

*Cumhuriyet International Journal of Education*

**Sahibi**

*Prof. Dr. Ayhan ÖZTÜRK*

**Editör**

*Prof. Dr. Fatih M. DERVİŞOĞLU*

**Editör Yardımcıları**

*Yrd. Doç. Dr. S. Tunay KAMER  
Uzm. Dr. Halim SARİCAOĞLU*

**Owner**

*Prof. Dr. Ayhan ÖZTÜRK*

**Editor in Chief**

*Prof. Dr. Fatih M. DERVİŞOĞLU*

**Associate Editors**

*Assist. Prof. Dr. S. Tunay KAMER  
Spec. PhD. Halim SARİCAOĞLU*

**Academic Advisory Board**

- Prof. Dr. Hayati AKYOL (Gazi University, Turkey)  
Prof. Dr. Mehmet ARSLAN (Gaziosmanpaşa University, Turkey)  
Prof. Dr. Nevzat Yaşar AŞIKOĞLU (Cumhuriyet University, Turkey)  
Prof. Dr. Adnan BAKI (Karadeniz Technical University, Turkey)  
Prof. Dr. İvanna BANCOVA (Comrat State University, Republic of Moldova)  
Prof. Dr. Mustafa Hilmi BULUT (Cumhuriyet University, Turkey)  
Prof. Dr. Hilary COOPER (University of Cumbria, England)  
Prof. Dr. Mustafa ÇELİKTEM (Erciyes University, Turkey)  
Prof. Dr. Dursun DİLEK (Sinop University, Turkey)  
Prof. Dr. Tayyip DUMAN (Gazi University, Turkey)  
Prof. Dr. Firdevs GÜNEŞ (Bartın University, Turkey)  
Prof. Dr. Turan GÜVEN (Gazi University, Turkey)  
Prof. Dr. Hilmi İBAR (Trakya University, Turkey)  
Prof. Dr. Abdullah KORKMAZ (İnönü University, Turkey)  
Prof. Dr. Muhsin KONUK (Afyon Kocatepe University, Turkey)  
Prof. Dr. Abakir MAMİTOV (National Academy of Science, Kyrgyz Repuclic)  
Prof. Dr. Maria Isabel Gomes Barca OLIVEIRA (University of Minho, Portugal)  
Prof. Dr. Mack Clayton SHELLEY (Iowa State University, USA)  
Prof. Dr. Mehmet ŞİŞMAN (Osmangazi University, Turkey)  
Prof. Dr. Erdal TOPRAKÇI (Ege University, Turkey)  
Prof. Dr. Necati YALÇIN (Gazi University, Turkey)  
Prof. Dr. Ayhan YILMAZ (Hacettepe University, Turkey)*

