinforced Concrete Pressure Tunnels Using the Overlapping Lattice Method**

- İşik G., Kalaycıoğlu M., Albostan U., CANBAY E., ARICI Y., BİNİCİ B., TUNCAY K.  
13th International Congress on Advances in Civil Engineering, İzmir, Turkey, 12 - 14 September 2018
- **Traffic Flow Characteristics of an Urban Arterial Based on Different Traffic Flow Models**  
ALTINTAŞI O., TÜYDEŞ YAMAN H., TUNCAY K.  
13th International Congress on Advances in Civil Engineering, İzmir, Turkey, 12 - 14 September 2018
- **Comparison of the Overlapping Lattice and the Finite Element Approaches for the Prediction of the Collapse State of Concrete Gravity Dams**  
Soysal Albostan B. F. , Arıcı Y., Binici B., Tuncay K.  
4th International Conference on Earthquake Engineering and Seismology, Eskişehir, Turkey, 11 - 13 October 2017,  
pp.1-8
- **Explicit Dynamic Analysis of a Reinforced Concrete Frame up to Collapse**  
KOCAMAZ K., TUNCAY K., BİNİCİ B.  
4th International Conference on Earthquake Engineering and Seismology, Eskişehir, Turkey, 11 October - 13  
November 2017
- **MASIF BETON YAPILARDA HASAR İLERLEMESİ SIMULASYONU, ORTUŞMELİ KAFES MODELİ VE SONLU  
ELEMANLAR YAKLAŞIMLARI KARŞILAŞTIRMASI**  
SOYSAL B. F. , ARICI Y., BİNİCİ B., TUNCAY K.  
4. Uluslararası Deprem Mühendisliği ve Sismoloji Konferansı, 11 - 13 October 2017
- **BETON AĞIRLIK BARAJLARININ GOÇME DURUMLARININ BELİRLENMESİNDE ORTUŞMELİ KAFES VE  
SONLU ELEMAN YAKLAŞIMLARININ KARŞILAŞTIRILMASI**  
SOYSAL B. F. , ARICI Y., BİNİCİ B., TUNCAY K.  
4. Uluslararası Deprem Mühendisliği ve Sismoloji Konferansı, 11 - 13 October 2017
- **SIMULATION OF DAMAGE PROPAGATION ON MASSIVE CONCRETE STRUCTURES, THE OVERLAPPING  
LATTICE MODEL VS. THE FINITE ELEMENT APPROACH**  
SOYSAL B. F. , ARICI Y., BİNİCİ B., TUNCAY K.  
4th International Conference on Earthquake Engineering and Seismology, Eskişehir, Turkey, 11 - 13 October 2017
- **EXPLICIT DYNAMIC ANALYSIS OF A REINFORCED CONCRETE FRAME UP TO COLLAPSE**  
KOCAMAZ K., TUNCAY K., BİNİCİ B.  
4. Uluslararası Deprem Mühendisliği ve Sismoloji Konferansı, 11 - 13 October 2017
- **COMPARISON OF THE OVERLAPPING LATTICE AND THEFINITE ELEMENT APPROACHES FOR THE  
PREDICTION OF THE COLLAPSE STATE OF CONCRETE GRAVITY DAMS**  
SOYSAL B. F. , ARICI Y., BİNİCİ B., TUNCAY K.  
4th International Conference on Earthquake Engineering and Seismology, Eskişehir, Turkey, 11 - 13 October 2017
- **Overlapping Lattice Simulation of Concrete Gravity Dam Collapse Simulations**  
SOYSAL B. F. , AYDIN B. B. , TUNCAY K., ARICI Y., BİNİCİ B.  
COMPDYN 6th International Conference on Computational Methods in Structural Dynamics and Earthquake  
Engineering, 15 - 17 June 2017
- **Three-Dimensional Finite Element Modeling for Spudcan Penetration into a Clayey Seabed**  
Emren V., Huvaj Saruhan N., Tuncay K.  
3rd Conference on Geotechnical Frontiers, Florida, United States Of America, 12 - 15 March 2017, pp.122-131
- **Three Dimensional Finite Element Modeling for Spudcan Penetration into Clayey Seabed**  
Emren V., Huvaj Saruhan N., Tuncay K.  
Zemin Mekaniği ve Geoteknik Mühendisliği 16. Ulusal Kongresi, Erzurum, Turkey, 13 - 14 October 2016
- **Üç Boyutlu Sonlu Elemanlar Yöntemi ile Açık Deniz Platform Temellerinin Killi Zemine Penetrasyonu**  
Emren V., Huvaj Saruhan N., Tuncay K.  
Zemin Mekaniği ve Geoteknik Mühendisliği 16. Ulusal Kongresi, Erzurum, Turkey, 13 - 14 October 2016, vol.1, pp.1-  
10
- **Computational Modelling of Pressurized Reinforced Concrete Tunnel Linings**  
TUNCAY K., BİNİCİ B., YAMAN İ. Ö.  
12th International Conference on Advances in Civil Engineering, İstanbul, Turkey, 21 - 23 September 2016
- **Overlapping Lattice Model for Concrete Fracture Simulations**

AYDIN B. B. , TUNCAY K., BİNİCİ B.

12th International Conference on Advances in Civil Engineering, 21 - 23 September 2016

**Overlapping Lattice Modeling for Concrete Fracturing Using Sequentially Linear Analysis**

AYDIN B. B. , TUNCAY K., BİNİCİ B.

12th international congress on advances in civil engineering (ACE2016), 21 - 23 September 2016

**Identification of Localities in Speed Patterns for Urban Arterials Using Floating Car Data FCD**

ALTINTAŞI O., TÜYDEŞ YAMAN H., TUNCAY K.

ACE 2016 12th International Congress on Advances in Civil Engineering, 21 - 23 September 2016

**Overlapping Lattice Modeling for Concrete Fracturing Using Sequentially Linear Analysis**

Aydın Bestami B., TUNCAY K., BİNİCİ B.

ACE 2016 12th International Congress on Advances in Civil Engineering, 21 - 23 September 2016

**Detection of urban traffic patterns from Floating Car Data (FCD)**

ALTINTAŞI O., TÜYDEŞ YAMAN H., TUNCAY K.

19th European-Operational-Research-Societies Working Group on Transportation Meeting (EWGT), İstanbul, Turkey, 5 - 07 September 2016, vol.22, pp.382-391

**Sensitivity Analysis to design a near optimal piezoelectric energy harvester to power Wireless Sensor Nodes for underwater pipeline monitoring applications**

Qureshi F. U. , MUHTAROĞLU A., TUNCAY K.

IV. EUROPEAN CONFERENCE on RENEWABLE ENERGY SYSTEMS, 28 - 31 August 2016, vol.1, pp.461-466

**Comparative Analysis between D shaped and I shaped bluff body for piezoelectric energy harvesting to power Wireless Sensor Nodes for underwater pipeline monitoring applications**

Qureshi F. U. , MUHTAROĞLU A., TUNCAY K.

IV. EUROPEAN CONFERENCE on RENEWABLE ENERGY SYSTEMS, 28 - 31 August 2016, vol.1, pp.662-666

**Collapse Simulation of a Concrete Pressurized Tunnel Lining**

TUNCAY K., BİNİCİ B., YAMAN İ. Ö.

First International Conference on Natural Hazards and Infrastructure, Chania, Greece, 28 - 30 July 2016

**Overlapping Lattice Model for Fracture Initiation and Propagation**

AYDIN B. B. , TUNCAY K., BİNİCİ B.

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