



# Çukurova International Congress of Basic and Applied Sciences

13 - 15 March, 2026  
Adana, TÜRKİYE

## PROCEEDINGS BOOK

ISBN: 978-625-92452-4-9

DOI: XXXXXXXXXXXXX

EDITORS

Prof Dr. Nuray GÜZELER

Tolga ARMUTCU



**AKAP<sup>®</sup>** | INTERNATIONAL  
ACADEMIC  
PLATFORM





**ISBN: 978-625-92452-4-9**

ÇUKUROVA INTERNATIONAL CONGRESS OF BASIC  
AND APPLIED SCIENCES PROCEEDINGS BOOK

2026® INTERNATIONAL ACADEMIC PLATFORM

**EDITORS**

Prof Dr. Nuray GÜZELER  
Tolga ARMUTCU

**Publication Date:** 25 March, 2026

***All Rights Reserved.***

*No part of this publication may be reproduced, distributed, transmitted, stored in a retrieval system, or translated into any language, in any form or by any means—electronic, mechanical, photocopying, recording, or otherwise—without the prior written permission of both the copyright holder and the publisher.*

*Any unauthorized use, reproduction, or distribution of the material contained in this book is strictly prohibited and may result in civil and/or criminal liability under applicable copyright laws.*



**Publisher Certificate No: 76864**

**Contact:**

Greff Rek. Mat. Org. Tur. Dan. San. ve Tic. Ltd. Şti.  
Yıldızevler Mah. 708. Cad. No: 14/3 Çankaya - ANKARA  
0312 490 97 94  
0536 571 50 33  
www.greff.com.tr  
info@greff.com.tr



# Çukurova International Congress of Basic and Applied Sciences

13 - 15 March, 2026  
Adana, TÜRKİYE

The logo features the text 'AKAP' in a large, white, sans-serif font. To the right of 'AKAP' is a small registered trademark symbol (®). A thin white vertical line separates 'AKAP' from the text 'INTERNATIONAL ACADEMIC PLATFORM'. The background is a dark blue gradient with several thin, white, parallel diagonal lines running from the top-left towards the bottom-right.

