

## Prof. LALE BALAS

### Personal Information

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### International Researcher IDs

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ScopusID: 35616216700

Yoksis Researcher ID: 4950

### Education Information

Doctorate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, İnşaat Mühendisliği (Dr), Turkey 1992 - 1998

Postgraduate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, İnşaat Mühendisliği (YI) (Tezli), Turkey 1990 - 1992

Undergraduate, Middle East Technical University, Faculty Of Engineering, Department Of Civil Engineering, Turkey 1986 - 1990

### Foreign Languages

French, C1 Advanced

English, C1 Advanced

### Dissertations

Doctorate, Three dimensional numerical modelling of transport processes in coastal water bodies, Middle East Technical University, Analiz ve Fonksiyonlar Teorisi, İnşaat Mühendisliği (Dr), 1998

Postgraduate, İzmir Körfezi'nde Çevrintilerin ve Kirlilik Taşımının Üç Boyutlu Matematiksel Modellemesi, Middle East Technical University, Analiz ve Fonksiyonlar Teorisi, İnşaat Mühendisliği (YI) (Tezli), 1992

### Research Areas

Environmental Engineering, Marine Sciences and Technology, Civil Engineering, Engineering and Technology

### Academic Titles / Tasks

Professor, Gazi University, Mühendislik Fakültesi, İnşaat Mühendisliği, 2008 - Continues

Associate Professor, Gazi University, Mühendislik Fakültesi, İnşaat Mühendisliği, 2002 - 2007

Assistant Professor, Gazi University, Mühendislik Fakültesi, İnşaat Mühendisliği, 1999 - 2001

Research Assistant, Middle East Technical University, Faculty Of Engineering, Department Of Civil Engineering, 1990 - 1998

## Academic and Administrative Experience

Director of the Center, Gazi University, Mühendislik Fakültesi, İnşaat Mühendisliği, 2010 - Continues

Deputy Head of Department, Gazi University, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2000 - 2003

## Courses

Fluid Mechanics, Undergraduate, 2021 - 2022

## Advising Theses

Balas L., Yıldırım P., Wind and wave climate changes in coastal lagoons, Postgraduate, D.İBOŞ(Student), 2023

Balas L., Numerical modelling of harbor resonance, Doctorate, O.EĞRİBOYUN(Student), 2022

BALAS L., Typology Studies For Turkey Transitional And Coastal Waters, Postgraduate, E.ESER(Student), 2021

BALAS L., Wave climate of northern aegean coastline of Turkey: Empirical and numerical method comparisons, Postgraduate, O.AL(Student), 2019

BALAS L., A comparative study on the wave climate of Southern Aegean coastline of Turkey, Postgraduate, K.AL(Student), 2019

BALAS L., Meteorolojik parametrelerin deniz suyu seviyesi değişimlerine etkisi, Postgraduate, E.COŞKUN(Student), 2019

BALAS L., Gıs Based Electronic Atlas Of Wind And Wave Climate And Energy Potential On Turkish Coasts, Doctorate, T.Buyruk(Student), 2019

BALAS L., The Effect Of Meteorological Parameters On Sea Level Changes, Postgraduate, E.Coşkun(Student), 2019

BALAS L., Water Quality Modelling In Coastal Waters, Doctorate, K.CEBE(Student), 2016

BALAS L., Türkiye'de bütünleşik kıyı alanları yönetimi, Postgraduate, N.ÖZBAL(Student), 2015

BALAS L., Wave energy atlas for the bays of mediterranean sea, Postgraduate, A.SEVİNİR(Student), 2014

BALAS L., Near field dilution of hot and salt water, Postgraduate, G.ACAR(Student), 2014

BALAS L., Modeling of flushing time in coastal lagoons, Postgraduate, B.BİÇKİCİ(Student), 2011

BALAS L., Physical modelling of wave propagation, Postgraduate, İ.ATAK(Student), 2011

BALAS L., ANTALYA DENİZ DEŞARJI BÖLGESİ ÇEVİRİNTİ DÜZENİNİN BELİRLENMESİ, Postgraduate, M.ÇETİN(Student), 2010

BALAS L., Antalya deniz deşarji bölgesi çevrinti düzeninin belirlenmesi, Postgraduate, M.ÇETİN(Student), 2010

BALAS L., MODELING OF FAR FIELD DILUTION OF HOT WATER DISCHARGE, Postgraduate, İ.ÖZYÜREK(Student), 2009

BALAS L., İNAN A., Kıyısularda petrol kirliliği dağılımının sayısal modellenmesi, Postgraduate, O.AYDIN(Student), 2009

BALAS L., Genişletilmiş yumuşak eğim eşitliklerinin sayısal olarak modellenmesi, Doctorate, A.İNAN(Student), 2007

BALAS L., NUMERICAL MODELING OF WIND INDUCED STORM SURGE, Postgraduate, Y.BOZDEMİR(Student), 2007

BALAS L., Kıyı boyu sediment taşınımının modellenmesi, Postgraduate, M.ÜLGER(Student), 2006

BALAS L., Yoğunluk kaynaklı akıntılarının sayısal modellenmesi, Postgraduate, S.TUNABOYLU(Student), 2006

BALAS L., Kıyısularda askı maddesi taşınımının sayısal modellenmesi, Postgraduate, U.YEGÜL(Student), 2005

