

# **Prof. BETTİNA ANDREA FACH SALİHOĞLU**

## **Personal Information**

**Office Phone:** [+90 324 521 2406](tel:+903245212406) Extension: 1211

**Email:** bettina@metu.edu.tr

**Web:** <https://avesis.metu.edu.tr/bettina>

## **International Researcher IDs**

ScholarID: vg9bkTAAAAAJ

ORCID: 0000-0003-4688-1918

Publons / Web Of Science ResearcherID: B-6003-2016

ScopusID: 6506241625

Yoksis Researcher ID: 163519

## **Education Information**

Doctorate, Old Dominion University, Oşinografi, United States Of America 1996 - 2003

Postgraduate, Fachhochschule Wilhelmshaven, Precision Engineering, Precision Engineering, Germany 1991 - 1996

## **Foreign Languages**

English, C2 Mastery

German, C2 Mastery

## **Dissertations**

Doctorate, Modeling studies of Antarctic krill (*Euphausia superba*) survival during transport across the Scotia Sea and environs., Old Dominion University, Oşinografi, 2003

Postgraduate, Development of wind conditions in the German Bight since 1965 as an important environmental influence on the coastal area, Middle East Technical University, Precision Engineering, Environmental Engineering, 1996

## **Research Areas**

Marine Sciences and Technology, Oceanography, Physical Oceanography, Ocean Observation Systems, Ocean Modeling and Forecasting, Engineering and Technology

## **Academic Titles / Tasks**

Professor, Middle East Technical University, Institute of Marine Sciences, Oceanography, 2022 - Continues

Associate Professor, Middle East Technical University, Institute of Marine Sciences, Oceanography, 2015 - 2022

Assistant Professor, Middle East Technical University, Institute of Marine Sciences, Oceanography, 2009 - 2015

## Courses

INTRODUCTION TO PHYSICAL OCEANOGRAPHY, Postgraduate, 2020 - 2021, 2018 - 2019

INTRODUCTION TO OCEANOGRAPHY, Postgraduate, 2019 - 2020, 2018 - 2019

STRUCTURE AND FUNCTION OF MARINE ECOSYSTEMS, Postgraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018

## Advising Theses

FACH SALİHOĞLU B. A., THE MISSING LINK: PELAGIC PREY FIELD PREDICTION FOR SOUTHERN OCEAN PREDATORS, Doctorate, D.Green(Student), 2022

Fach Salihoglu B. A., INVESTIGATING THE RELATIVE IMPORTANCE OF MESOSCALE PHYSICAL PROCESSES FOR VERTICAL AND HORIZONTAL TRANSPORT IN THE BLACK SEA WITH THE IMPLEMENTATION OF A HIGH-RESOLUTION CIRCULATION MODEL , Doctorate, E.Sadighrad(Student), 2019

Fach Salihoglu B. A., INVESTIGATING PELAGIC FISH LARVAL DISPERSAL AND CONNECTIVITY IN THE BLACK SEA USING LAGRANGIAN DRIFTER MODELING., Postgraduate, B.Cağdaş(Student), 2019

FACH SALİHOĞLU B. A., SALİHOĞLU B., Estimating the effect of krill on the southern ocean ecosystem functioning, Postgraduate, O.KARAKUŞ(Student), 2018

Fach Salihoglu B. A., Modeling the impact of climate variability on anchovy overwintering migration in the Black Sea., Doctorate, C.Guraslan(Student), 2016

Fach Salihoglu B. A., Seasonal to decadal variability in the physical and biological properties of the Black Sea and Levantine Basin as inferred from satellite remote sensing. , Doctorate, A.Akpınar(Student), 2016

Fach Salihoglu B. A., Numerical simulations of eutrophication processes in Izmir Bay with a coupled three-dimensional eco-hydrodynamic model. , Postgraduate, O.Yelekci(Student), 2013

Fach Salihoglu B. A., The impact of climate variability on the production of Black Sea anchovy: a modeling study., Postgraduate, C.Guraslan(Student), 2010

Fach Salihoglu B. A., Physical characteristics of the Black Sea inferred from Argo profiling data., Postgraduate, A.Akpınar(Student), 2010

## Jury Memberships

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Middle East Technical University, August, 2021

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Middle East Technical University, July, 2021

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Middle East Technical University, June, 2020

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Middle East Technical University, January, 2020

## Designed Lessons

Fach Salihoglu B. A., Structure and Function of Marine Ecosystems, Postgraduate, 2009 - 2010

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

- I. High levels of genetic diversity and population structure in the Mediterranean seagrass *Posidonia oceanica* at its easternmost distribution limit  
Tutar O., Ruocco M., Dattolo E., Lacorata G., Corrado R., Watteaux R., Iudicone D., Fach B. A., Procaccini G.  
ICES JOURNAL OF MARINE SCIENCE, vol.79, no.8, pp.2286-2297, 2022 (SCI-Expanded)
- II. Eddy Induced Cross-Shelf Exchanges in the Black Sea

