

Assoc. Prof. MUSTAFA KOÇAK

Personal Information

Email: mukocak@metu.edu.tr

Web: <https://avesis.metu.edu.tr/mukocak>

International Researcher IDs

ScholarID: 8oqu964AAAAJ

ORCID: 0000-0002-5416-9632

Publons / Web Of Science ResearcherID: ABA-3350-2020

ScopusID: 7005149798

Yoksis Researcher ID: 286564

Courses

Energy, Clouds and Climate, Postgraduate, 2022 - 2023

Advising Theses

KOÇAK M., A 15-year climatology of aerosol optical and physical properties and near-real time measurements of water-soluble ions in pm2.5 and their precursor gases in the atmosphere over the eastern mediterranean., Doctorate, E.TUTSAK(Student), 2018

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Appraising the characteristics of particulate matter from leather tanning micro-environments, their respirational risks, and dysfunctions amid exposed working cohorts**
Sarwar F., Alam K., Öztürk F., Koçak M., Malik R. N.
Environmental Monitoring and Assessment, vol.195, no.12, 2023 (SCI-Expanded)
- II. **Optical and microphysical properties of the columnar Aerosol burden over the Eastern Mediterranean: Discrimination of Aerosol types**
Tutsak E., KOÇAK M.
ATMOSPHERIC ENVIRONMENT, vol.229, 2020 (SCI-Expanded)
- III. **A new exposure route to trace elements in indoor particulate matter.**
Broomandi P., Amouei T., Akturk M., Ngagine S., Gorjinezhad S., Ozturk F., Kocak M., Kim J.
Indoor air, 2019 (SCI-Expanded)
- IV. **High time-resolved measurements of water-soluble sulfate, nitrate and ammonium in PM2.5 and their precursor gases over the Eastern Mediterranean**
Tutsak E., KOÇAK M.
SCIENCE OF THE TOTAL ENVIRONMENT, vol.672, pp.212-226, 2019 (SCI-Expanded)
- V. **Long-term measurements of aerosol optical and physical properties over the Eastern Mediterranean: Hygroscopic nature and source regions**
Tutsak E., KOÇAK M.
ATMOSPHERIC ENVIRONMENT, vol.207, pp.1-15, 2019 (SCI-Expanded)
- VI. **Atmospheric water-soluble organic nitrogen (WSON) in the eastern Mediterranean: origin and**

ramifications regarding marine productivity

Nehir M., KOÇAK M.

ATMOSPHERIC CHEMISTRY AND PHYSICS, vol.18, no.5, pp.3603-3618, 2018 (SCI-Expanded)