AKAP<sup>®</sup> | INTERNATIONAL  
ACADEMIC  
PLATFORM



# Çukurova International Congress of Basic and Applied Sciences

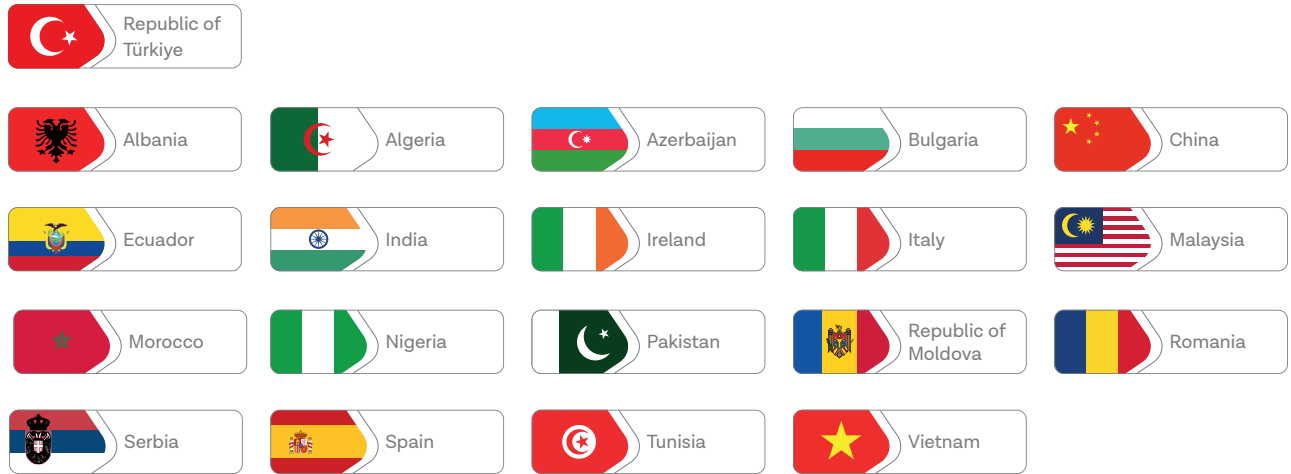
13 - 15 March, 2026  
Adana, TÜRKİYE

## ORGANIZER

**AKAP<sup>®</sup>** | INTERNATIONAL  
ACADEMIC  
PLATFORM

Yıldızevler Mah. 708. Cad. No: 14/3 Çankaya - ANKARA - 0 312 343 10 33 - 0 501 676 10 33 - <https://akap.tr> - [info@akap.tr](mailto:info@akap.tr)

## PARTICIPANTS COUNTRY



## STATISTICS ON ACADEMIC PUBLICATIONS

**91** Total Accepted Article

**43** Accepted Article (Türkiye)

**48** Accepted Article (Other Countries)



## Organizing Committee

| <i><b>Name</b></i>                                                | <i><b>Institution</b></i>                                                         | <i><b>Country</b></i> |
|-------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------|
| <i><b>Prof.Dr. Oleksandr DLUHOPOLSKYI</b></i>                     | <i>Batı Ukrayna Ulusal University,<br/>Lublin Ekonomi ve İnovasyon University</i> | <i>UA<br/>PL</i>      |
| <i><b>Prof.Dr. Serap GÖNCÜ</b></i>                                | <i>Çukurova University</i>                                                        | <i>TR</i>             |
| <i><b>Prof.Dr. Sibel DEMİR KANMAZALP</b></i>                      | <i>GaziantepUniversity</i>                                                        | <i>TR</i>             |
| <i><b>Prof. Dr. Ahmet Doğan DUMAN</b></i>                         | <i>Hatay Mustafa Kemal University</i>                                             | <i>TR</i>             |
| <i><b>Prof. Dr. Hidayet MAZI</b></i>                              | <i>Gaziantep University</i>                                                       | <i>TR</i>             |
| <i><b>Assoc. Prof. Dr. Hakan KAVUR</b></i>                        | <i>Çukurova University</i>                                                        | <i>TR</i>             |
| <i><b>Prof. Dr. Raul Duarte Salgueiral Gomes<br/>CAMPILHO</b></i> | <i>Higher Engineering Institute of Porto</i>                                      | <i>PT</i>             |
| <i><b>Prof. Dr. Güray KILINÇÇEKER</b></i>                         | <i>Çukurova University</i>                                                        | <i>TR</i>             |
| <i><b>Prof. Dr. Nuray GÜZELER</b></i>                             | <i>Çukurova University</i>                                                        | <i>TR</i>             |
| <i><b>Prof. Dr. Ayşe HALIGÜR</b></i>                              | <i>Cukurova University</i>                                                        | <i>TR</i>             |
| <i><b>Prof. Dr. Emel YILDIZ</b></i>                               | <i>Cukurova University</i>                                                        | <i>TR</i>             |