- Akpınar A., Sadighrad E., Fach Salihoglu B. A., Arkin Ş. S.  
REMOTE SENSING, vol.14, no.19, 2022 (SCI-Expanded)
- III. **Sources of the Levantine Intermediate Water in Winter 2019**  
Taillardier V., D'Ortenzio F., Prieur L., Conan P., Coppola L., Cornec M., Dumas F., Durrieu De Madron X., Fach Salihoglu B. A., Fourrier M., et al.  
Journal of Geophysical Research: Oceans, vol.127, no.6, 2022 (SCI-Expanded)
- IV. **Modeling the Impact of Macrozooplankton on Carbon Export Production in the Southern Ocean**  
Karakus O., Voelker C., Iversen M., Hagen W., Wolf-Gladrow D., Fach B. A., Hauck J.  
JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS, vol.126, no.12, 2021 (SCI-Expanded)
- V. **Mesoscale eddies in the Black Sea: Characteristics and kinematic properties in a high-resolution ocean model**  
Sadighrad E., Fach Salihoglu B. A., Arkin S. S., Salihoglu B., Hüsrevoglu Y. S.  
Journal of Marine Systems, vol.223, 2021 (SCI-Expanded)
- VI. **Assessing the impact of nutrient loads on eutrophication in a semi-enclosed bay combining observations and coupled hydrodynamic-ecosystem modelling**  
Yelekci Ö., Ibello V., Fach Salihoglu B. A., Küçüksezgin F., Yumruktepe C. V., Sayin E., Salihoglu B., Tuğrul S.  
Mediterranean Marine Science, vol.22, no.3, pp.677-696, 2021 (SCI-Expanded)
- VII. **Water Mass Variability and Levantine Intermediate Water Formation in the Eastern Mediterranean Between 2015 and 2017**  
Fach Salihoglu B. A., Örek H., Yilmaz E., Tezcan D., Salihoglu I., Salihoglu B., Latif M. A.  
JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS, vol.126, no.2, 2021 (SCI-Expanded)
- VIII. **Observing the subsurface thermal signature of the Black Sea cold intermediate layer with Argo profiling floats**  
AKPINAR A., Fach B. A., OĞUZ T.  
DEEP-SEA RESEARCH PART I-OCEANOGRAPHIC RESEARCH PAPERS, vol.124, pp.140-152, 2017 (SCI-Expanded)
- IX. **Understanding the Impact of Environmental Variability on Anchovy Overwintering Migration in the Black Sea and its Implications for the Fishing Industry**  
Güraslan C., Fach B. A., Oğuz T.  
FRONTIERS IN MARINE SCIENCE, vol.4, 2017 (SCI-Expanded)
- X. **MODELING AS A MANAGEMENT TOOL**  
FACH SALİHOĞLU B. A., SALİHOĞLU B., Arkin S., AKOĞLU E., Guraslan C.  
BLACK SEA MARINE ENVIRONMENT: THE TURKISH SHELF, vol.46, pp.458-475, 2017 (SCI-Expanded)
- XI. **Evolution of Future Black Sea Fish Stocks under Changing Environmental and Climatic Conditions**  
Salihoglu B., Arkin Ş. S., Akoğlu E., Fach B. A.  
FRONTIERS IN MARINE SCIENCE, vol.4, 2017 (SCI-Expanded)
- XII. **Potential impacts of climate change on the primary production of regional seas: A comparative analysis of five European seas**  
Holt J., Schrum C., Cannaby H., Daewel U., Allen I., Artioli Y., Bopp L., Butenschon M., Fach B. A., Harle J., et al.  
PROGRESS IN OCEANOGRAPHY, vol.140, pp.91-115, 2016 (SCI-Expanded)
- XIII. **Climatic controls on biophysical interactions in the Black Sea under present day conditions and a potential future (A1B) climate scenario**  
Cannaby H., Fach B. A., Arkin S. S., Salihoglu B.  
JOURNAL OF MARINE SYSTEMS, vol.141, pp.149-166, 2015 (SCI-Expanded)
- XIV. **Modeling the impact of climate variability on Black Sea anchovy recruitment and production**  
Güraslan C., Fach B. A., Oğuz T.  
FISHERIES OCEANOGRAPHY, vol.23, pp.436-457, 2014 (SCI-Expanded)
- XV. **Biomass changes and trophic amplification of plankton in a warmer ocean**  
Chust G., Allen J. I., Bopp L., Schrum C., Holt J., Tsiaras K., Zavatarelli M., Chifflet M., Cannaby H., Dadou I., et al.  
GLOBAL CHANGE BIOLOGY, vol.20, pp.2124-2139, 2014 (SCI-Expanded)
- XVI. **FOOD WEB STRUCTURE IN THE AEGEAN SEA AND THE TURKISH STRAITS SYSTEM AND UNDERSTANDING THE ROLE OF THE OCEAN ACIDIFICATION AS IMPORTANT DRIVER OF CHANGE IN**