## Review Board

- Prof. Dr. Abakir MAMÍTOV (National Academy of Science, Kyrgyz Republic)  
Prof. Dr. Abdullah KORKMAZ (İnönü University, Turkey)  
Prof. Dr. Adnan BAKI (Karadeniz Technical University, Turkey)  
Prof. Dr. Ahmet SABAN (Necmettin Erbakan University, Turkey)  
Prof. Dr. Ali GÜLER (Abant İzzet Baysal University, Turkey)  
Prof. Dr. Ayhan ÖZTÜRK (Cumhuriyet University, Turkey)  
Prof. Dr. Ayhan YILMAZ (Hacettepe University, Turkey)  
Prof. Dr. B. Ünal İBRET (Kastamonu University, Turkey)  
Prof. Dr. Cemil ÖZTÜRK (Marmara University, Turkey)  
Prof. Dr. Claudia FAHRENWALD (University of Hamburg, Germany)  
Prof. Dr. Douglas HARTMANN (University of Minnesota, USA)  
Prof. Dr. Dursun DİLEK (Sinop University, Turkey)  
Prof. Dr. Erdal TOPRAKÇI (Ege University, Turkey)  
Prof. Dr. Esmahan AĞAOĞLU (Anadolu University, Turkey)  
Prof. Dr. Eyüp AKMAN (Kastamonu University, Turkey)  
Prof. Dr. Fatih M. DERVIŞOĞLU (Cumhuriyet University, Turkey)  
Prof. Dr. Firdevs GÜNEŞ (Bartın University, Turkey)  
Prof. Dr. Hayati AKYOL (Gazi University, Turkey)  
Prof. Dr. Hilary COOPER (University of Cumbria, England)  
Prof. Dr. Hilmü İBAR (Trakya University, Turkey)  
Prof. Dr. Ivanna BANCOVA (Comrat State University, Republic of Moldova)  
Prof. Dr. İlhan ERDEM (Ankara University, Turkey)  
Prof. Dr. Kemalettin KUZUCU (Marmara University, Turkey)  
Prof. Dr. Mack Clayton SHELLY (Iowa State University, USA)  
Prof. Dr. Maria Isabel Gomes Barca OLIVEIRA (University of Minho, Portugal)  
Prof. Dr. Mehmet ARSLAN (Gaziosmanpaşa University, Turkey)  
Prof. Dr. Mehmet Durdu KARSLI (Çanakkale University, Turkey)  
Prof. Dr. Mehmet Engin DENİZ (Yıldız Technical University, Turkey)  
Prof. Dr. Mehmet ŞİŞMAN (Osmaniye University, Turkey)  
Prof. Dr. Muhsin KONUK (Üsküdar University, Turkey)  
Prof. Dr. Murat ALP (Niğde University, Turkey)  
Prof. Dr. Mustafa ÇELİKTEM (Erciyes University, Turkey)  
Prof. Dr. Mustafa Hilmü BULUT (Cumhuriyet University, Turkey)  
Prof. Dr. Mustafa SAFRAN (Gazi University, Turkey)  
Prof. Dr. Mustafa ŞANAL (Erciyes University, Turkey)  
Prof. Dr. Necati YALÇIN (Gazi University, Turkey)  
Prof. Dr. Nevzat BATTAL (İnönü University, Turkey)  
Prof. Dr. Nkasiobi Silas OGUZOR (Federal College of Education, Nigeria)  
Prof. Dr. Sebahattin ARIBAŞ (Adiyaman University, Turkey)  
Prof. Dr. Souad HALILA (University of Tunis, Tunis)  
Prof. Dr. Şener BÜYÜKÖZTÜRK (Gazi University, Turkey)  
Prof. Dr. Tayyip DUMAN (Gazi University, Turkey)  
Prof. Dr. Temel ÇALIK (Gazi University, Turkey)  
Prof. Dr. Turan GÜVEN (Gazi University, Turkey)  
Prof. Dr. Yücel GELİŞLİ (Gazi University, Turkey)  
Assoc. Prof. A. Yaşar SERİN (Cumhuriyet University, Turkey)  
Assoc. Prof. Dr. Abdullah TEMİZKAN (Ege University, Turkey)  
Assoc. Prof. Dr. Ali ALAŞ (Necmettin Erbakan University, Turkey)  
Assoc. Prof. Dr. Ali GÖÇER (Erciyes University, Turkey)  
Assoc. Prof. Dr. Anar ADİLOĞLU (Cumhuriyet University, Turkey)  
Assoc. Prof. Dr. Anatoli RAPOORT (Purdue University, USA)  
Assoc. Prof. Dr. Atilla ÇAĞLAR (Kastamonu University, Turkey)  
Assoc. Prof. Dr. Aykut Emre BOZDOĞAN (Giresun University, Turkey)  
Assoc. Prof. Dr. Bahri ATA (Gazi University, Turkey)  
Assoc. Prof. Dr. Baykal BİÇER (Dumlupınar University, Turkey)  
Assoc. Prof. Dr. Celal Teyyar UĞURLU (Cumhuriyet University, Turkey)  
Assoc. Prof. Dr. Coşkun ARSLAN (Necmettin Erbakan University, Turkey)  
Assoc. Prof. Dr. Duran AYDINÖZÜ (Kastamonu University, Turkey)  
Assoc. Prof. Dr. Emine Sema BATU (Anadolu University, Turkey)  
Assoc. Prof. Dr. Erdal HAMARTA (Necmettin Erbakan University, Turkey)  
Assoc. Prof. Dr. Eren YÜRÜDÜR (Gaziosmanpaşa University, Turkey)  
Assoc. Prof. Dr. Ergün RECEPOĞLU (Kastamonu University, Turkey)  
Assoc. Prof. Dr. Eşref ORUÇOV (Cumhuriyet University, Turkey)  
Assoc. Prof. Dr. Gökhane DUMAN (Gazi University, Turkey)  
Assoc. Prof. Dr. H. Aşkin AKPULAT (Cumhuriyet University, Turkey)  
Assoc. Prof. Dr. Halil İbrahim DİKEN (Anadolu University, Turkey)  
Assoc. Prof. Dr. Hülya KARTAL (Uludağ University, Turkey)  
Assoc. Prof. Dr. İbrahim MARAŞ (Ankara University, Turkey)