## Scientific and Advisory Board

| <i><b>Name</b></i>                                     | <i><b>Institution</b></i>                        | <i><b>Country</b></i> |
|--------------------------------------------------------|--------------------------------------------------|-----------------------|
| <i>Assoc. Prof. Serap TOPRAK DÖŞLÜ</i>                 | <i>Mardin Artuklu University</i>                 | <i>TR</i>             |
| <i>Assoc. Prof. Mustafa KARAKÖSE</i>                   | <i>Giresun University</i>                        | <i>TR</i>             |
| <i>Prof. Dr. Nihat ATMACA</i>                          | <i>Gaziantep University</i>                      | <i>TR</i>             |
| <i>Prof. Dr. Nesibe Ebru KAFKAS</i>                    | <i>Çukurova University</i>                       | <i>TR</i>             |
| <i>Prof. Dr. Teodor BULBOACA</i>                       | <i>Babeş-Bolyai University</i>                   | <i>RO</i>             |
| <i>Prof. Dr. Suphi URAL</i>                            | <i>Çukurova University</i>                       | <i>TR</i>             |
| <i>Prof. Dr. Jasemin TODRI</i>                         | <i>Catholic University of Murcia</i>             | <i>ES</i>             |
| <i>Prof. Dr. Simge ZEYNELOĞLU</i>                      | <i>Gaziantep University</i>                      | <i>TR</i>             |
| <i>Prof. Dr. Işıl VAR</i>                              | <i>Çukurova University</i>                       | <i>TR</i>             |
| <i>Prof. Dr. Danilo Henrique LATTARO</i>               | <i>University of São Paulo</i>                   | <i>BR</i>             |
| <i>Prof. Dr. Khimmataliyev Dustnazar OMONOVICH</i>     | <i>Chirchiq State Pedagogical University</i>     | <i>UZ</i>             |
| <i>Prof. Dr. Yılmaz UÇAR</i>                           | <i>Çukurova University</i>                       | <i>TR</i>             |
| <i>Prof. Dr. Songül ÇAKMAKÇI</i>                       | <i>Atatürk University</i>                        | <i>TR</i>             |
| <i>Prof. Dr. Mehmet RAMAZANOĞLU</i>                    | <i>Istanbul Technical University</i>             | <i>TR</i>             |
| <i>Prof. Dr. Eng. Samir LADACI</i>                     | <i>National Polytechnic School of Algiers</i>    | <i>DZ</i>             |
| <i>Prof. Dr. Raul Duarte Salgueiral Gomes CAMPILHO</i> | <i>Polytechnic Institute of Porto</i>            | <i>PT</i>             |
| <i>Prof. Dr. Ali SABIR</i>                             | <i>Selçuk University</i>                         | <i>TR</i>             |
| <i>Prof. Dr. Mariem ZAGHDOUDI</i>                      | <i>University of Carthage</i>                    | <i>TN</i>             |
| <i>Prof. Dr. Lily PETRIASHVILI</i>                     | <i>Georgian Technical University</i>             | <i>GE</i>             |
| <i>Prof. Dr. Fatima Zohra MOSTEFA</i>                  | <i>USTO-MB University</i>                        | <i>DZ</i>             |
| <i>Prof. Dr. Kun HARISMAH</i>                          | <i>Muhammadiyah University of Surakarta</i>      | <i>ID</i>             |
| <i>Prof. Dr. Bimal Kumar MISHRA</i>                    | <i>Vinoba Bhave University</i>                   | <i>IN</i>             |
| <i>Prof. Dr. Vesna Karapetkovska Hristova</i>          | <i>St. Kliment Ohridski University</i>           | <i>MK</i>             |
| <i>Prof. Dr. Fateh Mebarek OUDINA</i>                  | <i>20 August 1955 - Skikda University</i>        | <i>DZ</i>             |
| <i>Prof. Dr. Ivan PAVLOVIC</i>                         | <i>Scientific Veterinary Institute of Serbia</i> | <i>RS</i>             |
| <i>Prof. Dr. Najim Abdulla YASSIN</i>                  | <i>University of Duhok</i>                       | <i>IQ</i>             |
| <i>Assoc. Prof. Adile AKPINAR</i>                      | <i>Gaziantep University</i>                      | <i>TR</i>             |
| <i>Assoc. Prof. Ahmet ÇİLEK</i>                        | <i>Çukurova University</i>                       | <i>TR</i>             |
| <i>Assoc. Prof. Abdurrahman MOHAMMED</i>               | <i>Antalya Bilim University</i>                  | <i>TR</i>             |



