

Assoc. Prof. MELİH ÇALAMAK

Personal Information

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Biography

Melih Calamak's research is on risk and reliability assessment in water resources engineering, the safety of embankments, structural flood mitigation, uncertainty-based seepage analysis, and fluid transients in pipes. He is a member of the Canadian Dam Association, International Association for Hydro-Environmental Engineering and Research (IAHR), and International Water Resources Association (IWRA).

Education Information

Doctorate, Middle East Technical University, Faculty Of Engineering, Department Of Civil Engineering, Turkey 2010 - 2014

Postgraduate, Middle East Technical University, Faculty Of Engineering, Department Of Civil Engineering, Turkey 2008 - 2010

Undergraduate, Gazi University, Mühendislik Fakültesi, İnşaat Mühendisliği, Turkey 2004 - 2008

Research Areas

Hydraulic Structures, Pipeline Hydraulics, Open Channel Flow, Hydromechanics

Courses

Water Resources Engineering, Undergraduate, 2021 - 2022

Open Channel Hydraulics, Undergraduate, 2020 - 2021, 2021 - 2022

Fluid Mechanics, Undergraduate, 2021 - 2022

Water Resources Engineering, Undergraduate, 2015 - 2016, 2016 - 2017

Hydromechanics, Undergraduate, 2015 - 2016, 2016 - 2017, 2017 - 2018

Civil Engineering Design, Undergraduate, 2016 - 2017, 2017 - 2018

Fluid Mechanics, Undergraduate, 2015 - 2016, 2016 - 2017

Numerical Methods in Engineering, Undergraduate, 2015 - 2016, 2016 - 2017

Civil Engineering Design, Undergraduate, 2014 - 2015

Material Science , Undergraduate, 2015 - 2016

Advising Theses

Çalamak M., Yanmaz A. M. , A study on performance evaluation of relief wells downstream of embankment dams, Postgraduate, D.GÖĞÜŞ(Student), 2021

Çalamak M., Yanmaz A. M. , A study on optimum layout of drainage gallery for concrete dams, Postgraduate, T.DAGHESTANI(Student), 2018

Yanmaz A. M. , Çalamak M., Assessment of performance of drainage systems in earth-fill dams, Postgraduate, A.NUR(Student), 2017

Yanmaz A. M. , Çalamak M., Effects of berm characteristics on earth-fill dam stability, Postgraduate, Y.KILIÇ(Student), 2017

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

- I. **Experimental Investigation of Flood Management by an Instantaneous Levee Breach**
Al-Hafidh I. A. I. , Calamak M., Larocque L. A. , Chaudhry M. H. , Imran J.
JOURNAL OF HYDRAULIC ENGINEERING, vol.148, no.2, 2022 (Journal Indexed in SCI)
- II. **Multiobjective optimization of a tubular pump to improve the applicable operating head and hydraulic performance**
Zhao W., Zhang J., Yu X., Zhou D., Calamak M.
Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, vol.235, no.9, pp.1555-1566, 2021 (Journal Indexed in SCI)
- III. **Numerical modelling of seepage through earthen dams with animal burrows: a case study**
Calamak M., Larocque L. A. , Chaudhry M. H.
Journal of Hydraulic Research, vol.59, no.3, pp.488-499, 2021 (Journal Indexed in SCI)
- IV. **Reliability-based evaluation of scouring around dual bridge piers**
Yilmaz M., Calamak M., YANMAZ A. M.
Gradjevinar, vol.71, no.9, pp.739-747, 2019 (Journal Indexed in SCI Expanded)
- V. **On the optimum layout of a drainage gallery in concrete gravity dams on isotropic foundation**
Daghestani T., Çalamak M., YANMAZ A. M.
Environmental and Engineering Geoscience, vol.25, no.4, pp.345-358, 2019 (Journal Indexed in SCI Expanded)
- VI. **Performance Evaluation of Internal Drains of Earthen Dams**
Calamak M., Yilmaz A. N. , Yanmaz A. M.
Journal of Performance of Constructed Facilities, vol.32, no.6, 2018 (Journal Indexed in SCI Expanded)
- VII. **Assessment of core-filter configuration performance of rock-fill dams under uncertainties**
Calamak M., Yanmaz A. M.
International Journal of Geomechanics, vol.18, no.4, 2018 (Journal Indexed in SCI Expanded)
- VIII. **Probabilistic evaluation of the effects of uncertainty in transient seepage parameters**
Calamak M., Melih Yanmaz A. M. , Kentel E.
Journal of Geotechnical and Geoenvironmental Engineering, vol.143, no.9, 2017 (Journal Indexed in SCI Expanded)
- IX. **Uncertainty quantification of transient unsaturated seepage through embankment dams**
Calamak M., Yanmaz A. M.
International Journal of Geomechanics, vol.17, no.6, pp.1-11, 2017 (Journal Indexed in SCI Expanded)
- X. **Performance of a pumped discharge line with combined application of protection devices against water hammer**
REZAEİ V., Calamak M., BOZKUŞ Z.
KSCE Journal of Civil Engineering, vol.21, no.4, pp.1493-1500, 2017 (Journal Indexed in SCI Expanded)
- XI. **Estimation of flood induced overtopping reliability of dams on Tanyeri Dam case study Tanyeri Barajı örneğinde barajların taskin nedeniyle üstten asılma güvenilirliğinin belirlenmesi**
Çalamak M.
Journal of the Faculty of Engineering and Architecture of Gazi University, vol.32, no.3, pp.965-975, 2017 (Journal Indexed in SCI Expanded)
- XII. **Evaluation of scour risk at foundations of river bridges**
YANMAZ A. M. , ÇALAMAK M.
Teknik Dergi/Technical Journal of Turkish Chamber of Civil Engineers, vol.27, pp.1997-2012, 2016 (Journal

