

CÜNEYT BAYKAL

ASST. PROF.

Email : cbaykal@metu.edu.tr

Office Phone : [+90 312 210 5435](tel:+903122105435)

Fax Phone : [+90 312 210 1800](tel:+903122101800)

Address : Orta Doğu Teknik Üniversitesi İnşaat Mühendisliği
Bölümü, K5 Binası Dumlupınar Blv., Üniversiteler Mah.
Çankaya/Ankara 06800

International Researcher IDs

ScholarID: cbaykal

ORCID: 0000-0002-8514-2758

Publons / Web Of Science ResearcherID: J-2834-2017

ScopusID: 55324534000

Yoksis Researcher ID: 164047



Learning Knowledge

Doctorate
2007 - 2012

Middle East Technical University, Graduate School of Natural and Applied Sciences, İnşaat Mühendisliği (Dr), Turkey

Postgraduate
2003 - 2006

Middle East Technical University, Graduate School of Natural and Applied Sciences, İnşaat Mühendisliği (YI) (Tezli), Turkey

Undergraduate
1998 - 2003

Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, Turkey

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Two-dimensional depth-averaged beach evolution modelling, Middle East Technical University, Graduate School of Natural and Applied Sciences, İnşaat Mühendisliği (Dr), 2012

Postgraduate, Numerical modeling of wave diffraction in one-dimensional shoreline change model, Middle East Technical University, Graduate School of Natural and Applied Sciences, İnşaat Mühendisliği (YI) (Tezli), 2006

Academic Titles / Tasks

Supported Projects

1. ÖZYURT TARAKCIOĞLU G., GÖZLET M. S., Kısacık D., BAYKAL C., Project Supported by Higher Education Institutions, İzmir İç Körfezde yaşanan fırtına taşkınlarının araştırılması ve taşkınların önlenmesi için bir öneri: Durgun Dalga Havuzu modeli, 2015 - 2021
2. BAYKAL C., TUBITAK Project, Kıyı Koruma Yapıları Gerisinde Dalga Aşması Kaynaklı Oyulmaların Fiziksel Modellenmesi, 2019 - 2020
3. BAYKAL C., Balcı H. B., Project Supported by Higher Education Institutions, Düşey Yüzlü Dalgakıran Müzvarı Çevresindeki Oyulmanın Sayısal ve Fiziksel Modellenmesi, 2018 - 2020
4. Özyurt Tarakcioğlu G., Baykal C., Kısacık D., Kaboğlu G., Akçalı B., Dondurur D., Akdağ C. T., TUBITAK Project, Nehir Deniz Etkileşiminde Kısa Süreli Sediment Form Oluşumlarının Değerlendirilmesi Gediz ve Büyük Menderes Örnekleri. 115Y722, 2016 - 2018

Awards

1. Baykal C., Outstanding Reviewer for 2018, Asce Journals, March 2019

Designed Lessons

Baykal C., COASTAL AND HARBOUR STRUCTURES DESIGN 2, Postgraduate, 2016 - 2017

Published journal articles indexed by SCI, SSCI, and AHCI

1. **Scour at the rear side of rubble mound revetments due to random wave overtopping: Laboratory experiments**
Yıldırım M. E., Yaman M., BAYKAL C.
Ocean Engineering, vol.309, 2024 (SCI-Expanded)
2. **Numerical simulation of scour at the rear side of a coastal revetment**
ŞENTÜRK B. U., Guler H. G., BAYKAL C.
Ocean Engineering, vol.275, 2023 (SCI-Expanded)
3. **Triboelectric nanogenerators for blue energy harvesting in simulated wave conditions**
DEMİRCİOĞLU O., ÇİÇEK M. Ö., DOĞANAY D., Gazaloglu G., BAYKAL C., ÇINAR AYGÜN S., ÜNALAN H. E.
Nano Energy, vol.107, 2023 (SCI-Expanded)
4. **An experimental study on the motion of solid spheres under solitary wave attack**
Goral K. D., GÜLER H. G., BAYKAL C., YALÇINER A. C.
OCEAN ENGINEERING, vol.240, 2021 (SCI-Expanded)
5. **Effect of Mean Water Level Variations on the Design and Performance of Rubble-Mound Coastal Protection Structures**
Guler H. G., Tarakcioglu G., BAYKAL C.
TEKNIK DERGI, vol.31, no.3, pp.9941-9966, 2020 (SCI-Expanded)
6. **Stilling wave basins for overtopping reduction at an urban vertical seawall - The Kordon seawall at Izmir**