| <i><b>Name</b></i>                                | <i><b>Institution</b></i>                                      | <i><b>Country</b></i> |
|---------------------------------------------------|----------------------------------------------------------------|-----------------------|
| <i><b>Assoc. Prof. Şenay KARABIYIK</b></i>        | <i>Çukurova University</i>                                     | <i>TR</i>             |
| <i><b>Assoc. Prof. Erdal KUŞVURAN</b></i>         | <i>Çukurova University</i>                                     | <i>TR</i>             |
| <i><b>Assoc. Prof. Mehmet Emin ARZUTUĞ</b></i>    | <i>Atatürk University</i>                                      | <i>TR</i>             |
| <i><b>Assoc. Prof. Yusuf YILMAZ</b></i>           | <i>Gaziantep University</i>                                    | <i>TR</i>             |
| <i><b>Assoc. Prof. Melike YAVAŞ ÇELİK</b></i>     | <i>Gaziantep University</i>                                    | <i>TR</i>             |
| <i><b>Assoc. Prof. Tamer DOĞAN</b></i>            | <i>Çukurova University</i>                                     | <i>TR</i>             |
| <i><b>Assoc. Prof. Dilek SAY</b></i>              | <i>Çukurova University</i>                                     | <i>TR</i>             |
| <i><b>Assoc. Prof. Rozina KHATTAK</b></i>         | <i>Shaheed Benazir Bhutto Women University</i>                 | <i>PK</i>             |
| <i><b>Assoc. Prof. Mourad DERRA</b></i>           | <i>Ibn Zohr University</i>                                     | <i>MA</i>             |
| <i><b>Assoc. Prof. Mahmut DİNGİL</b></i>          | <i>Çukurova University</i>                                     | <i>TR</i>             |
| <i><b>Assoc. Prof. Özlem ALPTEKİN</b></i>         | <i>Çukurova University</i>                                     | <i>TR</i>             |
| <i><b>Assoc. Prof. Semin TOPALOĞLU PAKSOY</b></i> | <i>Çukurova University</i>                                     | <i>TR</i>             |
| <i><b>Assoc. Prof. Marvel Reuben SUWITONO</b></i> | <i>Universitas Advent Indonesia</i>                            | <i>ID</i>             |
| <i><b>Assoc. Prof. Sehrish FIRYAL</b></i>         | <i>University of Veterinary and Animal Sciences</i>            | <i>PK</i>             |
| <i><b>Asst. Prof. Mustafa YEĞİN</b></i>           | <i>Çukurova University</i>                                     | <i>TR</i>             |
| <i><b>Dr. Can MAVRUK</b></i>                      | <i>Niğde Ömer Halisdemir University</i>                        | <i>TR</i>             |
| <i><b>Dr. Olha PODPALOVA</b></i>                  | <i>Taras Shevchenko National University of Kyiv</i>            | <i>UA</i>             |
| <i><b>Dr. Bogdan-Catalin SERBAN</b></i>           | <i>National Institute for R&amp;D in<br/>Microtechnologies</i> | <i>RO</i>             |
| <i><b>Dr. Muhammad KAMRAN</b></i>                 | <i>Shenzhen University</i>                                     | <i>CN</i>             |
| <i><b>Dr. Maria Taj MUHAMMAD</b></i>              | <i>Jinnah University for Women</i>                             | <i>PK</i>             |
| <i><b>Dr. Vidya PADMAKUMAR</b></i>                | <i>EcoDiversity Research Center</i>                            | <i>US</i>             |
| <i><b>Dr. Ramoshweu Solomon LEBELO</b></i>        | <i>Vaal University of Technology</i>                           | <i>ZA</i>             |
| <i><b>Dr. Habibur RAHMAN</b></i>                  | <i>New Global Community Education<br/>Foundation</i>           | <i>AU</i>             |
| <i><b>Dr. Stanislava STATEVA</b></i>              | <i>Institute of Plant Genetic Resources</i>                    | <i>BG</i>             |
| <i><b>Dr. Aysel Kekillioğlu</b></i>               | <i>Nevşehir Hacı Bektaş Veli University</i>                    | <i>TR</i>             |
| <i><b>Asst. Prof. Muslu Kazım KÖREZ</b></i>       | <i>Selçuk University, Faculty of Medicine</i>                  | <i>TR</i>             |

The logo for AKAP International Academic Platform is centered on a dark blue background. The text 'AKAP' is in a large, white, sans-serif font, followed by a registered trademark symbol (®). To the right of 'AKAP' is a thin vertical line, and then the words 'INTERNATIONAL', 'ACADEMIC', and 'PLATFORM' are stacked vertically in a smaller, white, sans-serif font. On the left side of the image, there are several thin, white, diagonal lines that create a sense of depth and movement.