BALAS L., Dalga akıntılarının sayısal modellenmesi, Postgraduate, İ.YILDIZ(Student), 2005

BALAS L., Deniz deşarjında seyrelme modellenmesi, Postgraduate, M.KANBER(Student), 2005

BALAS L., Dalga tırmanmasının sayısal modellenmesi, Postgraduate, M.TEMİZ(Student), 2004

BALAS L., Kapalı su alanlarında su değişiminin modellenmesi, Postgraduate, A.KÜÇÜKOSMANOĞLU(Student), 2004

BALAS L., Akışkan çamur tabakasıyla yüzey dalgalarının etkileşiminin sayısal modellenmesi, Postgraduate, A.MEHMET(Student), 2003

BALAS L., Deniz deşarjında sayısal modelleme, Postgraduate, F.ÇAYIRTEPE(Student), 2002

BALAS L., Dalga ilerlemesinin sayısal model ile çözümlenmesi, Postgraduate, A.İNAN(Student), 2001

## Jury Memberships

Associate Professor Exam, Associate Professor Exam, Gazi University, March, 2022

Post Graduate, Post Graduate, Gazi Üniversitesi, June, 2021

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

- I. **Resonance modeling of the tsunami caused by the Aegean Sea Earthquake (Mw7.0) of October 30, 2020**  
Eğriboyun O., BALAS L.  
Journal of Computational Science, vol.82, 2024 (SCI-Expanded)
- II. **Effect of Diffracted Waves on Harbor Resonance**  
BALAS L., Eğriboyun O.  
Thalassas, vol.39, no.1, pp.243-261, 2023 (SCI-Expanded)
- III. **Mathematical modelling of oil spill weathering processes for contingency planning in Izmit Bay**  
Ulker D., BURAK Z. S., BALAS L., Caglar N.  
REGIONAL STUDIES IN MARINE SCIENCE, vol.50, 2022 (SCI-Expanded)
- IV. **Modeling of Dilutions of Heated Discharges in Iskenderun Bay**  
İnan A., Balas L.  
Fresenius Environmental Bulletin, vol.30, no.6, pp.7723-7734, 2021 (SCI-Expanded)
- V. **Transitional Waters Typology in Turkey: Melen Estuary Case Study**  
BALAS L., Genc A. N., Eser E.  
JOURNAL OF COASTAL RESEARCH, pp.18-22, 2020 (SCI-Expanded)
- VI. **MODELING OF NEAR-FIELD DILUTION OF BRINE DISCHARGES: A CASE STUDY IN SAMSUN BAY**  
İNAN A., BALAS L.  
FRESENIUS ENVIRONMENTAL BULLETIN, vol.29, pp.2725-2731, 2020 (SCI-Expanded)
- VII. **Modeling transport of microplastics in enclosed coastal waters: A case study in the Fethiye Inner Bay**  
Genc A. N., VURAL N., BALAS L.  
MARINE POLLUTION BULLETIN, vol.150, 2020 (SCI-Expanded)
- VIII. **Monitoring and evaluation of coastal water quality parameters in Fethiye Bay, Turkey**  
Yildirim P., BALAS L.  
Applied Ecology and Environmental Research, vol.17, no.5, pp.10421-10444, 2019 (SCI-Expanded)
- IX. **Monitoring and modeling land-based marine pollution**  
CEBE K., BALAS L.  
REGIONAL STUDIES IN MARINE SCIENCE, vol.24, pp.23-39, 2018 (SCI-Expanded)
- X. **Enclosed coastal waters quality monitoring with bacterial indicator phase-plane analysis**  
HAPOĞLU H., CAMCIOĞLU Ş., ÖZYURT B., YILDIRIM P., Yilmaz N., BALAS L.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.33, no.4, pp.1419-1431, 2018 (SCI-Expanded)
- XI. **Water quality modelling in kas bay**  
Cebe K., BALAS L.  
APPLIED MATHEMATICAL MODELLING, vol.40, no.3, pp.1887-1913, 2016 (SCI-Expanded)
- XII. **Coastal erosion problem, modelling and protection**  
Yilmaz N., BALAS L., İNAN A.  
OCEAN SCIENCE JOURNAL, vol.50, no.3, pp.589-601, 2015 (SCI-Expanded)