## BIOLOGICAL SYSTEMS

- Zervoudaki S., Orek H., Krasakopoulou E., Assimakopoulou G., Fach -Salihoglu B. A., Papathanassiou E. JOURNAL OF ENVIRONMENTAL PROTECTION AND ECOLOGY, vol.15, no.4, pp.1641-1649, 2014 (SCI-Expanded)
- XVII. **Modeling the influence of hydrodynamic processes on anchovy distribution and connectivity in the black sea Karadeniz'deki hamsi dağılımı ve bölgeler arası bağlantısı üzerine hidrodinamik proseslerin etkisinin modellenmesi**  
Fach B. A.  
Turkish Journal of Fisheries and Aquatic Sciences, vol.14, pp.353-365, 2014 (SCI-Expanded)
- XVIII. **Testing early life connectivity supplying a marine fishery around the Falkland Islands**  
Ashford J. R., Fach B. A., Arkhipkin A. I., Jones C. M.  
FISHERIES RESEARCH, vol.121, pp.144-152, 2012 (SCI-Expanded)
- XIX. **Control mechanisms on the ctenophore Mnemiopsis population dynamics: A modeling study**  
Salihoglu B., Fach B. A., Oğuz T.  
JOURNAL OF MARINE SYSTEMS, vol.87, pp.55-65, 2011 (SCI-Expanded)
- XX. **Testing early life connectivity using otolith chemistry and particle-tracking simulations**  
Ashford J., La Mesa M., Fach B. A., Jones C., Everson I.  
CANADIAN JOURNAL OF FISHERIES AND AQUATIC SCIENCES, vol.67, pp.1303-1315, 2010 (SCI-Expanded)
- XXI. **Seasonal variation in body composition, metabolic activity, feeding, and growth of adult krill Euphausia superba in the Lazarev Sea**  
Meyer B., Auerswald L., Siegel V., Spahic S., Pape C., Fach B. A., Teschke M., Lopata A. L., Fuentes V.  
MARINE ECOLOGY PROGRESS SERIES, vol.398, pp.1-18, 2010 (SCI-Expanded)
- XXII. **Invasion dynamics of the alien ctenophore Mnemiopsis leidyi and its impact on anchovy collapse in the Black Sea**  
Oğuz T., Fach B. A., Salihoglu B.  
JOURNAL OF PLANKTON RESEARCH, vol.30, pp.1385-1397, 2008 (SCI-Expanded)
- XXIII. **Biochemically based modeling study of Antarctic krill Euphausia superba growth and development**  
Fach B. A., Meyer B., Wolf-Gladrow D., Bathmann U.  
MARINE ECOLOGY PROGRESS SERIES, vol.360, pp.147-161, 2008 (SCI-Expanded)
- XXIV. **A coupled plankton-anchovy population dynamics model assessing nonlinear controls of anchovy and gelatinous biomass in the Black Sea**  
OĞUZ T., SALİHOĞLU B., Fach B. A.  
MARINE ECOLOGY PROGRESS SERIES, vol.369, pp.229-256, 2008 (SCI-Expanded)
- XXV. **Transport of Antarctic krill (Euphausia superba) across the Scotia Sea. Part II. Krill growth and survival**  
Fach B. A., Hofmann E. E., Murphy E. J.  
DEEP-SEA RESEARCH PART I-OCEANOGRAPHIC RESEARCH PAPERS, vol.53, no.6, pp.1011-1043, 2006 (SCI-Expanded)
- XXVI. **Transport of Antarctic krill (Euphausia superba) across the Scotia Sea. Part I: Circulation and particle tracking simulations**  
Fach B. A., Klinck J. M.  
DEEP-SEA RESEARCH PART I-OCEANOGRAPHIC RESEARCH PAPERS, vol.53, no.6, pp.987-1010, 2006 (SCI-Expanded)
- XXVII. **Modeling studies of antarctic krill Euphausia superba survival during transport across the Scotia Sea**  
Fach B. A., HOFMANN E. E., MURPHY E.  
MARINE ECOLOGY PROGRESS SERIES, vol.231, pp.187-203, 2002 (SCI-Expanded)
- XXVIII. **Krill transport in the Scotia Sea and environs**  
Hofmann E. E., Klinck J. M., Locarnini R. A., Fach B. A., Murphy E.  
ANTARCTIC SCIENCE, vol.10, no.4, pp.406-415, 1998 (SCI-Expanded)