AKAP<sup>®</sup> | INTERNATIONAL  
ACADEMIC  
PLATFORM

The logo features the text 'AKAP' in a large, white, sans-serif font. To the right of 'AKAP' is a registered trademark symbol (®). A thin white vertical line separates 'AKAP' from the text 'INTERNATIONAL ACADEMIC PLATFORM'. The background is a dark blue gradient with several thin, white diagonal lines crossing the page from the bottom-left towards the top-right.

AKAP<sup>®</sup> | INTERNATIONAL  
ACADEMIC  
PLATFORM

CONGRESS ONLINE  
FACE-TO-FACE PRESENTATIONS



# Çukurova International Congress of Basic and Applied Sciences

13 - 15 March, 2026

## CONGRESS PROGRAM

## ABOUT THE CONGRESS

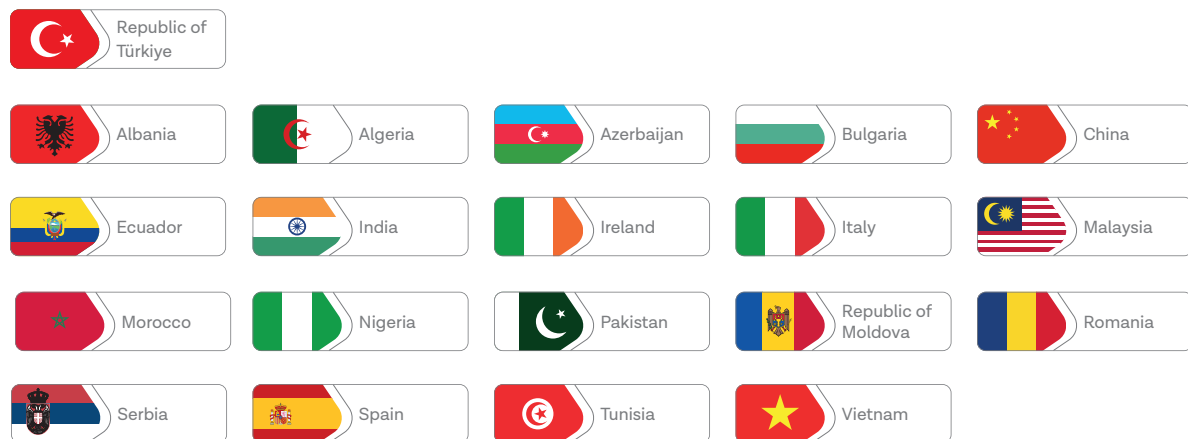
The Çukurova International Congress of Basic and Applied Sciences is an international scientific event aiming to share current, original, and high-quality academic studies conducted in the fields of basic and applied sciences. The congress aims to strengthen scientific interaction and knowledge production by bringing together academics, researchers, and graduate students from different disciplines on a common academic platform.

The congress covers studies prepared in various subfields of basic and applied sciences, primarily including natural sciences, engineering sciences, health sciences, and applied research. Participants have the opportunity to present their research findings through face-to-face and online sessions, discuss with expert academics in the field, and receive scientific feedback. In this respect, the congress is not only a presentation platform but also offers an effective and dynamic academic sharing ground that supports scientific development.

All papers presented within the scope of the Congress have undergone a double-blind peer-review process in accordance with international academic publishing standards and scientific ethical principles. During the evaluation process, the originality, methodological soundness, contribution to the literature, and scientific quality of the studies were meticulously examined. As a result of this comprehensive academic evaluation process, a total of 91 papers from 20 different countries—including 43 from Turkey—have been accepted.

Accepted papers will be published in the Conference Proceedings, registered with ISBN and DOI numbers; thereby, these studies will become internationally accessible, permanent, and citable academic resources.

