

ÖZGEÇMİŞ

- 1. Adı Soyadı:** ONUR AKAY
- 2. Doğum Tarihi:** 25 EYLÜL 1977
- 3. Bölümü:** İnşaat Mühendisliği
- 4. Öğrenim Durumu:**

Derece	Alan	Üniversite	Yıl
Lisans	İnşaat Mühendisliği	Dokuz Eylül Üniversitesi	2000
Y. Lisans	Hidrolik Mühendisliği	İstanbul Teknik Üniversitesi	2002
Doktora	İnşaat Mühendisliği	University of Mississippi	2007

5. Akademik Unvanlar

Ünvanı	Bilim Dalı	Üniversite	Yıl
Yrd. Doç.	İnşaat Mühendisliği	Okan Üniversitesi	2009
Doçent			
Profesör			

6. Yönetilen Yüksek Lisans ve Doktora Tezleri

6.1 Yüksek Lisans Tezleri

6.2 Doktora Tezleri

7. Yayınlar

7.1 Uluslararası hakemli dergilerde yayınlanan makaleler

- Akay, O., G.A. Fox and J. Simunek. 2008. Numerical Simulation of Flow Dynamics during Macropore -Subsurface Drain Interactions Using HYDRUS. *Vadose Zone Journal* 7:3 909-918.
- Akay, O. and G.A. Fox. 2007. Experimental investigation of direct interconnectivity between macropores and subsurface drains during infiltration. *Soil Science Society of America Journal* 71:5 1600–1606.
- Fox, G.A., G.V. Wilson, A. Simon, E. Langendoen, O. Akay, and J.W. Fuchs. 2007. Measuring streambank erosion due to ground water seepage: Correlation to bank pore water pressure, precipitation, and stream stage. *Earth Surface Processes and Landforms* DOI: 10.1002/esp.1490.

7.2 Uluslararası bilimsel toplantılarda sunulan ve bildiri kitabında (Proceedings) basılan bildiriler.

- Fox, G. A., O. Akay, R. Malone, L. Ma, and G. Sabbagh. An Improved Express Fraction for Modeling Macropore/Subsurface Drain Interconnectivity. ASABE Annual International Meeting, 17 - 20 June 2007, Minneapolis, Minnesota. ASABE Paper No. 072139, ASABE: St. Joseph, MI
- Akay, O. and Fox, G. A. Experimental Investigation of Direct Connectivity between Macropores and Subsurface Drains during Infiltration. EWRI World Environmental & Water Resources Congress, 21-25 May 2006, Omaha, NE, USA
- Akay, O. and Fox, G. A. Interconnectivity of Macropores and Subsurface Drains: Influence on BTC's. USDA-CSREES National Water Conference, 5-9 February 2006, San Antonio, TX, USA
- Akay, O., Yagci, O., Kabdasli, S. The Hydrodynamics of the Bosphorus Strait: A Three-dimensional TELEMAC Simulation, EGS-AGU-EUG Joint Assembly, 06-11 April 2003, Nice, France