## Articles Published in Other Journals

- I. **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 Tarakçıoğlu G., Boero F., Foglini F., Fraschetti S., Goriup P., Macpherson E., Planes S., Soukissian T., Adiloglu B., Gween C., et al.  
SCIRES-IT-SCIENTIFIC RESEARCH AND INFORMATION TECHNOLOGY, vol.6, pp.1-95, 2016 (ESCI)

## Books & Book Chapters

- I. **Marmara Denizi'nin Geçirdiği Biyojeokimyasal Değişimler Bağlamında 2021 Müsilaj Patlaması, Güncel Baskılar ve Çözüm Önerileri**  
Yücel M., Özkan K., Fach B. A., Örek H., Mantıkçı M., Tezcan D., Akçay I., Özhan K., Arkin Ş. S., Tuğrul S., et al.  
in: Marmara Denizi'nin Ekolojisi: Deniz Salyası Oluşumu, Etkileşimleri ve Çözüm Önerileri, Muzaffer Şeker, İzzet Öztürk, Editor, TÜBA, pp.249-268, 2021
- II. **Black Sea (Chapter 8)**  
Todorova N., Alyomov S., Chiotoroiu B., Fach B. A., Osadchaya T., Rangelov M., Salihoglu B., Vasilev V.  
in: World Seas: An Environmental Evaluation, Volume I: Europe, The Americas and West Africa., Charles Sheppard, Editor, Elsevier Science, Oxford/Amsterdam , Oxford, pp.209-226, 2018
- III. **Prospects for Marine Protected Areas in the Turkish Black Sea.**  
ÖZTÜRK B., FACH B. A., ARKİN S., KESKİN Ç., TOPALOĞLU B., ÖZTÜRK A. A.  
in: Management of Marine Protected Areas: A Network Perspective, Goriup, Paul, Editor, John Wiley Sons Ltd., Chichester, pp.247-262, 2017
- IV. **Modeling as a Management Tool**  
FACH B. A., SALİHOĞLU B., ARKİN S., AKOĞLU E., GÜRASLAN C.  
in: BLACK SEA MARINE ENVIRONMENT:THE TURKISH SHELF, Sezgin, M. Bat.L., ÜRKMEZ, D., ARICI, E., ÖZTÜRK, B., Editor, Turkish Marine Research Foundation (TÜDAV), İstanbul, pp.458-476, 2017
- V. **PHYSICAL OCEANOGRAPHY OF THE EASTERN MEDITERRANEAN SEA**  
Akpinar A., Yilmaz E., Fach B. A., Salihoglu B.  
in: THE TURKISH PART OF THE MEDITERRANEAN SEAMARINE BIODIVERSITY FISHERIES CONSERVATION AND GOVERNANCE, Cemal TURAN, Barış SALİHOĞLU, Elif Özgür ÖZBEK, Bayram ÖZTÜRK, Editor, Turkish Marine Research Foundation (TUDAV), İstanbul, 2016

## Refereed Congress / Symposium Publications in Proceedings

- I. **Western Black Sea suboxic layer biogeochemical structure during the December 2022 R/V Bilim Expedition**  
Yücel M., Ahaklı N., Cura H., Demir N. Y., Myroshnychenko V., Fach B. A., Arkin Ş. S., Tuğrul S., Salihoglu B.  
Goldschmidt 2023 Conference, Lyon, France, 09 July 2023
- II. **Phosphorus build-up, nitrogen loss and sulfide accumulation in response to recent deep-water deoxygenation in the Sea of Marmara**  
Yücel M., Örek H., Alimli N., Mantıkçı M., Özhan K., Fach B. A., Tezcan D., Örek Y., Kalkan E., Arkin Ş. S., et al.  
Goldschmidt 2023 Conference, Lyon, France, 9 - 14 July 2023
- III. **DIGITAL TWIN AND MANAGEMENT PLAN RECOMMENDATIONS FOR THE SEA OF MARMARA**  
SALİHOĞLU B., YÜCEL M., TEZCAN D., FACH B. A., ÖREK H., ARKIN Ş. S., ÖZHAN K., ÖZKAN K., Mantıkçı A. M.  
III. Ulusal Denizlerde İzleme ve Değerlendirme Sempozyumu, Antalya, Turkey, 6 - 09 December 2022, pp.39-40
- IV. **DOĞU AKDENİZ'DE DOLAŞIM DESENLERİ VE SU KÜTLESİ OLUŞUMUNDA DEĞİŞKENLİK**  
BAŞDURAK N. B., FACH B. A., SALİHOĞLU B., ÖREK H., ÖZHAN K., MANTIKÇI M., MANTIKÇI M.  
III. Ulusal Denizlerde İzleme ve Değerlendirme Sempozyumu, Turkey, 6 - 09 December 2022