## COUNTRIES OF PARTICIPATING ACADEMICIANS



March 14, 2026 **HALL-1 | SESSION-1****ANKARA TIME**  
**11:00 - 12:30****FACE TO FACE PRESENTATIONS - DİVAN ADANA**HEAD OF SESSION:  
Prof. Dr. Xxxx XXXXX

| AUTHOR(S)                                                      | ORGANISATION                                                   | TOPIC TITLE                                                                                                                                                |
|----------------------------------------------------------------|----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gülay ŞATAK<br>Prof. Dr. Mehmet KARAKILÇIK                     | Çukurova University (Türkiye)                                  | DETERMINATION OF PRE-OPERATIONAL ENVIRONMENTAL RADIOACTIVITY LEVELS AND ESTABLISHMENT OF REFERENCE (BASELINE) VALUES AROUND THE AKKUYU NUCLEAR POWER PLANT |
| Prof. Dr. Hakan AYDIN<br>Assoc. Prof. Dr. Onur ÖNÜR MEN        | Erciyes University (Türkiye)                                   | e-NetCoM: FROM DISASTER NARRATIVES TO DATA-DRIVEN ENVIRONMENTAL COMMUNICATION                                                                              |
| Assist. Prof. Dr. Mustafa Güçlü SUCAK<br>Prof. Dr. Serap GÖNCÜ | Adıyaman University (Türkiye)<br>Çukurova University (Türkiye) | GRAZING BASED FEEDING SYSTEMS: AN EVALUATION IN TERMS OF PRODUCTIVITY AND SUSTAINABILITY IN CATTLE FARMING                                                 |
| Assist. Prof. Dr. Mustafa Güçlü SUCAK<br>Prof. Dr. Serap GÖNCÜ | Adıyaman University (Türkiye)<br>Çukurova University (Türkiye) | BEEF FATTY ACID COMPOSITION: BIOLOGICAL MECHANISMS AND THE ROLE OF FEEDING SYSTEMS                                                                         |

**e-NetCoM: FELAKET ANLATISINDAN VERİ TEMELLİ ÇEVRE İLETİŞİMİNE**

e-NetCoM: FROM DISASTER NARRATIVES TO DATA-DRIVEN ENVIRONMENTAL  
COMMUNICATION

**Prof. Dr. Hakan AYDIN**

Erciyes Üniversitesi, İletişim Fakültesi, Gazetecilik Bölümü, Kayseri, TÜRKİYE

ORCID: 0000-0003-4873-0988

**Doç. Dr. Onur ÖNÜRMEN**

Erciyes Üniversitesi, İletişim Fakültesi, Radyo, Televizyon ve Sinema Bölümü, Kayseri,  
TÜRKİYE

ORCID: 0000-0001-7500-2869

**ÖZET**

Günümüzde çevresel sorunlar ve iklim değişikliği üzerine yürütülen tartışmalar geniş bir söylem yelpazesinde ilerlemektedir. Bir uçta yaklaşan küresel felaket senaryolarını vurgulayan alarımci anlatılar yer alırken, diğer uçta bu risklerin abartıldığını savunan eleştirel yaklaşımlar bulunmaktadır. Bu iki uç arasında oluşan iletişim ortamı, kamuoyunun çevre sorunlarını sağlıklı biçimde anlamasını zorlaştırabilmektedir. Felaket söylemlerinin yoğun biçimde kullanılması, kısa vadede dikkat çekse de uzun vadede umutsuzluk, duyarsızlaşma veya inkâr gibi psikolojik ve toplumsal sonuçlar doğurabilmektedir. Özellikle gençler arasında giderek daha fazla tartışılan “iklim kaygısı” bu iletişim biçiminin önemli yan etkilerinden biri olarak değerlendirilmektedir.