- Kısacık D., Tarakcıođlu G., Baykal C.
OCEAN ENGINEERING, vol.185, pp.82-99, 2019 (SCI-Expanded)
7. **Numerical assessment of tsunami attack on a rubble mound breakwater using OpenFOAM (R)**
GÜLER H. G., BAYKAL C., Arikawa T., YALÇINER A. C.
APPLIED OCEAN RESEARCH, vol.72, pp.76-91, 2018 (SCI-Expanded)
 8. **Tsunami-induced scour around monopile foundations**
Larsen B. E., Fuhrman D. R., BAYKAL C., Sumer B. M.
COASTAL ENGINEERING, vol.129, pp.36-49, 2017 (SCI-Expanded)
 9. **Numerical simulation of scour and backfilling processes around a circular pile in waves**
Baykal C., Sumer B. M., Fuhrman D. R., Jacobsen N. G., Fredsoe J.
COASTAL ENGINEERING, vol.122, pp.87-107, 2017 (SCI-Expanded)
 10. **Risk Assessment and Design of Prevention Structures for Enhanced Tsunami Disaster Resilience (RAPSDI)/Euro-Japan Collaboration**
Harbitz C. B., Nakamura Y., Arikawa T., BAYKAL C., Dogan G. G., Frauenfelder R., Glimsdal S., GÜLER H. G., Issler D., Kaiser G., et al.
COASTAL ENGINEERING JOURNAL, vol.58, no.4, 2016 (SCI-Expanded)
 11. **Numerical investigation of flow and scour around a vertical circular cylinder**
Baykal C., Sumer B. M., Fuhrman D. R., Jacobsen N. G., Fredsoe J.
PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY A-MATHEMATICAL PHYSICAL AND ENGINEERING SCIENCES, vol.373, 2015 (SCI-Expanded)
 12. **Numerical simulation of wave-induced scour and backfilling processes beneath submarine pipelines**
Fuhrman D. R., Baykal C., Sumer B. M., Jacobsen N. G., Fredsoe J.
COASTAL ENGINEERING, vol.94, pp.10-22, 2014 (SCI-Expanded)
 13. **Two-Dimensional Depth-Averaged Beach Evolution Modeling: Case Study of the Kizilirmak River Mouth, Turkey**
Baykal C., ERGİN A., Guler I.
JOURNAL OF WATERWAY PORT COASTAL AND OCEAN ENGINEERING, vol.140, no.3, 2014 (SCI-Expanded)
 14. **Development of a numerical 2-dimensional beach evolution model**
BAYKAL C.
TURKISH JOURNAL OF EARTH SCIENCES, vol.23, no.2, pp.215-231, 2014 (SCI-Expanded)

Articles Published in Other Journals

1. **CoCoNet: TOWARDS COAST TO COAST NETWORKS OF MARINE PROTECTED AREAS (FROM THE SHORE TO THE HIGH AND DEEP SEA), COUPLED WITH SEA-BASED WIND ENERGY POTENTIAL**
Özyurt Tarakcıođlu G., Boero F., Fogliini F., Frascchetti S., Goriup P., Macpherson E., Planes S., Soukissian T., Adilođlu B., Gween C., et al.
SCIRES-IT-SCIENTIFIC RESEARCH AND INFORMATION TECHNOLOGY, vol.6, pp.1-95, 2016 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

1. **Dolgu Dalgakıranlarda Antifer Ünitelerin Farklı Dizilimlerinin Dalga Aşmasına Etkisi**
Erler B., Demir F., Korkmaz A. M., Şentürk B. U., Güler H. G., Baykal C., Özyurt Tarakcıođlu G., Kısacık D., Güler I., Yalçiner A. C., et al.
İMO 10. Kıyı Mühendisliđi Sempozyumu, İzmir, Turkey, 16 - 17 November 2023, pp.518-527
2. **Dolgu Dalgakıranların Koruma Tabakasında Kullanılan Antifer Ünitelerin Dalga Aşmasına Etkisinin Sayısal Modellenmesi**
Şentürk B. U., Demir F., Erler B., Korkmaz A. M., Güler H. G., Baykal C., Özyurt Tarakcıođlu G., Kısacık D., Güler I., Yalçiner A. C., et al.