- V. **MODELING THE CONNECTIVITY OF ANTARCTIC KRILL (EUPHAUSIA SUPERBA) IN THE LAZAREV SEA**  
Fach Salihoglu B. A., Cagdas B., Sadighrad E., Guerves O., Hauck J., Timmermann R., Wekerle C.  
5. Ulusal Deniz Bilimleri Konferansı 2022, Trabzon, Turkey, 1 - 03 June 2022, pp.216-217
- VI. **INTEGRATED HYDRODYNAMIC-BIOGEOCHEMICAL MODEL APPLICATIONS SPECIFIC TO TURKISH SEAS: BLACK SEA EXAMPLE**  
Arkin Ş. S., Fach Salihoglu B. A., Sadighrad E., Acar A. O., Salihoglu B.  
5. Ulusal Deniz Bilimleri Konferansı 2022, Trabzon, Turkey, 1 - 03 June 2022, pp.163-164
- VII. **Spatial analysis of commercially important Lessepsian fish invasion in the Mediterranean Sea**  
Fach Salihoglu B. A., Ureten M. A.  
Advances in Marine Ecosystem Modelling Research (AMEMR) International Symposium , Plymouth, England, 12 - 15 July 2021
- VIII. **Modelling the Role of Macrozooplanton in the Southern Ocean Biogeochemistry**  
Karakus O., Völker C., Fach Salihoglu B. A., Iversen M., Hagen W., Wolf-Gladrow D., Hauck J.  
Advances in Marine Ecosystem Modelling Research (AMEMR), Plymouth, England, 12 - 15 July 2021
- IX. **Modeling the connectivity of Antarctic krill (Euphausia superba) in the Lazarev Sea.**  
Cagdas B., Fach Salihoglu B. A., Sadighrad E., Gurses O., Hauck J., Timmermann R., Wekerle C.  
Advances in Marine Ecosystem Modelling Research (AMEMR) International Symposium , Plymouth, England, 12 - 15 July 2021
- X. **Modeling seasonal and interannual variability of pelagic fish larval dispersal and connectivity in the Black Sea.**  
Çağdaş B., FACH B. A., SALİHOĞLU B., ARKIN Ş. S.  
Advances in Marine Ecosystem Modelling Research (AMEMR) International Symposium, Plymouth, England, 12 - 15 July 2021
- XI. **Modeling the impact of mesoscale eddies on water mass transport in the Black Sea.**  
Sadighrad E., Fach B. A., Salihoglu B., Arkin Ş. S., Hüsrevoglu Y. S.  
Advances in Marine Ecosystem Modelling Research (AMEMR) International Symposium, Plymouth, England, 12 - 15 July 2021
- XII. **Modeling the connectivity of Antarctic krill in the Lazarev Sea.**  
FACH B. A., Çağdaş B., E. S., Gürses Ö., Hauck J., Timmermann R., Wekerle C.  
ICED krill modeling workshop, Hobart, Australia, 17 May 2021
- XIII. **Recent oxygen loss and redox-dependent alteration of seafloor iron, sulfur, nitrogen and phosphorus biogeochemistry in the Sea of Marmara.**  
YÜCEL M., AKÇAY İ., ÖZKAN K., ÖREK H., TEZCAN D., ÖZHAN K., FACH B. A., Alimli N., SEVGEN S., Mantıkçı M., et al.  
Ocean Science Meeting USA 2020, 16 - 19 February 2020
- XIV. **Implementation of Antarctic Krill into the Ocean-Ecosystem Model FESOM-REcoM-2 and its Effects on Southern Ocean Biogeochemistry.**  
KARAKUS O., Hauck J., Völker C., FACH B. A., Hagen W.  
Ocean Sciences Meeting 2020, San Diego, United States Of America, 16 - 21 February 2020
- XV. **Modelling early-life stages connectivity to better understand marine population structure and inform fisheries management.**  
Rossi V., E. S., SerGiacomi E., Emilio H., FACH B. A., Hildalgo M.  
FishForum 2018, Rome, Italy, 10 - 14 December 2018
- XVI. **Ocean Energy for a sustainable environment – the Blue Growth strategy**  
FACH B. A.  
6th Global Congress on Renewable Energy and Environment (ESWAE-2018), İzmir, Turkey, 12 - 14 October 2018
- XVII. **Modeling the connectivity of marine populations by Lagrangian flow networks.**  
Hernandez-Garcia E., Ser-Giacomi E., Rossi V., Monroy P., López C., Hildago M., E. S., FACH B. A.  
PHYSICS AND ECOLOGY: Challenges at the frontier. XXXIV Scientific meetings in the Mediterranean., Spain, 9 - 11 October 2018
- XVIII. **DENİZ EKOSİSTEM ve İKLİM ARAŞTIRMALARI MERKEZİ**  
Fach Salihoglu B. A., Tezcan D., Salihoglu B.