- XIII. **Modelling of Dilution of Thermal Discharges in Enclosed Coastal Waters**  
BALAS L., İNAN A., Genc A. N.  
RESEARCH JOURNAL OF CHEMISTRY AND ENVIRONMENT, vol.17, no.10, pp.82-89, 2013 (SCI-Expanded)
- XIV. **A FINITE DIFFERENCE APPROACH FOR EXTENDED MILD SLOPE EQUATION**  
İNAN A., BALAS L.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.28, no.2, pp.401-408, 2013 (SCI-Expanded)
- XV. **Modeling of Erosion at Goksu Coasts**  
Genc A. N., İNAN A., Yilmaz N., BALAS L.  
JOURNAL OF COASTAL RESEARCH, pp.2155-2160, 2013 (SCI-Expanded)
- XVI. **Modelling of sediment transport of Akyaka Beach**  
BALAS L., Inan A., Yilmaz E.  
JOURNAL OF COASTAL RESEARCH, pp.460-463, 2011 (SCI-Expanded)
- XVII. **3-D numerical modelling of transport processes in Bay of Fethiye, Turkey**  
Balas L., Kuecukosmanoglu A.  
JOURNAL OF COASTAL RESEARCH, pp.1529-1532, 2006 (SCI-Expanded)
- XVIII. **Numerical modelling of coastal currents**  
BALAS L., Inan A., Yildiz I.  
COMPUTATIONAL SCIENCE AND ITS APPLICATIONS - ICCSA 2006, PT 1, vol.3980, pp.547-555, 2006 (SCI-Expanded)
- XIX. **Closure to "predictions of missing wave data by recurrent neuronets" by Can Elmar Balas, Levent Koc, and Lale Balas**  
Balas C. E., Koc L., Balas L.  
JOURNAL OF WATERWAY PORT COASTAL AND OCEAN ENGINEERING, vol.132, no.1, pp.72-74, 2006 (SCI-Expanded)
- XX. **3-D numerical modelling of coastal currents and suspended sediment transport**  
BALAS L., Kucukosmanoglu A., Yegul U.  
COMPUTATIONAL SCIENCE - ICCS 2006, PT 1, PROCEEDINGS, vol.3991, pp.814-817, 2006 (SCI-Expanded)
- XXI. **Discussion: Risk assessment of revetments by Monte Carlo simulation**  
BALAS C. E., Balas L., Williams A.  
Proceedings of the Institution of Civil Engineers: Maritime Engineering, vol.159, no.2, pp.81-84, 2006 (SCI-Expanded)
- XXII. **Modelling of interaction between surface waves and mud layer**  
BALAS L.  
COMPUTATIONAL SCIENCE - ICCS 2004, PT 2, PROCEEDINGS, vol.3037, pp.618-621, 2004 (SCI-Expanded)
- XXIII. **Risk assessment of revetments by Monte Carlo simulation**  
Balas C. E., Balas L., Williams A.  
Proceedings of the Institution of Civil Engineers: Maritime Engineering, vol.157, no.2, pp.61-70, 2004 (SCI-Expanded)
- XXIV. **Predictions of missing wave data by recurrent neuronets**  
Balas C. E., Koc L., Balas L.  
Journal of Waterway, Port, Coastal and Ocean Engineering, vol.130, no.5, pp.256-265, 2004 (SCI-Expanded)
- XXV. **A baroclinic three dimensional numerical model applied to coastal Lagoons**  
BALAS L., Ozhan E.  
COMPUTATIONAL SCIENCE - ICCS 2003, PT II, PROCEEDINGS, vol.2658, pp.205-212, 2003 (SCI-Expanded)
- XXVI. **Simulation of water exchange in enclosed water bodies**  
Ozhan E., BALAS L.  
COMPUTATIONAL SCIENCE - ICCS 2003, PT II, PROCEEDINGS, vol.2658, pp.195-204, 2003 (SCI-Expanded)
- XXVII. **Applications of a numerical model to wave propagation on mild slopes**  
Inan A., BALAS L.  
China Ocean Engineering, vol.16, no.4, pp.569-576, 2002 (SCI-Expanded)

- XXVIII. **A Numerical Model of Wave Propagation on Mild Slopes**  
BALAS L., İNAN A.  
JOURNAL OF COASTAL RESEARCH, pp.16-21, 2002 (SCI-Expanded)
- XXIX. **Risk assessment of some revetments in southwest Wales, United Kingdom**  
Balas C. E., Balas L.  
Journal of Waterway, Port, Coastal and Ocean Engineering, vol.128, no.5, pp.216-223, 2002 (SCI-Expanded)
- XXX. **Three-dimensional modelling of stratified coastal waters**  
BALAS L., Ozhan E.  
ESTUARINE COASTAL AND SHELF SCIENCE, vol.54, no.1, pp.75-87, 2002 (SCI-Expanded)
- XXXI. **Applications of a 3-D numerical model to circulation in coastal waters**  
BALAS L., Ozhan E.  
COASTAL ENGINEERING JOURNAL, vol.43, no.2, pp.99-120, 2001 (SCI-Expanded)
- XXXII. **Simulation of pollutant transport in Marmaris Bay**  
BALAS L.  
CHINA OCEAN ENGINEERING, vol.15, no.4, pp.565-578, 2001 (SCI-Expanded)
- XXXIII. **An implicit three-dimensional numerical model to simulate transport processes in coastal water bodies**  
BALAS L., Ozhan E.  
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS, vol.34, no.4, pp.307-339, 2000 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Numerical Modelling of Harbor Agitation**  
Eğriboyun O., Balas L.  
Uluslararası Mühendislik Araştırma ve Geliştirme Dergisi, vol.16, no.2, pp.630-645, 2024 (Peer-Reviewed Journal)
- II. **Discrete-time dynamic water quality index model in coastal water**  
Hapoglu H., Camcioglu S., Ozyurt B., Yildirim P., Balas L.  
GLOBAL JOURNAL OF ENVIRONMENTAL SCIENCE AND MANAGEMENT-GJESM, vol.7, no.2, pp.197-210, 2021 (ESCI)
- III. **Hydrodynamic Modelling Using HİDROTÜRK Model**  
Balas L., Cebe K.  
Turkish Journal of Water Science and Management, vol.5, no.1, pp.80-107, 2021 (Peer-Reviewed Journal)
- IV. **NUMERICAL MODELING OF NEAR AND FAR FIELD DILUTION: EDREMIT SEA OUTFALL**  
BALAS L., YILMAZ N.  
INTERNATIONAL JOURNAL OF ADVANCES IN MECHANICAL AND CIVIL ENGINEERING, vol.5, no.3, pp.41-54, 2018 (Peer-Reviewed Journal)
- V. **The Need for the Integration of Land Use Planning and Water Quality Modeling in the Case of Fethiye Bay**  
Yilmaz N., Cebe K., Fidanoglu Yildirim P., İNAN A., BALAS L.  
JOURNAL OF POLYTECHNIC-POLITEKNİK DERGISI, vol.20, no.2, pp.427-435, 2017 (ESCI)
- VI. **Kara Kullanımı Etkileşimli Su Kalitesi Modellemesine Gereksinim:Fethiye Körfezi Örneği**  
YILMAZ N., CEBE K., YILDIRIM P., İNAN A., BALAS L.  
Politeknik Dergisi, vol.20, no.2, pp.427-432, 2017 (Peer-Reviewed Journal)
- VII. **Liman yapılarının tasarımı için dalga tahmini**  
BALAS L., NUMANOĞLU GENÇ A., İNAN A.  
Dokuz Eylül Üniversitesi Denizcilik Fakültesi Dergisi, vol.5, no.3, pp.19-35, 2014 (Peer-Reviewed Journal)
- VIII. **Modeling of Induced Circulation**  
BALAS L., İNAN A.  
WSEAS Transactions on Fluid Mechanics, vol.5, no.3, pp.132-143, 2010 (Scopus)
- IX. **Modelling of Marina Forced Flushing**