- İMO 10. Kıyı Mühendisliği Sempozyumu, İzmir, Turkey, 16 - 17 November 2023, pp.408-416
3. **Karadeniz Bölgesi'nde Yer Alan Bir Limanda Fırtına Kaynaklı Gerçekleşen Ağır Hasarın Değerlendirilmesi**
Güler H. G., Kirezci Ç., Baykal C., Özyurt Tarakcioğlu G., Işık E., Ergin A., Yalçiner A. C., Güler I.
İMO 10. Kıyı Mühendisliği Sempozyumu, İzmir, Turkey, 16 - 17 November 2023, pp.417-421
4. **İzmir Körfezinde Deniz Seviyesi Yükselmesine Bağlı Kıyı Taşkınlarına Önlem Olarak Yumuşak Çözüm Önerilerinin Sayısal Modellemesi**
Türkseven O. D., Kısacık D., Baykal C., Güler I.
İMO 10. Kıyı Mühendisliği Sempozyumu, İzmir, Turkey, 16 - 17 November 2023, pp.251-258
5. **Mersin Kumsal Restorasyon Projesi Sayısal Modelleme Çalışması**
Sevindik C., Yaman M., Özsoy C., Baykal C., Güler I.
İMO 10. Kıyı Mühendisliği Sempozyumu, İzmir, Turkey, 16 - 17 November 2023, pp.242-250
6. **Soft Measures Against Coastal Flooding as A Result of Expected Sea Level Rise in Izmir Bay**
Türkseven O. D., Kısacık D., Baykal C., Güler I.
10th Short Course/Conference on Applied Coastal Research, İstanbul, Turkey, 4 - 06 September 2023, pp.114
7. **Numerical Investigation of a Beach Restoration Project in Mersin using XBEACH and ONELINE Numerical Models**
Baykal C., Sevindik C., Yaman M., Özsoy C., Güler I.
10th Short Course/Conference on Applied Coastal Research, İzmir, Turkey, 4 - 06 September 2023, pp.115
8. **Effects of Antifer Placement Methods on Wave Overtopping and Wave Loads on Crown-Walls**
Demir F., Erler B., Şentürk B. U., Güler H. G., Baykal C., Özyurt Tarakcioğlu G., Kısacık D., Güler I., Yalçiner A. C., Ergin A.
10th Short Course/Conference on Applied Coastal Research, İstanbul, Turkey, 4 - 06 September 2023, pp.102
9. **Investigation of Wave Loads at the Lee-Side of a Rubble Mound Breakwater Head**
Sevindik C., Demir F., Şentürk B. U., Güler H. G., Baykal C., Özyurt Tarakcioğlu G., Güler I., Ergin A., Yalçiner A. C.
10th Short Course/Conference on Applied Coastal Research, İstanbul, Turkey, 4 - 06 September 2023, pp.101
10. **Hydrodynamical Comparison of Nami Dance and XBeach Non-Hydrostatic on a Benchmark Study**
Çiçek Y. A., Doğan Bingöl G. G., Güler I., Baykal C., Yalçiner A. C.
14th Int. Conf. on Hydrosience & Engineering, İzmir, Turkey, 26 - 27 May 2022, pp.283-286
11. **Flow and Scour Around Round Head Vertical Wall Breakwater Under Random Waves**
Karakuş K., Baykal C.
15th Young Coastal Scientists and Engineers Conference (YCSEC), Glasgow, United Kingdom, 13 - 15 May 2019, pp.1-2
12. **A CASE STUDY ON PERFORMANCE OF RESHAPING BERM BREAKWATERS: ORDU GİRESUN INTERNATIONAL AIRPORT, TURKEY**
Özyurt Tarakcioğlu G., Baykal C., Bezazoğlu S., Atak D., Ergin A., Güler I.
36th International Conference on Coastal Engineering, Maryland, United States Of America, 29 July - 03 August 2018, pp.36-40
13. **A NEW NUMERICAL SOLVER FOR SIMULATING POROUS MEDIA FLOW BASED ON IMMERSSED BOUNDARY METHOD**
GÜLER H. G., Liu X., Jensen B., Tomaselli P. D., BAYKAL C., ARIKAWA T., YALÇINER A. C.
American Geophysics Union Fall Meeting 2018, Washington, United States Of America, 10 - 14 December 2018
14. **Xbloc'lu Tahkimat Kesitinde Sayısal Ve Fiziksel Model Sonuçlarına Göre Dalga Aşması Rize Artvin Havalimanı Tahkimatı**
Karakuş D., Cihan H. K., Sağ M., Baykal C., Yalçiner A. C.
İMO 9. Kıyı Mühendisliği Sempozyumu, Adana, Turkey, 1 - 03 November 2018, pp.752-764
15. **YAPAY BLOKLU KIYI TAHKİMATI DENGE VE DALGA AŞMA DURUMLARININ ARAŞTIRILMASI ÜZERİNE BİR FİZİKSEL MODEL ÇALIŞMASI**
BAYKAL C., ÖZYURT TARAKCIOĞLU G., IŞIK E., GÖZLET M. S., GÜLER H. G.
İMO 9. Ulusal Kıyı Mühendisliği Sempozyumu, Adana, Turkey, 1 - 03 November 2018
16. **DÜZENLİ DALGALARIN İLERLEYİŞİNİN BENZETİMİNDE SWASH SAYISAL MODELİNİN**

PERFORMANSININ DEĞERLENDİRİLMESİ

GÜLER H. G., IŞIK E., SHARGHIVAND N., GÖRAL K. D., BAYKAL C., GÜLER I., ERGİN A.