- Indexed in SCI Expanded)
- XIII. **Evaluation of scour risk at foundations of river bridges Akarsu Köprü Temellerindeki Oyulma Riskinin Değerlendirilmesi**
Yanmaz A. M. , Çalamak M.
Teknik Dergi/Technical Journal of Turkish Chamber of Civil Engineers, vol.27, no.3, pp.7533-7549, 2016 (Journal Indexed in SCI Expanded)
- XIV. **Comparison of performance of two run-of-river plants during transient conditions**
ÇALAMAK M., BOZKUŞ Z.
Journal of Performance of Constructed Facilities, vol.27, no.5, pp.624-632, 2013 (Journal Indexed in SCI Expanded)
- XV. **Protective measures against waterhammer in run-of-river hydropower plants**
ÇALAMAK M., BOZKUŞ Z.
Teknik Dergi/Technical Journal of Turkish Chamber of Civil Engineers, vol.23, pp.1623-1636, 2012 (Journal Indexed in SCI Expanded)
- XVI. **Protective measures against waterhammer in run of river hydropower plants Nehir tipi hidroelektrik santrallerde su darbesine karşı alınabilecek önlemler**
ÇALAMAK M., BOZKUŞ Z.
Teknik Dergi/Technical Journal of Turkish Chamber of Civil Engineers, vol.23, no.4, pp.6187-6202, 2012 (Journal Indexed in SCI Expanded)

Articles Published in Other Journals

- I. **On the Stability of Moderate Height Berm-Type Earthen Dams: The Hancagiz Dam Example**
Calamak M., Kilic Y., YANMAZ A. M.
GEOTECHNICAL AND GEOLOGICAL ENGINEERING, vol.38, no.4, pp.4169-4179, 2020 (Journal Indexed in ESCI)
- II. **Demiryolu dolgularının taşkın anındaki güvenliğinin değerlendirilmesi**
ÇALAMAK M.
Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, vol.24, no.3, pp.453-460, 2018 (Other Refereed National Journals)
- III. **Nehir Tipi Hidroelektrik Santraller ve Su Darbesi**
ÇALAMAK M.
Yapı Dünyası, vol.180, pp.11-17, 2011 (National Non-Refereed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Experimental investigations of flood management by an engineered levee breach**
Ibrahim I. A. , Calamak M., LaRocque L., Imran J.
2019 ASDSO Annual Dam Safety Conference, Florida, United States Of America, 8 - 12 September 2019, pp.751-759
- II. **A Review of the Anita Dam Incident: Internal Erosion Caused by a Buried Conduit and Lessons Learned**
ÇALAMAK M., Yılmaz M.
5th International Symposium on Dam Safety, İstanbul, Turkey, 27 - 31 October 2018, vol.2, pp.700-709
- III. **İnşaat Mühendisliği Lisans Eğitiminin Bir Parçası Olarak Araştırma ve Sosyal Sorumluluk**
ÇALAMAK M., AKGÜNER C.
4. İnşaat Mühendisliği Eğitimi Sempozyumu, İzmir, Turkey, 17 - 18 November 2017, pp.74-82
- IV. **Effects of Burrowing Animals on Seepage Behavior of Earthen Dams**
ÇALAMAK M., Bilgin G., Demirkapu H., Kobal A.
16th World Water Congress, International Water Resources Association (IWRA), Cancun, Mexico, 29 May - 03 June 2017, pp.1-11
- V. **Effect of Drainage Properties on Seepage Behavior of Earth-Fill Dams**

ÇALAMAK M., Yılmaz A. N. , YANMAZ A. M.