BALAS L., İNAN A.

WATER AND GEOSCIENCE, pp.78-83, 2010 (Peer-Reviewed Journal)

- X. **An Application of 2D Oil Spill Model to Mersin Coast**  
İNAN A., BALAS L.  
WSEAS Transactions on Environment and Development, vol.6, no.5, pp.345-354, 2010 (Scopus)
- XI. **Mild Slope Equations in Wave Propagation Modelling**  
İnan A., Balas L.  
MEDCOAST 09: NINTH INTERNATIONAL CONFERENCE ON THE MEDITERRANEAN COASTAL ENVIRONMENT, VOLS 1 AND 2, vol.1, pp.733-741, 2009 (Conference Book)
- XII. **Measurements and numerical modeling of wind driven circulation and pollutant transport**  
İNAN A., BALAS L., ÇETİN M.  
WSEAS Transactions on Environment and Development, vol.5, no.10, pp.619-629, 2009 (Scopus)
- XIII. **Numerical modeling of extended mild slope equation with modified mac cormack method**  
İNAN A., BALAS L.  
WSEAS Transactions on Fluid Mechanics, vol.4, no.1, pp.14-23, 2009 (Scopus)
- XIV. **Numerical modeling of mild slope equation with finite volume method**  
İNAN A., BALAS L.  
WSEAS Transactions on Mathematics, vol.7, no.5, pp.234-243, 2008 (Scopus)
- XV. **A Moving Boundary Wave Run-Up Model**  
İNAN A., BALAS L.  
lecture notes in computer science, vol.4487, pp.38-45, 2007 (Peer-Reviewed Journal)
- XVI. **A composite finite element-finite difference model applied to turbulence modelling**  
BALAS L., İNAN A.  
lecture notes in computer science, pp.1-8, 2007 (Peer-Reviewed Journal)
- XVII. **A nonlinear wave propagation model**  
İNAN A., BALAS L.  
WSEAS Transactions on Mathematics, vol.5, no.7, pp.806-810, 2006 (ESCI)
- XVIII. **Three dimensional numerical modelling of circulation in coastal lagoons**  
BALAS L.  
Teknik Dergi/Technical Journal of Turkish Chamber of Civil Engineers, vol.13, no.DECEMBER, pp.813-830, 2002 (Scopus)
- XIX. **Three dimensional numerical modelling of circulation in coastal lagoons Kiyi Lagünlerindeki Çevrintilerin Üç Boyutlu Sayısal Modelle İncelenmesi**  
BALAS L.  
Teknik Dergi/Technical Journal of Turkish Chamber of Civil Engineers, vol.13, no.3, pp.2691-2708, 2002 (Scopus)
- XX. **Dynamic simulation of packed distillation columns using orthogonal collocation on finite elements**  
HAPOĞLU H., BALAS L.  
International Journal of Modelling and Simulation, vol.19, no.1, pp.101-110, 1999 (Scopus)
- XXI. **Generalized minimum variance (GMV) control of packed distillation columns**  
HAPOĞLU H., BALAS L., Wardle A.  
Turkish Journal of Engineering & Environmental Sciences, vol.19, no.5, pp.391-398, 1995 (Scopus)
- XXII. **Numerical modeling of refraction and diffraction**  
BALAS L.  
COASTAL ENGINEERING V: COMPUTER MODELLING OF SEAS AND COASTAL REGIONS, vol.6, pp.185-194, 1900 (Peer-Reviewed Journal)
- XXIII. **Modelling of Oil Spill**  
BALAS L.  
MEDCOAST 09: NINTH INTERNATIONAL CONFERENCE ON THE MEDITERRANEAN COASTAL ENVIRONMENT, VOLS 1 AND 2, pp.875-886, 1900 (Peer-Reviewed Journal)
- XXIV. **Numerical modelling of wave induced circulation**  
BALAS L.