İMO 9. Ulusal Kıyı Mühendisliği Sempozyumu, Adana, Turkey, 1 - 03 November 2018

17. **Kum Beslemesi Uygulamalarında Jeotekstil Tüplerin Kullanımı Üzerine Fiziksel Model Deneyleri**
Işık E., Baykal C.
İMO 9. Kıyı Mühendisliği Sempozyumu, Adana, Turkey, 1 - 03 November 2018, vol.1, pp.160-171
18. **Motion of Solid Spheres under Solitary Wave Attack: Physical and Numerical Modeling**
GÜLER H. G., ARIKAWA T., BAYKAL C., Göral K. D., YALÇINER A. C.
International Conference on Coastal Engineering 2018, Baltimore, United States Of America, 29 July - 04 August 2018
19. **Harbor Agitation Due To Offshore Ship Waves Using Swash: A Case Study Of Kumkapi Yacht Park, Istanbul**
BAYKAL C., ÖZYURT TARAKCIOĞLU G., IŞIK E.
36th International Conference on Coastal Engineering, Baltimore, United States Of America, 29 July - 03 August 2018, vol.1, pp.12
20. **COMPARISON OF NUMERICAL WAVE TANKS WITH VARIOUS TURBULENCE MODELSIN APPLICATION TO LONG WAVE MOTION AND ITS INTERACTION WITH A VERTICALWALL**
ÇINAR G. E., GÜLER H. G., ARIKAWA T., BAYKAL C., YALÇINER A. C.
International Conference on Coastal Engineering 2018, Baltimore, United States Of America, 29 July - 03 August 2018
21. **Vertical Seawall Crest Modifications for Overtopping**
KISACIK D., ÖZYURT G., BAYKAL C., KABOĞLU G.
36th International Conference on Coastal Engineering 2018, Baltimore, United States Of America, 30 July - 03 August 2018
22. **Kıyı Mühendisliği Uygulamalarında Tasarım Dalgası ve Risk**
ÖZYURT TARAKCIOĞLU G., ERGİN A., GÜLER H. G., BAYKAL C., GÜLER I., ESEN M., KİREZCİ Ç., YALÇINER A. C.
3. Ulusal Deniz Bilimleri Konferansı, İzmir, Turkey, 9 - 12 May 2018
23. **Application of XBeach in a Beach Nourishment and Restoration Project A Case Study: Alanya-Turkler, Turkey**
BAYKAL C., ÖZYURT TARAKCIOĞLU G., IŞIK E., GÜLER H. G., AYDIN D. C., ÇINAR G. E., YALÇINER A. C., IŞIKHAN G., ERGİN A.
XBeach X (10th Year Anniversary) Free User Conference, Delft, Netherlands, 1 - 03 November 2017
24. **Challenges in Numerical Assessment of Tsunami Impact on Composite and Rubble Mound Breakwaters**
GÜLER H. G., ARIKAWA T., BAYKAL C., YALÇINER A. C.
International Tsunami Symposium (ITS) 2017, Balvi, Indonesia, 21 - 25 August 2017
25. **Comparison of 2D and 3D Models in Application to Long Wave Motion and Its Interaction with the Structures**
ÇINAR G. E., GÜLER H. G., BAYKAL C., ARIKAWA T., ZAYTSEV A., YALÇINER A. C.
International Tsunami Symposium (ITS) 2017, Balvi, Indonesia, 21 - 25 August 2017
26. **Effect of Temporal Downscaling of Wind Data on Hindcasting Extreme Wave Events and Wind Power Density Studies over the Black Sea**
BAYKAL C., GÜLER H. G., ÖZYURT G., ak g. h., kirezci ç., YILMAZ M. T.
American Geophysical Union Fall Meeting 2016, 12 - 16 December 2016
27. **Numerical Modeling of Flow and Scour around a Vertical Cylindrical Pile in Combined Wave and Current**
BAYKAL C., Sumer B. M., Fuhrman D. R.
35th International Conference on Coastal Engineering, Antalya, Turkey, 17 - 20 November 2016
28. **Performance of Rubble Mound and Caisson Type Breakwaters under Extreme Waves**
Doğan G. G., ÖZYURT G., BAYKAL C., YALÇINER A. C.
35th International Conference on Coastal Engineering, Antalya, Turkey, 17 - 20 November 2016