12th International Congress on Advances in Civil Engineering (ACE 2016), İstanbul, Turkey, 21 - 23 September 2016, pp.1-8

- VI. **Seepage characteristics in embankments subject to variable water storages on both sides**
ÇALAMAK M., YANMAZ A. M.
4th European Congress of the International Association of Hydroenvironment engineering and Research, IAHR 2016, Liege, Belgium, 27 - 29 July 2016, pp.551-556
- VII. **Akarsu Köprülerinde Yıkılma Riskinin Azaltılması Üzerine Bir Çalışma**
Selamoğlu M., ÇALAMAK M., YANMAZ A. M.
4. Su Yapıları Sempozyumu, Antalya, Turkey, 19 - 21 November 2015, pp.185-194
- VIII. **Dolgu Barajlarda Filtre Tane Dağılımı Belirsizliğinin Sızmaya Olan Etkisi Üzerine Bir Çalışma**
ÇALAMAK M., YANMAZ A. M.
4. Ulusal Baraj Güvenliği Sempozyumu, Elazığ, Turkey, 9 - 11 October 2014, pp.127-137
- IX. **Probabilistic assessment of slope stability for earth-fill dams having random soil parameters**
Çalamak M., YANMAZ A. M.
5th IAHR International Symposium on Hydraulic Structures: Hydraulic Structures and Society - Engineering Challenges and Extremes, ISHS 2014, Brisbane, Australia, 25 - 27 June 2014
- X. **Türkiye de Baraj Mühendisliği Gelişimi Üzerine Bir Değerlendirme**
ÇALAMAK M., ARICI Y., YANMAZ A. M.
3. Su Yapıları Sempozyumu, Ankara, Turkey, 7 - 08 December 2013, pp.73-83
- XI. **Numerical investigation of operation levels in a surge tank of a small hydropower plant**
ÇALAMAK M., BOZKUŞ Z.
10th International Congress on Advances in Civil Engineering (ACE 2010), Ankara, Turkey, 17 - 19 October 2012, pp.1-8
- XII. **Spatial Variability In Seepage Flow Through Earth-Fill Dams**
Çalamak M., Yanmaz A. M. , Kentel Erdoğan E.
CDA 2013 Annual Conference , Montreal, Canada, 5 - 10 October 2013, pp.1-10
- XIII. **Seepage analysis of earth fill dams having random fields**
ÇALAMAK M., KENTEL E., YANMAZ A. M.
10th International Congress on Advances in Civil Engineering (ACE 2010), Ankara, Turkey, 17 - 19 October 2012, pp.1-9
- XIV. **Numerical Investigation of Operation Levels in a Surge Tank of a Small Hydropower Plant**
ÇALAMAK M., BOZKUŞ Z.
the 10th International Congress on Advances in Civil Engineering, Ankara, Turkey, 17 - 19 October 2012
- XV. **Seepage Analysis Through Earth-Fill Dams Having Random Fields**
Çalamak M., Yanmaz A. M. , Kentel Erdoğan E.
Tenth International Congress on Advances in Civil Engineering, Ankara, Turkey, 17 - 19 October 2012, pp.21-30
- XVI. **Nehir Tipi Hidroelektrik Santrallerde SCADA Sistemi Otomasyon ve Uzaktan Erişim**
ÇALAMAK M.
2. Su Yapıları Sempozyumu, Diyarbakır, Turkey, 16 - 18 September 2011, pp.97-103

Tasks In Event Organizations

Çalamak M., Elçi Ş., Bombar G., Köken M., Kökpınar M. A. , Kırca V. Ş. Ö. , Eriş E., Özbahçeci B., Tayfur G., 14th International Conference on Hydrosience & Engineering,, Scientific Congress, İzmir, Turkey, Mayıs 2022

Citations

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