- Assoc. Prof. Dr. İsa KORKMAZ (Necmettin Erbakan University, Turkey)  
Assoc. Prof. Dr. İsmail Hakkı DEMİRCİOĞLU (Karadeniz Technical University, Turkey)  
Assoc. Prof. Dr. Kadir KARATEKİN (Kastamonu University, Turkey)  
Assoc. Prof. Dr. Kaya YILMAZ (Marmara University, Turkey)  
Assoc. Prof. Dr. M. Serhat YILMAZ (Kastamonu University, Turkey)  
Assoc. Prof. Dr. Mehmet Altan KURNAZ (Kastamonu University, Turkey)  
Assoc. Prof. Dr. Mehmet Nuri GÖMLEKSİZ (Fırat University, Turkey)  
Assoc. Prof. Dr. Mehmet ÖZKARTAL (Süleyman Demirel University, Turkey)  
Assoc. Prof. Dr. Muhittin DİNÇ (Necmettin Erbakan University, Turkey)  
Assoc. Prof. Dr. Murat BURSAL (Cumhuriyet University, Turkey)  
Assoc. Prof. Dr. Murat İSKENDER (Sakarya University, Turkey)  
Assoc. Prof. Dr. Murat PEKTAŞ (Kastamonu University, Turkey)  
Assoc. Prof. Dr. Mustafa KOÇ (Sakarya University, Turkey)  
Assoc. Prof. Dr. Mustafa ŞAHİN (Karadeniz Technical University, Turkey)  
Assoc. Prof. Dr. Nail YILDIRIM (Gaziosmanpaşa University, Turkey)  
Assoc. Prof. Dr. Nebahat GÖÇERİ (Cumhuriyet University, Turkey)  
Assoc. Prof. Dr. Necdet KARASU (Gazi University, Turkey)  
Assoc. Prof. Dr. Nevzat YİĞİT (Karadeniz Technical University, Turkey)  
Assoc. Prof. Dr. Nihal LINDBERG (Kastamonu University, Turkey)  
Assoc. Prof. Dr. Oğuzhan KILDAN (Kastamonu University, Turkey)  
Assoc. Prof. Dr. Selahattin AVŞAROĞLU (Necmettin Erbakan University, Turkey)  
Assoc. Prof. Dr. Selahattin KAYMAKÇI (Kastamonu University, Turkey)  
Assoc. Prof. Dr. Sezgin ÇELİK (Yıldız Technical University, Turkey)  
Assoc. Prof. Dr. Sezgin VURAN (Anadolu University, Turkey)  
Assoc. Prof. Dr. Sibel ÇOBAN (Marmara University, Turkey)  
Assoc. Prof. Dr. Şengül Saime ANAGÜN (Osmangazi University, Turkey)  
Assoc. Prof. Dr. Tuncay DİLÇİ (Cumhuriyet University, Turkey)  
Assoc. Prof. Dr. Yusuf CAN (Muğla University, Turkey)  
Assoc. Prof. Dr. Zdravka Blagoeva KOSTOVA (University of Sofia, Bulgaria)  
Assist. Prof. Dr. Ahmet YIKMIŞ (Abant İzzet Baysal University, Turkey)  
Assist. Prof. Dr. Atiye Adak ÖZDEMİR (Pamukkale University, Turkey)  
Assist. Prof. Dr. Aysun ÇOLAK (Anadolu University, Turkey)  
Assist. Prof. Dr. Ayşenur BÜYÜKGÖZE-KAVAS (19 Mayıs University, Turkey)  
Assist. Prof. Dr. Birol ALVER (Atatürk University, Turkey)  