29. **Numerical Modelling on Hydrodynamic Flow Conditions and Morphological Changes using XBeach near Manavgat River Mouth**
Demirci E., BAYKAL C., Güler I., Söğüt E., Ergin A.
35th International Conference on Coastal Engineering, Antalya, Turkey, 17 - 20 November 2016
30. **Effect of Temporal Downscaling Methods of Long Term Wind Data on the Design Wave Parameters in the Black Sea**
ÖZYURT G., GÜLER H. G., BAYKAL C., Ak G. H., Yılmaz M. T.
35th International Conference on Coastal Engineering, Antalya, Turkey, 17 - 20 November 2016
31. **Storm surge and flooding in Izmir bay and a suggestion for coastal protection stilling wave basin**
KISACIK D., KABOĞLU G., Keleş B. B., ÖZYURT G., BAYKAL C., Güler I.
35th International Conference on Coastal Engineering, Antalya, Turkey, 17 - 20 November 2016
32. **Numerical Modelling of Physical Model Experiments on Rubble Mound Breakwaters Under Tsunami Attack Using IHFOAM**
GÜLER H. G., Arikawa T., BAYKAL C., YALÇINER A. C.
35th International Conference on Coastal Engineering, Antalya, Turkey, 17 - 20 November 2016
33. **Numerical Investigation of Long-Term Beach Evolution Around Shore-Normal Groins Using XBeach**
Söğüt E., BAYKAL C., Güler I., Ergin A., Demirci E.
35th International Conference on Coastal Engineering, Antalya, Turkey, 17 - 20 November 2016
34. **Tsunami induced scour around a monopile foundation**
Fuhrman D. R., Larsen B. E., BAYKAL C., Sumer B. M.
35th International Conference on Coastal Engineering, Antalya, Turkey, 17 - 20 November 2016
35. **Damage Identification of Coastal Structures Using Image Processing Techniques**
PEKCAN O., ERSÖZ A. B., TEKE T., DOĞAN G. G., ÖZYURT G., BAYKAL C.
35TH INTERNATIONAL CONFERENCE ON COASTAL ENGINEERING, 17 - 20 November 2016
36. **Effect Of Temporal Downscaling Methods of Long Term Wind Data on The Design Wave Parameters in the Black Sea**
ÖZYURT G., BAYKAL C., GÜLER H. G., YILMAZ M. T., AK H.
35TH International Conference on Coastal Engineering, 17 - 20 November 2016
37. **Damage Identification of Coastal Structures Using Image Processing Tecniques**
PEKCAN O., ERSÖZ A. B., TEKE T., Doğan G. G., ÖZYURT G., BAYKAL C.
ICCE' 16 - 35th International Conference on Coastal Engineering, 17 - 20 November 2016
38. **Effect of Temporal Downscaling Methods of Long Term Wind Data on the Design Wave Parameters in the Black Sea**
ÖZYURT G., GÜLER H. G., BAYKAL C., AK G. H., YILMAZ M. T.
International Conference on Coastal Engineering, 16 - 20 November 2016
39. **Şekillenmeyen Basamak Tipi Dalgakıranlar İle Şekillenebilen Dinamik Stabil Dalgakıranların Karşılaştırılması Örnek Bir Çalışma Ordu Giresun Havalimanı**
Atak D., Bezazoğlu S., BAYKAL C., ÖZYURT G., GÜLER H. G., Güler I., Ergin A.
Türkiye Deniz Bilimleri Konferansı, Ankara, Turkey, 31 May - 03 June 2016
40. **Taş Dolgu Ve Keson Tipi Dalgakıran Performanslarının Ekstrem Dalgalar Altında Fiziksel Model Deneyleri İle İncelenmesi**
Doğan G. G., ÖZYURT G., BAYKAL C.
Türkiye Deniz Bilimleri Konferansı, Ankara, Turkey, 31 May - 03 June 2016
41. **Modelling of Performance of Caisson Type Breakwaters under Extreme Waves**
Doğan G. G., ÖZYURT G., BAYKAL C.
European Geosciences Union General Assembly 2016, Viyana, Austria, 17 - 22 April 2016
42. **Comparison of Laboratory Experimental Data to XBeach Numerical Model Output**
Demirci E., BAYKAL C., Güler I., Söğüt E.
European Geosciences Union General Assembly 2016, Viyana, 17 - 22 April 2016
43. **Performance of Statistical Temporal Downscaling Techniques of Wind Speed Data Over Aegean Sea**
GÜLER H. G., BAYKAL C., ÖZYURT G., KISACIK D.