- VII. **Atmospheric Deposition of Macronutrients (Dissolved Inorganic Nitrogen and Phosphorous) onto the Black Sea and Implications on Marine Productivity***
KOÇAK M., Mihalopoulos N., Tutsak E., Violaki K., Theodosi C., Zarmpas P., Kalegeri P.
JOURNAL OF THE ATMOSPHERIC SCIENCES, vol.73, no.4, pp.1727-1739, 2016 (SCI-Expanded)
- VIII. **PM10 and PM2.5 composition over the Central Black Sea: origin and seasonal variability**
KOÇAK M., Mihalopoulos N., Tutsak E., Theodosi C., Zarmpas P., Kalegeri P.
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, vol.22, no.22, pp.18076-18092, 2015 (SCI-Expanded)
- IX. **Solubility of Atmospheric Nutrients over the Eastern Mediterranean: Comparison between Pure-Water and Sea-Water, Implications Regarding Marine Production**
Kocak M.
TURKISH JOURNAL OF FISHERIES AND AQUATIC SCIENCES, vol.15, no.1, pp.59-71, 2015 (SCI-Expanded)
- X. **Influence of mineral dust transport on the chemical composition and physical properties of the Eastern Mediterranean aerosol**
KOÇAK M., Theodosi C., Zarmpas P., Seguret M. J. M., Herut B., Kallos G., Mihalopoulos N., Kubilay N., Nimmo M.
ATMOSPHERIC ENVIRONMENT, vol.57, pp.266-277, 2012 (SCI-Expanded)
- XI. **Summertime aerosol chemical composition in the Eastern Mediterranean and its sensitivity to temperature**
Im U., Markakis K., KOÇAK M., Gerasopoulos E., Daskalakis N., Mihalopoulos N., Poupkou A., Kindap T., Ünal A., Kanakidou M.
ATMOSPHERIC ENVIRONMENT, vol.50, pp.164-173, 2012 (SCI-Expanded)
- XII. **Particulate matter (PM10) in Istanbul: Origin, source areas and potential impact on surrounding regions**
Kocak M., Theodosi C., Zarmpas P., Im U., Bougiatioti A., Yenigun O., Mihalopoulos N.
ATMOSPHERIC ENVIRONMENT, vol.45, no.38, pp.6891-6900, 2011 (SCI-Expanded)
- XIII. **Iron solubility in crustal and anthropogenic aerosols: The Eastern Mediterranean as a case study**
Seguret M. J. M., KOÇAK M., Theodosi C., Ussher S. J., Worsfold P. J., Herut B., Mihalopoulos N., Kubilay N., Nimmo M.
MARINE CHEMISTRY, vol.126, pp.229-238, 2011 (SCI-Expanded)
- XIV. **Megacities as hot spots of air pollution in the East Mediterranean**
Kanakidou M., Mihalopoulos N., Kindap T., Im U., Vrekoussis M., Gerasopoulos E., Dermitzaki E., Ünal A., Kocak M., Markakis K., et al.
ATMOSPHERIC ENVIRONMENT, vol.45, no.6, pp.1223-1235, 2011 (SCI-Expanded)
- XV. **Long term atmospheric nutrient inputs to the Eastern Mediterranean sources solubility and comparison with riverine inputs**
KOÇAK M., KUBİLAY N., TUĞRUL S., Nikos M.
Biogeosciences Discussions, vol.7, pp.5081-5117, 2010 (SCI-Expanded)
- XVI. **Atmospheric nutrient inputs to the northern levantine basin from a long-term observation: sources and comparison with riverine inputs**
Koçak M., Kubilay N., TUĞRUL S., Mihalopoulos N.
BIOGEOSCIENCES, vol.7, no.12, pp.4037-4050, 2010 (SCI-Expanded)
- XVII. **Origin and source regions of PM10 in the Eastern Mediterranean atmosphere**
KOÇAK M., Mihalopoulos N., Kubilay N.
ATMOSPHERIC RESEARCH, vol.92, no.4, pp.464-474, 2009 (SCI-Expanded)
- XVIII. **Variability in regional background aerosols within the Mediterranean**
Querol X., Alastuey A., Pey J., Cusack M., Perez N., Mihalopoulos N., Theodosi C., Gerasopoulos E., Kubilay N., KOÇAK M.
ATMOSPHERIC CHEMISTRY AND PHYSICS, vol.9, no.14, pp.4575-4591, 2009 (SCI-Expanded)
- XIX. **Chemical composition of the fine and coarse fraction of aerosols in the northeastern Mediterranean**
Kocak M., Mihalopoulos N., Kubilay N.