Advances in Computational Methods in Sciences and Engineering 2005, Vols4 A & 4 B, vol.44, pp.602-605, 1900  
(Peer-Reviewed Journal)

**XXV. Wind Driven Currents and Pollution Distributions around Sea Outfall inAntalya Bay**

BALAS L.

MN'09: PROCEEDINGS OF THE 2ND INTERNATIONAL CONFERENCE ON MARITIME ANDNAVAL SCIENCE AND  
ENGINEERING, pp.25-30, 1900 (Peer-Reviewed Journal)

**XXVI. 3D Modelling of Density Induced Coastal Currents**

BALAS L.

MEDCOAST 07: EIGHTH INTERNATIONAL CONFERENCE ON THE MEDITERRANEANCOASTAL ENVIRONMENT,  
VOLS 1 AND 2, pp.1253-1262, 1900 (Peer-Reviewed Journal)

**XXVII. Numerical Modelling of Oil Spill**

BALAS L.

PROCEEDINGS OF THE 5TH IASME/WSEAS INT CONF ON WATER RESOURCES,HYDRAULICS &  
HYDROLOGY/PROCEEDINGS OF THE 4TH IASME/WSEAS INT CONF ONGEOLOGY AND SEISMOLOGY: WATER AND  
GEOSCIENCE, pp.62-67, 1900 (Peer-Reviewed Journal)

### **Refereed Congress / Symposium Publications in Proceedings**

- I. **Göksu Deltası Kıyı Boyu Sediman Taşınımının Modellenmesi**  
YILMAZ N., NUMANOĞLU GENÇ A., İNAN A., BALAS L.  
Türkiye'xxnin Kıyı ve Deniz Alanları VIII. Ulusal Konferansı, ANTAKYA, Turkey, 14 - 17 November 2012, vol.2,  
pp.1053-1060
- II. **HYDROTAM-3D Sayısal Modeli ile Türkiye'de Dalga İklimi Çalışmaları**  
NUMANOĞLU GENÇ A., YILMAZ N., İNAN A., BALAS L.  
Türkiye'xxnin Kıyı ve Deniz Alanları VIII. Ulusal Konferansı, ANTAKYA, Turkey, 14 - 17 November 2012, vol.2,  
pp.925-936
- III. **HYDROTAM: 3D model for hydrodynamic and transport processes in coastal waters**  
BALAS L., NUMANOĞLU GENÇ A., İNAN A.  
iEMSs 2012 - Managing Resources of a Limited Planet: Proceedings of the 6th Biennial Meeting of the International  
Environmental Modelling and Software Society, Leipzig, Germany, 1 - 05 July 2012
- IV. **A sustainable method of effluent disposal: Case study of Antalya Sea Outfall-Turkey**  
MUHAMMETOĞLU A., Yalçın O., Ozcan T., BALAS L., BALAS C. E.  
2011 35th WEDC International Conference - The Future of Water, Sanitation and Hygiene in Low-Income  
Countries: Innovation, Adaptation and Engagement in a Changing World, Loughborough, England, 6 - 08 July 2011
- V. **HYDROTAM: A Coastal Engineering Model Based on Cloud Computing**  
BALAS L., Cebe K., Akay N.  
10th International Conference on the Mediterranean Coastal Environment, Rhodes, Greece, 25 - 29 October 2011,  
pp.663-664
- VI. **Modelling of Marina Forced Flushing**  
BALAS L., İNAN A.  
5th IASME/WSEAS International Conference on Water Resources, Hydraulics and Hydrology/4th IASME/WSEAS  
International Conference on Geology and Seismology, Cambridge, Canada, 23 - 25 February 2010, pp.78-79
- VII. **Numerical Modelling of Oil Spill**  
İNAN A., BALAS L.  
5th IASME/WSEAS International Conference on Water Resources, Hydraulics and Hydrology/4th IASME/WSEAS  
International Conference on Geology and Seismology, Cambridge, Canada, 23 - 25 February 2010, pp.62-63
- VIII. **İnşaat Mühendisliği Eğitiminde Sürdürülebilir Gelişim Kavramı**  
BALAS L.  
İnşaat Mühendisliği Eğitimi Sempozyumu, Antalya, Turkey, 12 - 18 November 2009
- IX. **Modeling of Oil Spill**

AYDIN O., İNAN A., BALAS L.

9th International Conference on the Mediterranean Coastal Environment (MEDCOAST 09), Sochi, Russia, 10 - 14 November 2009, pp.875-886