Assist. Prof. Dr. Bülent AYDOĞDU (Afyon Kocatepe University, Turkey)  
Assist. Prof. Dr. Celal GÜLŞEN (Nevşehir University, Turkey)  
Assist. Prof. Dr. Çiğdem KAN (Fırat University, Turkey)  
Assist. Prof. Dr. Dawn T. LAMBETH (Valdosta State University, USA)  
Assist. Prof. Dr. Ebru BOZPOLAT (Cumhuriyet University, Turkey)  
Assist. Prof. Dr. Enver YOLCU (Çanakkale 18 Mart University, Turkey)  
Assist. Prof. Dr. Erdal ASLAN (Dokuz Eylül University, Turkey)  
Assist. Prof. Dr. Ergün ÖZTÜRK (Sakarya University, Turkey)  
Assist. Prof. Dr. Erkan YEŞİLTAŞ (Cumhuriyet University, Turkey)  
Assist. Prof. Dr. Erol İNELMEN (Boğaziçi University, Turkey)  
Assist. Prof. Dr. Erol TOPAL (Kastamonu University, Turkey)  
Assist. Prof. Dr. Esmira MEHDİYEV (Cumhuriyet University, Turkey)  
Assist. Prof. Dr. Evren KARATAŞ (Cumhuriyet University, Turkey)  
Assist. Prof. Dr. Fatih KARAKUŞ (Afyon Kocatepe University, Turkey)  
Assist. Prof. Dr. Ferda YILDIRIM (Cumhuriyet University, Turkey)  
Assist. Prof. Dr. Güler TULUK (Kastamonu University, Turkey)  
Assist. Prof. Dr. Gülten KÜÇÜKBASMACI (Kastamonu University, Turkey)  
Assist. Prof. Dr. Güner TURAL (19 Mayıs University, Turkey)  
Assist. Prof. Dr. Hakan AKDAĞ (Gaziantep University, Turkey)  
Assist. Prof. Dr. Hakan KURT (Necmettin Erbakan University, Turkey)  
Assist. Prof. Dr. Halil İbrahim AKYÜZ (Kastamonu University, Turkey)  
Assist. Prof. Dr. Handan DEMİRCİOĞLU (Cumhuriyet University, Turkey)  
Assist. Prof. Dr. Harun ER (Bartın University, Turkey)  
Assist. Prof. Dr. Hasan GÜRGÜR (Anadolu University, Turkey)  
Assist. Prof. Dr. Hatayi ZENGİN (Cumhuriyet University, Turkey)  
Assist. Prof. Dr. Hatice MUMYAKMAZ (Bozok University, Turkey)  
Assist. Prof. Dr. Hikmet YILMAZ (Cumhuriyet University, Turkey)  
Assist. Prof. Dr. Hülya ERCAN (Cumhuriyet University, Turkey)  
Assist. Prof. Dr. Hüseyin ANILAN (Osmangazi University, Turkey)  
Assist. Prof. Dr. Hüseyin ŞİMSEK (Ahi Evran University, Turkey)  
Assist. Prof. Dr. Kamil YILDIRIM (Aksaray University, Turkey)  
Assist. Prof. Dr. Levent AKGÜN (Atatürk University, Turkey)  
Assist. Prof. Dr. M. Kasim ÖZGEN (Cumhuriyet University, Turkey)  
Assist. Prof. Dr. Mehmet AYDIN (Dicle University, Turkey)  
Assist. Prof. Dr. Mehmet ÖZCAN (Mehmet Akif Ersoy University, Turkey)  
Assist. Prof. Dr. Mehmet Koray SERİN (Kastamonu University, Turkey)