7.3 Yazılan uluslar arası kitaplar veya kitaplarda bölümler

7.4 Ulusal hakemli dergilerde yayımlanan makaleler

7.5 Ulusal bilimsel toplantılarda sunulan ve bildiri kitabında basılan bildiriler

7.6 Yazılan ulusal kitaplar veya kitaplarda bölümler

7.7 Diğer yayımlar

8. Projeler (Katılımcı olarak)

- Experimental Analysis and Modeling of Macropore Flow during Artificial Subsurface Drainage. Supported by USDA CSREES- Cooperative State Research, Education, and Extension Service
 - *Design and build laboratory soil columns and setups*
 - *Use of HYDRUS computer model for verification of data and to test macropore connectivity to subsurface drains at different locations in the field*
 - *Selection and operation of equipments such as datalogger, tensiometers, pressure transducers, infiltrometer*
 - *Collection of undisturbed soil samples from field. Lab tests included determining bulk density, particle size analysis, water retention curves (use of Tempe Cells)*
- Quantifying the importance of lateral, subsurface flow on sediment load to streams. Supported by USDA CSREES-Cooperative State Research, Education, and Extension Service
 - *Collection and analysis of field data including stream bank seepage flow and sediment concentrations*
 - *Conduct laboratory lysimeter experiments to investigate subsurface erosion processes under various layering and hydrologic conditions*
- Removal of Airborne Particulate during Spray Application of Surficially-Applied Emulsions. Supported by U.S. Army Corps of Engineers, Engineer Research and Development Center
 - *Design and construction of particle disperser and horizontal flow chamber*
 - *Determine adequate spray nozzles/fittings*
 - *Perform control experiments to achieve operation/mass balance requirements*

- Technical Drainage Study for the Clark County Water Reclamation District (CCWRD) Advanced Water Treatment Plant Membrane/Ozone Project, Las Vegas, Nevada
 - *Existing and ultimate condition hydrologic analysis*
 - *Normal depth calculations (FlowMaster) for the storm drain laterals and water head calculations for the drop inlets*
 - *Hydraulic grade line (HGL) calculations for the storm drains using Water Surface Pressure Gradient (WSPG)*
- Clark County Water Reclamation District Las Vegas Wash Channelization Improvements Request for Conditional Letter of Map Revision, Las Vegas, Nevada
 - *Floodway analysis for pre and post-project conditions*
- Stable Slope Analysis for Pittman Wash, Las Vegas, Nevada
 - *Use of GIS Spatial analysis to determine the long-term aggradation/degradation along the study reaches*
 - *Use of sediment transport formulations (Empirical Power Relationship, Copeland Method) to estimate the historical sediment inflow*
 - *Use of incipient motion/tractive force formulations (Skhoklitsch Method, Meyer-Peter Muller Method, Shield's Diagram Method, Lane's Tractive Force Method)*
- Cactus Avenue / UPRR Grade Separation 60% Drainage Design, Las Vegas, Nevada
 - *Existing condition hydraulic model setup (HEC-GeoRAS) to estimate the amount of flow impacting the project site*
 - *Construction of a 2-D model (FLO-2D) to verify the HEC-RAS results*
- Fourmile Creek and Mudd Gulch H&H Analysis and PMR, Canon City, Colorado
 - *Subbasin delineation (ArcHydro tools) and hydrologic analysis using SCS and Regression equations*
 - *Hydraulic analysis and floodplain delineation (Zone AE, Zone X)*
 - *Floodway analysis*
 - *Preparation of TSDN*
- Lower Occoquan Watershed Hydraulic Analysis and Floodplain Mapping, Fairfax County, Virginia
 - *Preliminary modeling using RFD (Rapid Floodplain Delineation) software*
 - *Use of HEC-RAS & HEC-GeoRAS for hydraulic modeling and floodplain mapping*
- State of Georgia Flood Map Modernization, Marietta, Georgia
 - *QC of hydraulic analysis and floodplain mapping for Toombs, Jenkins and Jeff Davis County*
 - *Redelineation of effective Zone AE for Appling, Bacon, Toombs, Jenkins, and Jeff Davis County*

9. İdari Görevler

10. Bilimsel Kuruluşlara Üyelikler

- ASCE-Amerikan İnşaat Mühendisleri Birliği, EWRI-Çevre ve Su Kaynakları Enstitüsü, ASABE-Amerikan Ziraat ve Biyoloji Mühendisleri Birliği, ASFPM- Eyalet Taşkın Yöneticileri Birliği, SIGMA XI-Bilimsel Araştırma Derneği, CHI EPSILON-Ulusal İnşaat Mühendisleri Onur Birliği

11. Ödüller

- En İyi Sunum Ödülü: Çevre Bilimleri, Öğrenci Araştırma Sempozyumu, Sigma Xi, The University of Mississippi
- Mezuniyet Derecesi Ödülü: Birincilik Derecesi, İnşaat Mühendisliği Bölümü, Dokuz Eylül Üniversitesi, İzmir, Türkiye