- TÜRKİYE ULUSAL JEODEZİ JEOFİZİK BİRLİĞİ BİLİMSEL KONGRESİ , İzmir, Turkey, 30 May - 02 June 2018, pp.1-4
- XIX. **Argo Verileri**  
TEZCAN D., FACH B. A.  
Türkiye Ulusal Jeodezi ve Jeofisik Birliği Bilimsel Kongresi, İzmir, Turkey, 30 May - 02 June 2018
- XX. **Karadeniz kıyı akıntı sisteminde pelajik balık larvalarının kıyı boyunca taşınımı ve bölgelerde tutulmasında tahmini etkilerin belirlenmesi**  
Fach B. A., Arkin S., Salihoglu B.  
III Ulusal Deniz Bilimleri Konferansı, İzmir, Turkey, 9 - 12 May 2018
- XXI. **Degisen Cevresel Ve İklimsel Kosullar Altında Karadeniz Balık Stoklarının Geleceği**  
SALİHOĞLU B., Arkin S., AKOĞLU E., FACH B. A.  
III, Ulusal Deniz Bilimleri Konferansı 2018, İzmir, Turkey, 9 - 12 May 2018
- XXII. **Karadeniz İc Baseni Ve Kita Sahanlığı Arasındaki Fizikal Transfer Mekanizmalarının Ekosistem Uzerine Etkisi**  
Sadighrad E., Arkin S., FACH B. A., SALİHOĞLU B.  
III. Ulusal Deniz Bilimleri Konferansı 2018, İzmir, Turkey, 9 - 12 May 2018
- XXIII. **Kuzey Doğu Levanten Basenindeki Fizikal Oşinografi Çalışmaları.**  
Örek H., TEZCAN D., FACH B. A., Yılmaz E., SALİHOĞLU İ., SANCAK S., FULLER W. J., Latif M.  
III. Ulusal Deniz Bilimleri Konferansı 2018, İzmir, Turkey, 9 - 12 May 2018
- XXIV. **Comparing the permanently anoxic Black Sea with the rapidly deoxygenating Marmara Sea: Distinct redox processes of sulfur, nitrogen and oxygen in the two interconnected basins.**  
YÜCEL M., SALİHOĞLU B., Örek H., FACH B. A., Arkin S., AKOĞLU E., ÖZKAN K., AKÇAY İ., Güraslan C., TEZCAN D., et al.  
Ocean Sciences Meeting 2018, Portland, United States Of America, 12 - 16 February 2018
- XXV. **Modelling the connectivity of early-life stages for exploited species: a new approach for the delimitation of fishery assessment units in the Mediterranean Sea**  
Rossi V., Sadighrad E., SerGiacomi E., Hildalgo M., FACH B. A., Emilio H.  
Ocean Sciences Meeting 2018, Portland, United States Of America, 12 - 16 February 2018
- XXVI. **Forecasting the evolution of Black Sea fish stocks under changing environmental and climatic conditions.**  
SALİHOĞLU B., Arkin S., AKOĞLU E., FACH B. A.  
Ocean Sciences Meeting 2018, Portland, United States Of America, 12 - 16 February 2018
- XXVII. **Evolution of Black Sea fish stocks under changing environmental and climatic conditions**  
SALİHOĞLU B., Arkin S., AKOĞLU E., FACH B. A., Sadighrad E.  
Advances in Marine Ecosystem Modelling Research Symposium, Plymouth, United Kingdom, 3 - 06 July 2017, pp.96
- XXVIII. **Contrasting local retention and along-shore transport in the Black Sea rim current system and their relative influence on pelagic fish**  
FACH B. A., Arkin S., SALİHOĞLU B.  
Advances in Marine Ecosystem Modelling Research Symposium, Plymouth, United Kingdom, 3 - 06 July 2017, pp.84
- XXIX. **KARADENİZ DE PELAJİK LARVA YAYILIM MODELLEMESİ EKOLOJİK BAĞLANTISALLIĞIN MEVSİMSEL VE YILLARARASI DEĞİŞKENLİĞİ**  
FACH B. A., Arkin S., SALİHOĞLU B.  
Türkiye Deniz Bilimleri Konferansı 2016, Turkey, 31 May - 03 June 2016, pp.213-214
- XXX. **ARADENİZ DE İKLİM SİRKÜLASYON VE FITOPLANKTON BİYOKÜLTLESİ ARASINDAKİ İLİŞKİ**  
Arkin S., Akpinar A., FACH B. A., SALİHOĞLU B., Temel O.  
Türkiye Deniz Bilimleri Konferansı, Turkey, 31 May - 03 June 2016, pp.203-204
- XXXI. **KARADENİZ İÇİN GELİŞTİRİLMİŞ YENİ NESİL EKOSİSTEM MODELİ BAŞARI ANALİZİ**  
SALİHOĞLU B., FACH SALİHOĞLU B., ARKIN Ş. S., AKOĞLU E.  
Türkiye Deniz Bilimleri Konferansı, Ankara, Turkey, 31 May - 03 June 2016
- XXXII. **Assessment of Model Uncertainty in the Prediction of Seasonal and Annual Variability in the Black Sea**  
SALİHOĞLU B., Arkin S., FACH B. A., AKOĞLU E.