- Assist. Prof. Dr. Meltem O. SAMANİ (European University of Lefke, Turkish Republic of Northern Cyprus)  
Assist. Prof. Dr. Mergül ÇOLAK (Erzincan University, Turkey)  
Assist. Prof. Dr. Metin DENİZ (Bartın University, Turkey)  
Assist. Prof. Dr. Muammer ERGÜN (Kastamonu University, Turkey)  
Assist. Prof. Dr. Muhammed SALMAN (Kastamonu University, Turkey)  
Assist. Prof. Dr. Mustafa KİŞOĞLU (Aksaray University, Turkey)  
Assist. Prof. Dr. Necmi GÖKYER (Fırat University, Turkey)  
Assist. Prof. Dr. Ömer Faruk SÖNMEZ (Gaziosmanpaşa University, Turkey)  
Assist. Prof. Dr. Ramazan ALABAŞ (Kastamonu University, Turkey)  
Assist. Prof. Dr. Roza ABDİKULOVA (Kyrgyzstan-Turkey Manas University, Kyrgyz Repuplic)  
Assist. Prof. Dr. Rukiye ŞAHİN (Gaziosmanpaşa University, Turkey)  
Assist. Prof. Dr. S. Tunay KAMER (Kastamonu University, Turkey)  
Assist. Prof. Dr. Salim PİLAV (Kırıkkale University, Turkey)  
Assist. Prof. Dr. Selda KILIÇ (Necmettin Erbakan University, Turkey)  
Assist. Prof. Dr. Selma KARABINAR (Marmara University, Turkey)  
Assist. Prof. Dr. Serkan AKKOYUN (Cumhuriyet University, Turkey)  
Assist. Prof. Dr. Serkan BULDUR (Cumhuriyet University, Turkey)  
Assist. Prof. Dr. Sezai ÖZTAŞ (Kırklareli University, Turkey)  
Assist. Prof. Dr. Sibel CENGİZHAN (Marmara University, Turkey)  
Assist. Prof. Dr. Şerife YÜCESOY (Anadolu University, Turkey)  
Assist. Prof. Dr. Tahsin YILDIRIM (Aksaray University, Turkey)  
Assist. Prof. Dr. Tarık TOTAN (Abant İzzet Baysal University, Turkey)  
Assist. Prof. Dr. Tayfun TUTAK (Fırat University, Turkey)  
Assist. Prof. Dr. Tolga ERDOĞAN (Karadeniz Technical University, Turkey)  
Assist. Prof. Dr. Tuğba GÖKÇEK (Karadeniz Technical University, Turkey)  
Assist. Prof. Dr. Türkan KARAKUŞ (Atatürk University, Turkey)  
Assist. Prof. Dr. Türker TÜZEMEN (Cumhuriyet University, Turkey)  
Assist. Prof. Dr. Yasin GÖKBULUT (Gaziosmanpaşa University, Turkey)  
Assist. Prof. Dr. Yasin ÖZKARA (Akdeniz University, Turkey)  
Dr. Alison TAYSUM (University of Leicester, England)  
Dr. Berat AHİ (Kastamonu University, Turkey)  
Dr. Dean SMART (University of the West, England)  
Dr. Düysön ŞAMATOV (National Academy of Science, Kyrgyz Repuplic)  
Dr. John Sal GUAGLIARDO (The World Public Library Association, USA)  
Dr. Nusrat SHIKHBABAEV (Qafqaz University, Azerbaijan)  
Dr. Penelope HARNETT (University of the West, England)