- X. **Mild Slope Equations in Wave Propagation Modelling**  
İNAN A., BALAS L.  
9th International Conference on the Mediterranean Coastal Environment, Sochi, Russia, 10 - 14 November 2009, pp.733-737
- XI. **Wind Driven Currents and Pollution Distributions around Sea Outfall in Antalya Bay**  
İNAN A., BALAS L., Cetin M.  
2nd International Conference on Maritime and Naval Science and Engineering (MN '09), Brasov, Romania, 24 - 26 September 2009, pp.25-30
- XII. **Numerical Modeling of Extended Mild Slope Equation with Mac Cormack Method**  
İNAN A., BALAS L.  
4th IASME/WSEAS International Conference on Water Resources, Hydraulics and Hydrology, Cambridge, Canada, 24 - 26 February 2009, pp.195-196
- XIII. **Modelling of Oil Spill**  
Aydin O., İnan A., Balas L.  
9th International Conference on the Mediterranean Coastal Environment, Sochi, Russia, 10 - 14 November 2009, pp.875-877
- XIV. **Wave Transformation Simulation: A Case Study Mersin Bay**  
İNAN A., BALAS L.  
8th International Congress on Advances in Civil Engineering, (ACE08), FAMAGUSTA, Cyprus (Kktc), 15 - 17 September 2008, vol.1, pp.351-358
- XV. **Parabolik Dalga İlerlemesi Sayısal Modelinin İzmit Kıyısına Uygulanması**  
İNAN A., BALAS L.  
Türkiye'xxnin Kıyı ve Deniz Alanları VII. Ulusal Konferansı, Ankara, Turkey, 27 - 30 May 2008, vol.2, pp.891-898
- XVI. **Numerical modeling of extended mild slope equation with finite volume method**  
İNAN A., BALAS L.  
Applied Computing Conference 2008, İstanbul, Turkey, 27 - 30 May 2008, pp.222-224
- XVII. **Longshore Sediment Transport Modelling: An Application Ordu**  
İNAN A., ÜLGER M., BALAS L.  
8th International Conference on the Mediterranean Coastal Environment (MEDCOAST 07), İSKENDERİYE, Egypt, 13 - 17 November 2007, vol.2, pp.1075-1084
- XVIII. **A composite finite element-finite difference model applied to turbulence modelling**  
BALAS L., İNAN A.  
7th International Conference on Computational Science (ICCS 2007), Beijing, China, 27 - 30 May 2007, vol.4487, pp.1-2
- XIX. **A moving boundary wave run-up model**  
İNAN A., BALAS L.  
7th International Conference on Computational Science (ICCS 2007), Beijing, China, 27 - 30 May 2007, vol.4487, pp.38-39
- XX. **3D Modelling of Density Induced Coastal Currents**  
BALAS L., Tunaboğlu S.  
8th International Conference on the Mediterranean Coastal Environment, Alexandria, Canada, 13 - 17 November 2007, pp.1253-1262
- XXI. **'xxonlu Hacim Yöntemi ile Dalga İlerlemesinin Sayısal Modellenmesi**  
İNAN A., BALAS L.  
Türkiye'xxnin Kıyı ve Deniz Alanları VI. Ulusal Konferansı, Muğla, Turkey, 7 - 11 November 2006, vol.2, pp.759-766
- XXII. **Numerical modelling of coastal currents**  
BALAS L., İNAN A., Yıldız I.  
ICCSA 2006: International Conference on Computational Science and Its Applications, Glasgow, England, 8 - 11 May



- 2006, vol.3980 LNCS, pp.547-555
- XXIII. **3-D numerical modelling of coastal currents and suspended sediment transport**  
BALAS L., Küçükosmanoğlu A., Yegül U.  
ICCS 2006: 6th International Conference on Computational Science, Reading, England, 28 - 31 May 2006, vol.3991 LNCS - I, pp.814-817
- XXIV. **An Efficient Numerical Scheme to Simulate Wave Induced Circulation**  
YILDIZ İ., İNAN A., BALAS L.  
7th International Conference on the Mediterranean Coastal Environment (MEDCOAST 05), KUŞADASI, Turkey, 25 - 29 October 2005, vol.2, pp.1215-1124
- XXV. **A Wave Propagation Model with Parabolic Equation**  
İNAN A., BALAS L.  
7th International Conference on the Mediterranean Coastal Environment (MEDCOAST 05), 25 - 29 October 2005, vol.2, pp.1199-1206
- XXVI. **Numerical Modelling of Wave Induced Circulation'xx'xx**  
YILDIZ İ., İNAN A., BALAS L.  
the Advances in Computational Methods in Sciences and Engineering 2005 (ICCMSE 2005), CORINTH, Greece, 21 - 26 October 2005, vol.4, pp.602-605
- XXVII. **Three Dimensional Modelling of Turbulence'xx'xx**  
BALAS L., İNAN A.  
the Advances in Computational Methods in Sciences and Engineering 2005 (ICCMSE 2005), CORINTH, Greece, 21 - 26 October 2005, vol.4, pp.48-51
- XXVIII. **Numerical modelling of wave induced circulation**  
Yildiz I., Inan A., Balas L.  
International Conference on Computational Methods in Sciences and Engineering (ICCMSE 2005), Corinth, Greece, 21 - 26 October 2005, vol.4A-4B, pp.602-605
- XXIX. **Three dimensional modelling of turbulence**  
Balas L., Inan A.  
International Conference on Computational Methods in Sciences and Engineering (ICCMSE 2005), Corinth, Greece, 21 - 26 October 2005, vol.4A-4B, pp.48-51
- XXX. **Economic analysis of ports by artificial intelligence**  
BALAS C. E., BALAS L., KOÇ M. L., Küçükosmanoglu A.  
7th International Conference on the Mediterranean Coastal Environment, MEDCOAST 2005, Kusadasi, Turkey, 25 - 29 October 2005, vol.1, pp.187-194
- XXXI. **Uzun Dalga Tırmanmasının Benzeştirilmesi'**  
İNAN A., TEMİZ M., BALAS L.  
Türkiye'xxnin Kıyı ve Deniz Alanları V. Ulusal Konferansı, Adana, Turkey, 4 - 07 May 2004, pp.891-898
- XXXII. **A Wave Propagation Model for Irregular Shaped Water Bodies**  
BALAS L., İNAN A.  
6th International Conference on the Mediterranean Coastal Environment (MEDCOAST 03), Ravenna, Italy, 7 - 11 October 2003, vol.3, pp.1975-1982
- XXXIII. **Bir Dalga İlerlemesi Modeli ve Belceğiz Kıyı Alanına Uygulanması**  
İNAN A., BALAS L.  
Türkiye'xxnin Kıyı ve Deniz Alanları IV. Ulusal Konferansı, İzmir, Turkey, 5 - 07 November 2002, vol.1, pp.1141-1150
- XXXIV. **Uzun Dalgaların Tırmanmasının Benzeştirilmesi**  
BALAS L., İNAN A.  
IV. Ulusal Kıyı Mühendisliği Sempozyumu, Antalya, Turkey, 24 - 27 October 2002, pp.121-132
- XXXV. **Yumuşak Eğim Eşitliklerinin Sayısal Yöntemle Çözülmesi**  
BALAS L., İNAN A.  
Türkiye İnşaat Mühendisliği XVI. Teknik Kongre ve Sergisi, Ankara, Turkey, 1 - 03 November 2001
- XXXVI. **Numerical Modelling of Mild Slope Equations**