Ocean Sciences Meeting 2016, 21 - 26 February 2016

**XXXIII. A new generation end to end model producing forecast products to enhance marine GMES applications to the Black Sea**

SALİHOĞLU B., ARKIN S. S., FACH B. A., AKOĞLU E.

Scientific Conference: Integrated Marine Research in the Mediterranean and the Black Sea", 7 - 09 December 2015

**XXXIV. A New Generation End to end Model To Analyse The Environmental Status Of The Black Sea**

Salihoglu B., Sinan A., FACH B. A., Akoglu E.

FAO Black Sea Ecosystem And Fisheries 2015, 18 - 20 November 2015

**XXXV. Modeling The Impact Of Environmental Variability On Black Sea Anchovy Overwintering Migration**

Güraslan C., FACH B. A.

FAO Black Sea Ecosystem And Fisheries 2015, 18 - 20 November 2015

**XXXVI. Modeling The Impact Of Climate Variability On Black Sea Anchovy Engraulis Encrasiculus Ponticus Recruitment And Production**

Güraslan C., FACH B. A., Oguz T.

ICES Working Group On Small Fishes, Their Ecosystems And Climate Impact, 30 March - 02 April 2015

## Supported Projects

SALİHOĞLU B., YÜCEL M., TEZCAN D., ŞAHİN YÜCEL E., FACH SALİHOĞLU B. A., Project Supported by Higher Education Institutions, Marmara Büyük Deniz Verisi Sağlıklı Deniz Ekosistemi için Büyük Veri, 2023 - Continues

Yücel M., Salihoglu B., Şahin Yücel E., Tezcan D., Fach Salihoglu B. A., UYGURER Z. P., H2020 Project, ARSINOE: CLIMATE RESILIENT-REGIONS THROUGH SYSTEMIC SOLUTIONS AND INNOVATIONS, 2021 - 2025

Tezcan D., Fach Salihoglu B. A., Özkan K., H2020 Project, Developing Optimal and Open Research Support for the Black Sea (DOORS), 2021 - 2025

Özhan K., Fach Salihoglu B. A., Salihoglu B., Yücel M., Akoğlu E., Özkan K., Örek H., Tezcan D., Project Supported by Other Official Institutions, MARMARA DENİZİ'NE DEŞARJ EDİLEN SOĞUTMA SULARININ ÇEVRESEL ETKILERİNİN DEĞERLENDİRİLMESİ PROJESİ (MARDESS), 2022 - 2023

Salihoglu B., Tuğrul S., Uysal Z., Fach Salihoglu B. A., Yücel M., Özhan K., Özkan K., Tezcan D., Örek H., Başdurak N. B., et al., Project Supported by Other Official Institutions, Marmara Denizi Bütünlesik Modelleme Sistemi (MARMOD) Faz II, 2021 - 2023

Salihoglu B., Mantıkcı A. M., Tezcan D., Gücü A. C., Özhan K., Fach Salihoglu B. A., Yücel M., Örek H., Tuğrul S., Mantıkcı G., et al., Municipality, İZMİT KÖRFEZİ SAĞLIKLI DENİZ EKOSİSTEMİ VE EKOSİTEM SERVİSLERİ İÇİN STRATEJİ BELGESİ HAZIRLANMASI PROJESİ, 2022 - 2022

Salihoglu B., Tuğrul S., Uysal Z., Kideyş A. E., Fach Salihoglu B. A., Yücel M., Başdurak N. B., Özhan K., Tezcan D., Örek H., et al., Project Supported by Other Official Institutions, Denizlerde Bütünleşik Kirlilik İzleme Programı (2020-2022), 2020 - 2022

Yücel M., Salihoglu B., Fach Salihoglu B. A., Tezcan D., Örek H., Arkin Ş. S., Sevgen S., TUBITAK Project, Deep-sea metal and nutrient cycling in the Marmara and the Black Sea: Improving the detection of redox processes and nanoparticle formation, 2020 - 2022

Fach Salihoglu B. A., Salihoglu B., TUBITAK Project, Assessing the effect of environmental and biological conditions on a global key species, Antarctic krill (*Euphausia superba*) via numerical modeling., 2019 - 2022