## Indexing and Listing

- Academic Papers Database*  
*Akademia Sosyal Bilimler Indeksi (ASOS Index)*  
*Akademik Türk Dergileri İndeksi (Akademik Dizin)*  
*Araştırmacı Bilimsel Yayın İndeksi*  
*Ball State University Libraries*  
*Biblioteca de Recursos, Universia*  
*Bibliothekssystem Universität Hamburg*  
*Bielefeld Academic Search Engine (BASE)*  
*Boatwright Memorial Library*  
*Cabell's Directories*  
*CardCat*  
*Contemporary Research Index*  
*Current Index to Scholarly Journals*  
*Dayang Journal System (DJS)*  
*Digital Journals Database*  
*Directory of Academic Resources*  
*Directory Of Research Journal Indexing (DRJI)*  
*DOAJ Index*  
*Electronic Journals Library*  
*Elite Scientific Journals Archive*  
*Florida Institute of Technology Evans Library*  
*Google Scholar*  
*Index Copernicus International*  
*Indiana University Libraries*  
*JournalTOCs*  
*Latest Journal Articles*  
*Mercyhurst University Hammermill Library*  
*Miami University Libraries*  
*New Jour Electronic Journal & Newsletters*  
*Oregon Health & Science University Library*  
*Pegem Türk Eğitim Bilimleri İndeksi*  
  
*Portal on Central Eastern and Balkan Europe by IECOB & AIS (PECOB)*  
*River Campus Libraries, University of Rochester Recent Science Index*  
*Research Bible*  
*ResearchGate*  
*Scholarly Journals Index*  
*School eBook Library*  
*Scientific Publications Index*  
*Scientific Resources Database*  
*Scribd*  
*SWB-Online Katalog*  
*Türk Eğitim İndeksi (TEİ)*  
*Ulrichsweb Global Serials Directory*  
*Universidad Nacional Autónoma de México, (Biblioteca)*  
*Universitas Mulawarman, UPT. Program Unggulan Internasional*  
*Universitätsbibliothek Regensburg*  
*University of Notre Dame Hesburgh Libraries*  
*University of Saskatchewan Library*  
*University of South Australia Library*  
*University of Tsukuba Library (TULIPS)*  
*University of Washington Libraries*  
*University of Virginia Libraries*  
*Vifoast*  
*Vrije Universiteit Brussel (VUBIS)*  
*Western Theological Seminary Beardslee Library*  
*Wittenberg University Library*  
*WorldCat*  
*World Public Library*  
*ZDB OPAC*

## **CONTEXT / İÇİNDEKİLER**

*Bilim ve Teknoloji Yüksek Kurulu'nun (BTYK) 1989- 2014 Yılları Arasındaki Almış Olduğu  
Kararların Uygunluk Analizi ile İncelemesi*

*The Investigation with Correspondence Analysis of the Decisions of the Supreme Council for Science  
and Technology (SCST) between the years 1989 and 2014*

**Çiğdem APAYDIN**

**1 - 17**

*Sınıf Öğretmeni Adaylarının Temel Kimya Kavramlarına İlişkin Başarı Düzeylerinin Belirlenmesi  
Determination of the Elementary Teacher Candidates' Achievement Level of Based Chemistry  
Concepts*

**Gökhan UYANIK**

**18 - 28**

*Tarih Derslerinde Alternatif Ölçme  
Alternative Assessment in History Lessons*

**Akif PAMUK**

**29 - 46**