- BALAS L., İNAN A.  
5th International Conference on the Mediterranean Coastal Environment (MEDCOAST 01), HAMMAMET, Tunisia,  
23 - 27 October 2001, vol.3, pp.1223-1234
- XXXVII. **Water Exchange at Göksu Lagoon**  
İNAN A., TUNCER Ö. F., BALAS C. E., BALAS L.  
5th International Conference on the Mediterranean Coastal Environment (MEDCOAST 01), HAMMAMET, Tunisia,  
23 - 27 October 2001, vol.3, pp.1111-1120
- XXXVIII. **Üç Boyutlu Taşınım Modellerinde Kullanılan Türbülans Modelleri**  
BALAS L., İNAN A.  
Türkiye'xxnin Kıyı ve Deniz Alanları III. Ulusal Konferansı (Türkiye Kıyıları 01), İstanbul, Turkey, 26 - 29 June 2001,  
pp.537-545
- XXXIX. **Numerical modeling of refraction and diffraction**  
BALAS L., Inan A.  
5th International Conference on Computer Modelling of Seas and Coastal Regions (CE 2001), RHODES, Greece, 01  
September 2001, vol.6, pp.185-194
- XL. **Three dimensional numerical modelling of the Marmaris Bay**  
BALAS L., Ozhan E.  
10th International Offshore and Polar Engineering Conference (ISOPE-2000), Washington, United States Of  
America, 28 May - 02 June 2000, pp.547-551
- XLI. **Three dimensional modelling of transport processes in stratified coastal waters**  
BALAS L., Ozhan E.  
3rd International Conference on Hydroinformatics, COPENHAGEN, Denmark, 24 - 26 August 1998, pp.97-104
- XLII. **Fully implicit finite difference model of two dimensional solute transport in groundwater**  
Hapoglu H., Balas L., Balas C. E.  
1996 IChemE Research Event - 2nd European Conference for Young Researchers in Chemical Engineering, Leeds,  
England, 2 - 03 April 1996, pp.615-617

## Supported Projects

- İnan A., Balas L., Yıldırım P., TUBİTAK Project, Nehir Ağzi Sularinin Hidrodinamik Modellenmesi, 2019 - 2021
- Balas L., Balas C. E., Günal A. Ç., Yücel Işıldar A. G., İnan A., Yıldırım P., Project Supported by Other Official Institutions, Beyşehir Gölü Siğ Sismik Ölçümleri ile Batimetrik Harita Alımı, Göl suyu Kalitesinin Belirlenmesi, Göl Dibi Tarama Malzemesinin Temizlenmesi ve Hayalet Balıkçılık Ağlarının Tespitine İlişkin Fizibilite Projesi, 2019 - 2020
- Balas L., Numanoğlu Genç A., Vural N., TUBİTAK Project, Mikroplastiklerin Taşınım Modellemesi Ve Fethiye Körfezi Uygulaması, 2019 - 2019
- Yıldırım P., Balas L., İnan A., Municipality, Turgutreis İleri Atıksu Arıtma Tesisi Deniz Deşarjı, Kentsel Atıksu Arıtma Tesisi Deniz Deşarjı Projesi için Yapım İhalesinde Kullanılmak Üzere Modelleme” ,”Marmaris İleri Atıksu Arıtma Tesisi Deniz Deşarjı, Kentsel Atıksu Arıtma Tesisi Deniz “Deşarjı Projesi için Yapım İhalesinde Kullanılmak Üzere Modelleme” Ölüdeniz İleri Atıksu Arıtma Tesisi Deniz Deşarjı, Kentsel Atıksu Arıtma Tesisi Deniz Deşarjı Projesi için Yapım İhalesinde Kullanılmak Üzere Modelleme, 2016 - 2017
- Yıldırım P., Balas L., Günal A. Ç., TUBİTAK Project, Kıyusal Sularda Su Kalitesi Parametrelerinin İzlenmesi ve Değerlendirilmesi TUBİTAK 115Y468, 2015 - 2017
- İNAN A., BALAS L., TUBİTAK Project, Tuzlu ve veya sıcak su deniz deşarjları yakın alan dağılımının modellenmesi, 2015 - 2017
- YILDIRIM P., BALAS C. E., İNAN A., BALAS L., Project Supported by Higher Education Institutions, HİDROKİNERJİ TÜRBİNLERİ İLE TÜRK BOĞAZLARINDA ENERJİ ÜRETİMİ, 2011 - 2017
- Balas C. E., Balas L., Project Supported by Other Official Institutions, Kıyı Geçiş Suları Modellemesi: Samsun(Kıyı) ve İzmir İç Körfezi Su Kütlelerinin İzlenmesi ve Modellenmesi, 2015 - 2016
- Balas C. E., İnan A., Balas L., Project Supported by Higher Education Institutions, Kıyı Geçiş Suları Modellemesi, 2015 - 2016