Salihoglu B., Tezcan D., Fach Salihoglu B. A., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, DENİZ EKOSİSTEM ve İKLİM ARAŞTIRMALARI MERKEZİ, 2012 - 2022

SALİHOĞLU B., ÖZHAN K., AKÇAY İ., KARAHAN A., UYSAL Z., AKOĞLU E., TUĞRUL S., GÜCÜ A. C., KİDEYŞ A. E., YÜCEL M., et al., Project Supported by Higher Education Institutions, Erdemli Zaman Serisi Deniz Araştırmaları 2018, 2018 - 2019

AKOĞLU E., FACH SALİHOĞLU B. A., SALİHOĞLU B., Project Supported by Higher Education Institutions, ECOSPACE-F 3D: Ecospace İki Boyutlu (2B) Ekosistem Modelinin Fortran Diline Transferi ve Üç Boyutlu (3B) Haline Getirilmesi, 2017 - 2019

Salihoglu B., Tuğrul S., Fach Salihoglu B. A., Yücel M., Özhan K., Özkan K., Akoğlu E., Tezcan D., Akçay I., Project Supported by Other Official Institutions, Marmara Denizi Bütünleşik Model Sistemi: Faz 1, 2017 - 2018

Fach Salihoğlu B. A., Akoğlu E., Project Supported by Higher Education Institutions, ECOSPACE-F, 2017 - 2018  
FACH SALİHOĞLU B. A., SALİHOĞLU B., TUBITAK Project, Bölgesel Yönetim Planları İçin Akdeniz e Özgü geliştirilecek Göstergeler İle Denizel Çevre Hedeflerinin Belirlenmesi 112Y394, 2013 - 2016  
Fach Salihoğlu B. A., FP7 Project, 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, 2012 - 2016  
Fach Salihoğlu B. A., Kideyş A., FP7 Project, PERSEUS Policy oriented marine Environmental Research in the Southern EUropean Seas, 2012 - 2016  
FACH SALİHOĞLU B. A., UYSAL Z., TUBITAK Project, Ulusal Balıkçılık Veri Toplama Programı için Karadeniz de Hamsi Stoklarının Akustik Yöntem ile Belirlenmesi ve Sürekli İzleme Modelinin Oluşturulması, 2011 - 2016  
Fach Salihoğlu B. A., Salihoğlu B., FP7 Project, OPEC OPerational ECology Ecosystem forecast products to enhance marine GMES applications, 2012 - 2015  
Ok M., GÜCÜ A. C., Fach Salihoğlu B. A., TUBITAK Project, Ulusal Balıkçılık Veri Toplama Programı İcin Karadeniz de Hamsi Stoklarinin Akustik Yontem Ile Belirlenmesi Ve Surekli zleme Modelinin Olusturulmasi, 2011 - 2015  
FACH SALİHOĞLU B. A., TUBITAK Project, Su Kolonunun Oksijenli-Oksijensiz Arayüzey Tabakasındaki Fosfat ve Nitrat Döngülerinin Modellemesi, 2009 - 2012

## Scientific Refereeing

NATURE COMMUNICATIONS, SCI Journal, September 2021  
PROGRESS IN OCEANOGRAPHY, SCI Journal, August 2021  
NATURE CLIMATE CHANGE, SCI Journal, February 2020  
JOURNAL OF MARINE SYSTEMS, SCI Journal, January 2020  
Nature Climate Change, SCI Journal, December 2019  
JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS, SCI Journal, June 2019  
FRONTIERS IN MARINE SCIENCE, SCI Journal, January 2019  
JOURNAL OF MARINE SYSTEMS, SCI Journal, July 2018  
PURE AND APPLIED GEOPHYSICS, Journal Indexed in SSCI, April 2018

## Metrics

Publication: 70  
Citation (WoS): 878  
Citation (Scopus): 961  
H-Index (WoS): 14  
H-Index (Scopus): 14

## Congress and Symposium Activities

AMEMR (Advances in Marine Ecosystem Modelling Research) Symposium , Panelists, Plymouth, United Kingdom, 2021  
AMEMR (Advances in Marine Ecosystem Modelling Research) Symposium , Session Moderator, Plymouth, United Kingdom, 2021  
6th Global Congress on Renewable Energy and Environment (ESWAE-2018), Invited Speaker, İzmir, Turkey, 2018

## Invited Talks

Ocean Energy for a sustainable environment – the Blue Growth strategy, Seminar, 6th Global Congress on Renewable Energy and Environment (ESWAE- 2018), Turkey, September 2018

## **Non Academic Experience**

ODTÜ, Deniz Bilimleri Enstitüsü

Alfred-Wegener-Institut for Polar and Marine Research, Bremerhaven, Germany

Woods Hole Oceanographic Institution, Woods Hole, USA