- ATMOSPHERIC ENVIRONMENT, vol.41, no.34, pp.7351-7368, 2007 (SCI-Expanded)
- XX. **Contributions of natural sources to high PM₁₀ and PM_{2.5} events in the eastern Mediterranean**
Kocak M., Mihalopoulos N., Kubilay N.
ATMOSPHERIC ENVIRONMENT, vol.41, no.18, pp.3806-3818, 2007 (SCI-Expanded)
- XXI. **Airborne desert dust and aeromicrobiology over the Turkish Mediterranean coastline**
Griffin D. W., Kubilay N., Kocak M., Gray M. A., Borden T. C., Shinn E. A.
ATMOSPHERIC ENVIRONMENT, vol.41, no.19, pp.4050-4062, 2007 (SCI-Expanded)
- XXII. **Trace metal solid state speciation in aerosols of the Northern Levantine basin, East Mediterranean**
Kocak M., Kubilay N., Herut B., Nimmo M.
JOURNAL OF ATMOSPHERIC CHEMISTRY, vol.56, no.3, pp.239-257, 2007 (SCI-Expanded)
- XXIII. **Seasonal variability of optical properties of aerosols in the Eastern Mediterranean**
Vrekoussis M., Liakakou E., Kocak M., Kubilay N., Oikonomou K., Sciare J., Mihalopoulos N.
ATMOSPHERIC ENVIRONMENT, vol.39, no.37, pp.7083-7094, 2005 (SCI-Expanded)
- XXIV. **Dry atmospheric fluxes of trace metals (Al, Fe, Mn, Pb, Cd, Zn, Cu) over the Levantine Basin: A refined assessment**
Kocak M., Kubilay N., Herut B., Nimmo M.
ATMOSPHERIC ENVIRONMENT, vol.39, no.38, pp.7330-7341, 2005 (SCI-Expanded)
- XXV. **Ground-based assessment of Total Ozone Mapping Spectrometer (TOMS) data for dust transport over the northeastern Mediterranean**
Kubilay N., Oguz T., Kocak M., Torres O.
GLOBAL BIOGEOCHEMICAL CYCLES, vol.19, no.1, 2005 (SCI-Expanded)
- XXVI. **Spatio-temporal aerosol trace metal concentrations and sources in the Levantine Basin of the Eastern Mediterranean**
Kocak M., Nimmo M., Kubilay N., Herut B.
ATMOSPHERIC ENVIRONMENT, vol.38, no.14, pp.2133-2144, 2004 (SCI-Expanded)
- XXVII. **Ionic composition of lower tropospheric aerosols at a Northeastern Mediterranean site: implications regarding sources and long-range transport**
Kocak M., Kubilay N., Mihalopoulos N.
ATMOSPHERIC ENVIRONMENT, vol.38, no.14, pp.2067-2077, 2004 (SCI-Expanded)
- XXVIII. **Atmospheric deposition of inorganic phosphorus in the Levantine Basin, eastern Mediterranean: Spatial and temporal variability and its role in seawater productivity**
Markaki Z., Oikonomou K., Kocak M., Kouvarakis G., Chaniotaki A., Kubilay N., Mihalopoulos N.
LIMNOLOGY AND OCEANOGRAPHY, vol.48, no.4, pp.1557-1568, 2003 (SCI-Expanded)
- XXIX. **Influence of Black Sea and local biogenic activity on the seasonal variation of aerosol sulfur species in the eastern Mediterranean atmosphere**
Kubilay N., Kocak M., Cokacar T., Oguz T., Kouvarakis G., Mihalopoulos N.
GLOBAL BIOGEOCHEMICAL CYCLES, vol.16, no.4, 2002 (SCI-Expanded)

Books & Book Chapters

- I. **Atmospheric Input of Inorganic Macro-Nutrients in the EasternMediterranean: Ramifications Regarding Marine Productivity**
KOÇAK M.
in: The Turkish Part of the Mediterranean Sea Marine Biodiversity Fisheries Conservation and Governance, Turan, C., Salihoğlu, B., Özgür Özbek, E., Öztürk, B., Editor, Turkish Marine Research Foundation, pp.30-38, 2016

Refereed Congress / Symposium Publications in Proceedings

- I. **ATMOSPHERIC WATER-SOLUBLE ORGANIC NITROGEN (WSON) IN THE EASTERN MEDITERRANEAN:**

ORIGIN AND IMPLICATIONS CONSIDERING MARINE PRODUCTIVITY

KOÇAK M.

INTERNATIONAL İSKENDERUN BAY SYMPOSIUM, 11 - 13 October 2017

II. Doğu Akdeniz de Atmosferik Azot Denizsel Üretime Etkisi

Nehir M., KOÇAK M.

Türkiye Deniz Bilimleri Konferansı, Turkey, 31 May - 03 June 2016

III. Hava Kütleri Geri Yörüngelerinin Kümeleme Analiz Metotlarının Doğruluğunun Değerlendirilmesi ve Doğu Akdeniz Atmosferinde Aerosol Kimyasal Kompozisyonu ve Optik Özellikleri Üzerine Etkisi

Tutsak E., KOÇAK M.

Türkiye Deniz Bilimleri Konferansı, Turkey, 31 May - 03 June 2016

IV. Doğu Akdeniz Atmosferik Aerosollerinde İz Metaller Türleştirme ve Deniz Üretimi Üzerine Etkileri

Gültekin Y., KOÇAK M.

Türkiye Deniz Bilimleri Konferansı, Turkey, 31 May - 03 June 2016

V. Interactions of cholesterol reducing agent simvastatin with neutral DPPC and DMPC multilamellar liposomes

Kocak M., Severcan F.

51st Annual Meeting of the Biophysical-Society, Maryland, United States Of America, 3 - 07 March 2007

VI. Concentration and chemical composition of PM2.5 and PM10-2.5 in the Northeastern Mediterranean

Kubilay N., KOÇAK M., Mihalopoulos N.

NATO Advanced Research Workshop on Regional Climate Variability and its Impacts in the Mediterranean Area, Marrakech, Morocco, 01 September 2006, vol.79, pp.167-169

Supported Projects

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

Metrics

Publication: 37

Citation (WoS): 1606

Citation (Scopus): 1321

H-Index (WoS): 19

H-Index (Scopus): 18