Balas L., İnan A., Yıldırım P., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, Kaş Deniz ve Kıyı Alanları Koruma Geliştirme ve Yönetim Projesi, 2013 - 2014

BALAS L., Project Supported by Higher Education Institutions, Fethiye Körfezinde dalga ilerlemesinin ve akıntı düzeninin belirlenmesi ve modellenmesi, 2005 - 2006

BALAS L., Project Supported by Higher Education Institutions, Üç Boyutlu Sayısal Model HİDROTAM-3 ün Fethiye Körfezine Uygulanması, 2003 - 2004

BALAS L., Project Supported by Higher Education Institutions, Göksu Lagünü hidrodinamiği , tuzluluk, su sıcaklığı dağılımlarının ve kirlenmesinin üç boyutlu matematiksel modellenmesi, 2001 - 2002

## Activities in Scientific Journals

International Journal of Environment and Geoinformatics, Publication Committee Member, 2014 - Continues

## Memberships / Tasks in Scientific Organizations

1. Su Şurası - Su Kaynaklarının Yönetiminde Karar Destek Sistemleri Çalışma Grubu , Principal Member, 2021 - 2021, Turkey

## Scientific Refereeing

MARINE POLLUTION BULLETIN, SCI Journal, September 2021

Turkish Journal of Water Science and Management, National Scientific Refreed Journal, May 2021

## Tasks In Event Organizations

Balas L., Su Kaynakları ve Kirlilik Yönetimi Eğitimi, Social Activities, Ankara, Turkey, Kasım 2023

Balas L., İnan A., Yıldırım P., Yücel Işıldar A. G., Günel A. Ç., Dünya'da ve Türkiye'de Gözlenen ve Öngörülen İklim Değişikliği, Social Activities, Turkey, Ekim 2022

Balas L., İnan A., Yıldırım P., Yücel Işıldar A. G., Günel A. Ç., Coastal Management Software to support decision-making, Social Activities, Ankara, Turkey, Mayıs 2022

Balas L., İnan A., Yıldırım P., Yücel Işıldar A. G., Günel A. Ç., TÜRKİYE'NİN SINIRAŞAN SULARI VE POLİTİKALARI, Social Activities, Turkey, Nisan 2022

Balas L., Seminer: Radar Altimeter wind and Wave Measurements, Social Activities, Ankara, Turkey, Aralık 2021

Balas L., İstanbul'da Su Yönetimi: Darboğazlar ve Çözüm Önerilerinin Değerlendirilmesi, Social Activities, Ankara, Turkey, Aralık 2021

Balas L., 1.Su Şurası Su Kaynaklarının Yönetiminde Karar Destek Sistemleri Çalışma Grubu 1. Toplantısı, Scientific Congress, Ankara, Turkey, Mayıs 2021

Balas L., İklim Değişikliğinin Su Kaynaklarına ve Kıyı Alanlarına Etkisi, Social Activities, Ankara, Turkey, Nisan 2021

Balas L., Su Kaynaklarının Sürdürülebilir Yönetim, Social Activities, Ankara, Turkey, Mart 2021

## Metrics

Publication: 123

Citation (WoS): 337

Citation (Scopus): 376

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H-Index (Scopus): 12

## **Congress and Symposium Activities**

Kaş Çevre Sorunları Panaeli, Invited Speaker, Antalya, Turkey, 2024

9th International Zeugma Conference on Scientific Research, Session Moderator, Gaziantep, Turkey, 2023

International Coastal Symposium 2021, Attendee, Sevilla, Spain, 2021

## **Invited Talks**

Coastal Pollution Modelling Studies, Seminar, Ege Üniversitesi, Turkey, March 2022

Su Kaynakları Yönetiminde Modelleme Çalışmaları, Seminar, Bursa Uludağ Üniversitesi, Turkey, December 2021

## **Scholarships**

NATO-B1 Doktora Sonrası Araştırma Bursu, TÜBİTAK, 2000 - 2000

Jeofiziksel Akışkanlar Dinamiği Bursu, United Nations, 1996 - 1996

Uluslararası Hidrolik Mühendisliği, Kıyı Haliç ve Liman Mühendisliği Araştırmaları, Official Institutions of Foreign Countries, 1994 - 1995

Hidrodinamik Modelleme, Other International Organizations, 1994 - 1994

Uluslararası Kıyı Alanları Yönetimi , United Nations, 1992 - 1992

## **Representation and Promotion Activities**

Institutional Representation, Tarım ve Orman Bakanlığı, Turkey, Ankara, 2021 - 2021

Institutional Representation, TARIM VE ORMAN BAKANLIĞI Su Yönetimi Genel Müdürlüğü, Turkey, Ankara, 2021 - 2021