- European Geosciences Union General Assembly 2016, Viyana, Austria, 17 - 22 April 2016
44. **Performance Statistical Temporal Downscaling Techniques of Wind Speed Data Over Aegean Sea**
GÜLER H. G., BAYKAL C., ÖZYURT G., KISACIK D.
European Geosciences Union General Assembly 2016, 17 - 22 April 2016
45. **NUMERICAL MODELLING OF SOLITARY WAVE EXPERIMENTS ON RUBBLE MOUND BREAKWATERS**
GÜLER H. G., arikawa T., BAYKAL C., YALÇINER A. C.
AGU, 12 - 16 December 2016
46. **Investigation on Hydrodynamic Flow Conditions at the Manavgat River Mouth in Combined Flooding of River Surface Runoff and Storm Surge**
Demirci E., BAYKAL C., ÖZYURT G., Söğüt E.
55th Conference of Estuarine Coastal Sciences Association, Londrina, United Kingdom, 6 - 09 September 2015
47. **Observations of Extreme Waves at South Coast of Black Sea**
TARAKÇIOĞLU G., KİREZCİ Ç., GÜLER H. G., BAYKAL C., YALÇINER A. C., PELINOVSKY E., KURKIN A., ZAYTSEV A.
26th IUGG GENERAL ASSEMBLY 2015 PRAG, 22 June - 02 July 2015
48. **Modelling long term morphological changes with XBeach case study of Kizilirmak River mouth**
BAYKAL C., Ergin A., Güler I., ÖZYURT G., Söğüt E., GÜLER H. G., Doğan G. G.
European Geosciences Union General Assembly 2015, Viyana, Austria, 12 - 17 April 2015
49. **Recent Extreme Marine Events at Southern Coast of Black Sea**
TARAKÇIOĞLU G., YALÇINER A. C., KİREZCİ Ç., BAYKAL C., GÜLER H. G., EROL O., ZAYTSEV A., KURKIN A.
EUROPEAN DEOSCIENCE UNION 201 General Assembly Vienna, 12 - 17 April 2015
50. **Numerical calculation of backfilling of scour holes**
Sumer B. M., BAYKAL C., Fuhrman D. R., Jacobsen N. G., Fredsoe J.
7th International Conference on Scour and Erosion, Perth, Australia, 2 - 04 December 2014, pp.633-642
51. **Tasarım Derinliğinin Taş Dolgu Dalgakıranların Tasarımına Etkisi**
GÜLER H. G., Ergin A., BAYKAL C., ÖZYURT G., Güler I.
8. Ulusal Kıyı Mühendisliği Sempozyumu, İstanbul, Turkey, 7 - 09 November 2014
52. **Sarıgerme Bölgesinde Oluşan Hortum ve Bölgeye Etkileri**
GÜLER H. G., BAYKAL C., YALÇINER A. C., Ayşen E., ÖZYURT G., Güler I.
8. Ulusal Kıyı Mühendisliği Sempozyumu, İstanbul, Turkey, 7 - 09 November 2014
53. **Silindir Yapılar Çevresinde Akım Koşulları ve Oyulma Süreçlerinin Sayısal Modellenmesi**
BAYKAL C., Sumer B. M., Fuhrman D. R., Jacobsen N. G., Fredsoe J.
8. Ulusal Kıyı Mühendisliği Sempozyumu, İstanbul, Turkey, 7 - 09 November 2014
54. **Numerical Simulation of Wave Induced Scour and Backfilling below Submarine Pipelines**
Fuhrman D. R., BAYKAL C., Sumer B. M., Jacobsen N. G., Fredsoe J.
34th International Conference on Coastal Engineering, Seul, South Korea, 15 - 20 June 2014
55. **An Experimental Study on the Cumulative Damage Development of Rubble Mound Structures**
Şimşek K. C., BAYKAL C., Ergin A., Güler I.
34th International Conference on Coastal Engineering, Seul, South Korea, 15 - 20 June 2014
56. **Numerical Modeling of Backfilling Process around Monopiles**
BAYKAL C., B Mutlu S., Fuhrman D. R., Jacobsen N. G., Fredsoe J.
34th International Conference on Coastal Engineering, Seul, South Korea, 15 - 20 June 2014, vol.1, pp.22
57. **An Energetic Type Model for the Cross shore Distribution of Total Longshore Sediment Transport Rate**
BAYKAL C., Ergin A., Güler I.
33rd International Conference on Coastal Engineering, Santander, Spain, 1 - 06 July 2012, vol.1
58. **Kıyı Boyu Akıntılarının Sayısal Modellenmesi**
BAYKAL C., Ergin A., Güler I.
7. Ulusal Kıyı Mühendisliği Sempozyumu, Trabzon, Turkey, 21 - 23 November 2011
59. **Coastal vulnerability assessment to sea level rise integrated with analytical hierarchy process**
Özyurt G., ERGİN A., BAYKAL C.
32nd International Conference on Coastal Engineering, ICCE 2010, Shanghai, China, 30 June - 05 July 2010

60. **Yapay Besleme ile Kıyı Dengelenmesi Örnek Uygulama Bir Kıyı Aşınımı Sorunu Side Türkiye**
Esen M., BAYKAL C., Güler I., Ergin A.
6. Ulusal Kıyı Mühendisliği Sempozyumu, İzmir, Turkey, 6 - 07 November 2009
61. **Shore Stabilization by Artificial Nourishment A Case Study A Coastal Erosion Problem in Side Turkey**
Güler I., BAYKAL C., Ergin A.
7th Int. Conf. on Coastal and Port Eng. in Developing Countries, Dubai, United Arab Emirates, 24 - 28 February 2008
62. **A One Line Numerical Model for Wind Wave Induced Shoreline Changes**
Ergin A., Güler I., YALÇINER A. C., BAYKAL C., ARTAGAN S. S., Şafak I.
7th International Congress on Advances in Civil Engineering, İstanbul, Turkey, 11 - 13 October 2006

Courses

Fluid Mechanics, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2014 - 2015
Statistical Analysis in Coastal Engineering, Postgraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015
Hydromechanics, Undergraduate, 2021 - 2022, 2018 - 2019, 2017 - 2018
Coastal & Harbour Structures Design 2, Postgraduate, 2019 - 2020, 2017 - 2018, 2016 - 2017
Fluid Mechanics, Undergraduate, 2020 - 2021, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2014 - 2015
Uncertainty and Data Analysis, Undergraduate, 2016 - 2017, 2015 - 2016