Türkiye Ulusal Ajansı tarafından yürütülen Erasmus+ Programı kapsamında Avrupa Birliği tarafından finanse edilen **Doğanın Enerjileri Bizimle: Genç Liderler Çevresel İletişim ve Medya Ağı** başlıklı proje kapsamında hazırlanan bu bildiri, çevre iletişiminde felaket anlatısının sınırlarını tartışmakta ve daha dengeli bir iletişim modelinin gerekliliğini ele almaktadır. Nitel doküman analizi yöntemine dayanan çalışma, çevresel risklerin varlığını inkâr etmeden, bu risklerin dramatize edilmesinin kamuoyunda yanlış algılar üretebileceğini savunmaktadır. Medya ve kamusal tartışmalar çoğu zaman dramatik olaylara odaklanmakta; bu durum ise uzun dönemli verilerin ve çözüm odaklı yaklaşımların arka planda kalmasına yol açabilmektedir. Bu bağlamda çevre iletişiminde veri temelli, eleştirel ve çözüm odaklı bir yaklaşımın geliştirilmesi önem kazanmaktadır.

Bu çerçevede e-NetCoM, çevre iletişiminde korku merkezli söylemler yerine bilimsel veriye dayalı bir yaklaşımı teşvik etmeyi amaçlamaktadır. Proje; çevre tartışmalarının sloganlar yerine doğrulanabilir veriler, bilimsel göstergeler ve eleştirel düşünme yöntemleri üzerinden yürütülmesini desteklemektedir. Ayrıca çevre iletişiminin yalnızca akademik çevrelerde değil, geniş toplum kesimlerinde de anlaşılabilir ve erişilebilir biçimde yaygınlaştırılmasını hedeflemektedir. Proje kapsamında farkındalık çalışmaları, eğitim faaliyetleri ve yerel katılım mekanizmaları aracılığıyla çevre sorunlarının daha rasyonel ve çok boyutlu biçimde ele alınması

teşvik edilmektedir. Çalışmada, çevre iletişimde felaket anlatısına dayalı tek yönlü söylemlerin yerine; bilimsel veri, şeffaflık, eleştirel düşünme ve çözüm odaklı yaklaşımların öne çıkarılması gerektiğini savunan e-NetCoM çıktılarının söz konusu nitelikleri haiz olduğu bulunmuştur.

**Anahtar Kelimeler:** Erasmus+, e-NetCoM, Çevresel Sürdürülebilirlik, Çevre İletişimi, Gençler

#### ABSTRACT

Today, discussions on environmental problems and climate change proceed within a wide spectrum of discourse. At one end, there are alarmist narratives emphasizing approaching global disaster scenarios, while at the other end there are critical approaches arguing that these risks are exaggerated. The communication environment formed between these two extremes may make it difficult for the public to understand environmental problems in a healthy manner. Although the intensive use of disaster narratives may attract attention in the short term, in the long term it can produce psychological and social consequences such as hopelessness, desensitization, or denial. “Climate anxiety,” which has increasingly been discussed especially among young people, is considered one of the important side effects of this form of communication.

This paper, prepared within the scope of the project titled **Nature's Energies are with Us: Young Leaders Environmental Communication and Media Network**, financed by the European Union under the Erasmus+ Programme carried out by the Turkish National Agency, discusses the limits of disaster narratives in environmental communication and addresses the necessity of a more balanced communication model. Based on the qualitative document analysis method, the study argues that without denying the existence of environmental risks, dramatizing these risks may produce misperceptions among the public. Media and public debates often focus on dramatic events; this situation may lead long-term data and solution-oriented approaches to remain in the background. In this context, developing a data-based, critical, and solution-oriented approach in environmental communication becomes important.

Within this framework, e-NetCoM aims to encourage a science-based approach in environmental communication instead of fear-centered discourses. The project supports conducting environmental debates through verifiable data, scientific indicators, and critical thinking methods rather than slogans. It also aims to disseminate environmental communication in an understandable and accessible manner not only within academic circles but also among broader segments of society. Within the scope of the project, awareness activities, educational programs, and local participation mechanisms encourage environmental issues to be addressed in a more rational and multidimensional way. The study finds that the outputs of e-NetCoM possess these qualities, advocating that instead of one-sided discourses based on disaster narratives in environmental communication, scientific data, transparency, critical thinking, and solution-oriented approaches should be emphasized.

**Keywords:** Erasmus+, e-NetCoM, Environmental Sustainability, Environmental Communication, Youth