Advising Theses

Yalçiner A. C., Baykal C., Experimental and numerical investigation on wave attenuation performance of a floating platform, Postgraduate, G.GAZALOĞLU(Student), 2023
Baykal C., Güler H. G., Investigation of wave loads at the lee-side of a rubble mound breakwater head, Postgraduate, C.SEVİNDİK(Student), 2023
Baykal C., Güler H. G., A PHYSICAL MODEL STUDY ON REINFORCEMENT OF A BREAKWATER CONSISTING OF TETRAPOD ARTIFICIAL BLOCKS, Postgraduate, B.AKYOL(Student), 2022
Yalçiner A. C., Baykal C., Coupling of NAMI DANCE and XBeach numerical models to simulate tsunami induced morphological changes: Case study in Sığacık bay, Postgraduate, Y.ARDA(Student), 2022
Yalçiner A. C., Baykal C., SCOUR AT THE REAR SIDE OF RUBBLE MOUND REVETMENT DUE TO THE SOLITARY-LIKE WAVE OVERTOPPING, Postgraduate, M.YAMAN(Student), 2022
Baykal C., Investigation of numerical schemes and their effects on impact pressures in numerical modelling, Postgraduate, S.BATUHAN(Student), 2022
Yalçiner A. C., Baykal C., A COMPUTATIONAL TOOL FOR WIND WAVE PREDICTION BASED ON CEM METHOD, Postgraduate, E.POLAT(Student), 2022
Baykal C., Comparison of turbulence model and wall function couplings for simulating scour, Postgraduate, B.UFUK(Student), 2022
Baykal C., SCOUR AT THE REAR SIDE OF RUBBLE MOUND REVETMENTS, Postgraduate, M.EMRE(Student), 2021
Baykal C., Development of a quasi-2DH model for numerical modeling of shoreline changes, Postgraduate, C.ÖZSOY(Student), 2021
Baykal C., Yalçiner A. C., PHYSICAL MODELING OF SOLID SPHERES' MOTION UNDER SOLITARY WAVE ATTACK, Postgraduate, K.DENİZ(Student), 2020
Yalçiner A. C., Baykal C., Numerical modelling of wave-structure interaction problems through CFD methods, Doctorate, H.GÖKHAN(Student), 2020
Eronat A. H., Baykal C., Kombine akımlar altında oluşan sediman dalgacıkları: Gediz ve Büyük Menderes örnekleri, Doctorate, S.OĞUZ(Student), 2020
Özyurt Tarakcioğlu G., Baykal C., Application of suitability index to Turkish coasts for wave energy site selection,

Postgraduate, M.ERKAM(Student), 2019

Özyurt Tarakcioğlu G., Baykal C., The coastal circulation model of Büyük Menderes river mouth and adjacent coastal areas, Postgraduate, M.SEDAT(Student), 2019

Baykal C., An experimental study on the performance of geotextile tubes in beach nourishment applications, Postgraduate, E.IŞIK(Student), 2019

Baykal C., Investigation of flow and scour around head of a vertical wall breakwater, Postgraduate, K.KARAKAŞ(Student), 2019

Yalçiner A. C., Baykal C., 3-Dimensional Numerical Circulation Modeling: A Case Study On The Coastal Processes In Gocek And Fethiye Bays, Turkey, Postgraduate, İ.Akdeniz(Student), 2018

BAYKAL C., YALÇINER A. C., Comparison of 2d and 3d models in application to long wave motion and its interaction with a vertical wall, Postgraduate, G.EZGİ(Student), 2018

BAYKAL C., Numerical modeling of short term morphological changes around coastal structures and at the river mouths, Postgraduate, E.DEMİRCİ(Student), 2016

BAYKAL C., A comparative study on stability and overtopping performances of reshaping berm breakwaters, Postgraduate, S.BEZAZOĞLU(Student), 2016

Contractual Researches

1. Baykal C., Özyurt Tarakcioğlu G., Güler H. G., Güler I., Yalçiner A. C., Ergin A., Eren Enerji Elektrik Üretim A.Ş., Eren Limanı İlave Dolgu Kıyı Tahkimatı ve Ana Mendirek Fiziksel Model Çalışmaları Araştırma Projesi, 2023 - 2023
2. Baykal C., Özyurt Tarakcioğlu G., Güler H. G., Yalçiner A. C., Uysal A. Ç., AGM Mühendislik Ltd. Şti., TMO Tekirdağ Iskelesi Rüzgar ve Dalgı İklimi, Tsunamiye Bağlı Etkilerin Araştırılması Projesi, 2023 - 2023
3. Baykal C., Özyurt Tarakcioğlu G., Güler H. G., Güler I., Yalçiner A. C., Ergin A., DALSAN Su Altı ve Liman Hiz.San.Tic.A.Ş., Basamaklı Keson Bloklarla Eren Limanı Ana Dalgakıran Gövdesi Model Deneyleri Projesi, 2022 - 2022
4. Baykal C., Özyurt Tarakcioğlu G., Güler I., Yalçiner A. C., Ergin A., Güler H. G., Eren Enerji Elektrik Üretim A.Ş., Zonguldak Eren Limanı Ana Mendirek Müzvar Güçlendirme Ek Fiziksel Model Çalışmaları Araştırma Projesi, 2021 - 2022
5. Baykal C., Yalçiner A. C., Özyurt Tarakcioğlu G., Eren Enerji Elektrik Üretim A.Ş., Zonguldak Eren Limanı Ana Mendirek Güçlendirme Fiziksel Model Çalışmaları Araştırma Projesi, 2021 - 2022

Scientific Refereeing

Uludağ Üniversitesi Mühendislik Fakültesi Dergisi, National Scientific Refreed Journal, September 2023

OCEAN ENGINEERING, Journal Indexed in SCI-E, September 2023

COASTAL ENGINEERING AN INTERNATIONAL JOURNAL FOR COASTAL, HARBOUR, AND OFFSHORE ENGINEERS, Journal Indexed in SCI-E, July 2023

OCEAN ENGINEERING, Journal Indexed in SCI-E, June 2023

JOURNAL OF FLUID MECHANICS, Journal Indexed in SCI-E, February 2023

TEKNIK DERGI/TECHNICAL JOURNAL OF TURKISH CHAMBER OF CIVIL ENGINEERS, National Scientific Refreed Journal, February 2023

COASTAL ENGINEERING AN INTERNATIONAL JOURNAL FOR COASTAL, HARBOUR, AND OFFSHORE ENGINEERS, Journal Indexed in SCI-E, January 2023

COASTAL ENGINEERING AN INTERNATIONAL JOURNAL FOR COASTAL, HARBOUR, AND OFFSHORE ENGINEERS, Journal Indexed in SCI-E, October 2022

MARINE GEORESOURCES AND GEOTECHNOLOGY, Journal Indexed in SCI-E, September 2022

OCEAN ENGINEERING, Journal Indexed in SCI-E, July 2022

JOURNAL OF OFFSHORE MECHANICS AND ARCTIC ENGINEERING, Journal Indexed in SCI-E, April 2022

OCEAN ENGINEERING, Journal Indexed in SCI-E, January 2022

OCEAN ENGINEERING, SCI Journal, November 2021
Journal Of Waterway Port Coastal And Ocean Engineering-Asce, SCI Journal, July 2021
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Karadeniz Technical University, Turkey, June 2021
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Dokuz Eylul University, Turkey, June 2021
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Yildiz Technical University, Turkey, September 2020
Journal Of Waterway Port Coastal And Ocean Engineering-Asce, Journal Indexed in SCI-E, July 2020
Ocean Engineering, Journal Indexed in SCI-E, March 2020
Ocean Engineering, Journal Indexed in SCI-E, January 2020
ADVANCES IN WATER RESOURCES, SCI Journal, March 2019
JOURNAL OF WATERWAY PORT COASTAL AND OCEAN ENGINEERING-ASCE, National Scientific Refreed Journal, November 2018
COASTAL ENGINEERING, SCI Journal, October 2018
COASTAL ENGINEERING, SCI Journal, May 2018
JOURNAL OF OFFSHORE MECHANICS AND ARCTIC ENGINEERING-TRANSACTIONS OF THE ASME, Journal Indexed in SCI-E, May 2018
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, Journal Indexed in SCI-E, March 2018
JOURNAL OF WATERWAY PORT COASTAL AND OCEAN ENGINEERING-ASCE, SCI Journal, January 2018
OCEAN ENGINEERING, SCI Journal, January 2018
COASTAL ENGINEERING, SCI Journal, January 2018
COASTAL ENGINEERING, SCI Journal, December 2017
ENGINEERING APPLICATIONS OF COMPUTATIONAL FLUID MECHANICS, Journal Indexed in SCI-E, September 2017
Journal Of Turbulence, Journal Indexed in SCI-E, March 2017
JOURNAL OF OFFSHORE MECHANICS AND ARCTIC ENGINEERING-TRANSACTIONS OF THE ASME, Journal Indexed in SCI-E, March 2017
Journal Of Waterway Port Coastal And Ocean Engineering-Asce, Journal Indexed in SCI-E, December 2016
JOURNAL OF OFFSHORE MECHANICS AND ARCTIC ENGINEERING-TRANSACTIONS OF THE ASME, SCI Journal, May 2016

Tasks In Event Organizations

Akpınar A., Inan A., Numanoğlu Genç A., Oğuz E., Özyurt Tarakcioğlu G., Baykal C., Arısoy Y., Kabdaşlı M. S., Çokgör Ş., Yüksek Ö., et al., 10th Coastal Engineering Symposium, Member of Scientific Committee, Scientific Congress, İzmir, Turkey, Kasım 2023

Metrics

Publication: 80
Citation (WoS): 360
Citation (Scopus): 493
H-Index (WoS): 8
H-Index (Scopus): 8

Research Areas

Civil Engineering, Coastal Sedimentation, Coastal Zone Management, Design of Coastal Structures, Coastal Engineering, Engineering and Technology