

Journal of Turkish Chemical Society Section C: Chemistry Education (JOTCSC) Vol. 8, Issue 1, March 2023, pp. 1-82. ISSN: 2459-1734 Türkiye Kimya Derneği Dergisi Kısım C: Kimya Eğitimi Cilt 8, Sayı 1, Mart 2023, sayfa 1-82. ISSN: 2459-1734



Journal of the Turkish Chemical Society Section C: Chemical Education (JOTCS-C)

https://dergipark.org.tr/jotcsc

A biannual, open-access chemical journal, hosted by Dergipark (Published, in English and Turkish in every March and September)

Editorial Board

Prof. Dr. Canan NAKİBOĞLU Editor in chief

Prof. Dr. Filiz KABAPINAR Vice Editor

> Dr. Martin RUSEK Vice Editor

Dr. Barbaros AKKURT Managing Editor

> Dr Ebru DEMİR Proofreader

Editorial Board

(sorted by the last names)

Dr. Sevil Akaygün; Boğaziçi University, Turkey; sevil.akaygun [at]boun.edu.tr Dr. Serap Alp; Dokuz Eylül University, Turkey; serap.alp[at]deu.edu.tr

Dr. Senol Alpat; Dokuz Eylül University, Turkey; senol.alpat[at]deu.edu.tr

Dr. Erol Asiltürk; Fırat University, Turkey; ecil[at]firat.edu.tr

Dr. Alipaşa Ayas ; Bilkent University, Turkey; apayas[at]bilkent.edu.tr

Dr. H. Şule Aycan; Muğla Sıtkı Koçman University, Turkey;

suleaycan[at]mu.edu.tr

Dr. Abdullah Aydın; Kırşehir Ahi Evran University, Turkey; aaydin[at]ahievran.edu.tr

Dr George Bodner; Purdue University, USA; gmbodner[at]purdue.edu Dr. Muammer Çalık; Karadeniz Teknik University, Turkey;

muammer38[at]ktu.edu.tr

Dr. Güler Ekmekci, Gazi Üniversitesi, Turkey; guler[at]gazi.edu.tr Dr Ingo Eilks; University of Bremen, Germany; ingo.eilks[at]uni-bremen.de Dr. Sibel Erduran; University of Limerick, Ireland; sibel.erduren[at]ul.ie Dr. Emine Erdem; Hacettepe University, Turkey; erdeme[at]hacettepe.edu.tr Dr. F. Nil Ertaş; Ege University, Turkey; fatma.nil.ersoyertas[at]ege.edu.tr Dr Ömer Geban; Middle East Technical University, Turkey; geban[at]metu.edu.tr Dr. Filiz Kabapınar; Marmara University, Turkey; filizk[at]marmara.edu.tr

Dr. Fitnat Köseoğlu; Gazi University, Turkey; fitnat[at]gazi.edu.tr Dr. Rachel Mamlok-Naaman; The Weizmann Institute of Science, Israel; rachel.mamlok[at]weizmann.ac.il

Dr. Mahmut Özacar; Sakarya University, Turkey; mozacar[at]sakarya.edu.tr Dr. Haluk Özmen; Karadeniz Teknik University, Turkey; hozmen[at]ktu.edu.tr Dr. Sri Rahayu; State University of Malang (UM), Indonesia; srirahayu um[at]hotmail.com, sri.rahayu.fmipa[at]um.ac.id

Dr. Mustafa Sözbilir; Atatürk University, Turkey; sozbilir[at]atauni.edu.tr Dr, Erdal Şenocak, Tokat Gaziosmanpaşa Üniversitesi, Turkey; erdal.senocak[at]gop.edu.tr

Dr. Gülten Şendur; Dokuz Eylül University, Turkey; gulten.sendur[at]deu.edu.tr Dr Keith S. Taber; University of Cambridge, UK; kst24[at]cam.ac.uk Dr Daniel Tan; Nanyang Technological University, Singapore; daniel.tan[at]nie.edu.sg

Dr. Leman Tarhan; Dokuz Eylül University, Turkey; leman.tarhan[at]deu.edu.tr Dr. Georgios Tsaparlis; University of Ioannina, Greece; gtseper[at]cc.uoi.gr

Dr. Yüksel Tufan; Gazi University, Turkey; ytufan66[at]gazi.edu.tr

Dr. Soner Yavuz; Zonguldak Bülent Ecevit University, Turkey;

yavuz[at]beun.edu.tr

Dr. Ayhan Yılmaz; Hacettepe University, Turkey; ayhany[at]hacettepe.edu.tr

Reviewers of this issue

Dr. Safiye Temel Aslan; Aksaray University

- Dr. Yıldızay Ayyıldız; Dokuz Eylül University
- Dr. Hüseyin Eş; Sinop University
- Dr. Nail İlhan; İnönü University
- Dr. Mahmut Özacar; Sakarya University
- Dr. Oya Ağlarcı Özdemir; Marmara University
- Dr. Mustafa Sözbilir; Atatürk University
- Dr. Gülseda Eceyurt Türk; Sivas Cumhuriyet University
- Dr. Ümmüye Nur Tüzün; Ministry of National Education

Editorial

We have launched the first issue of our 8th year. In this issue, we are here with a task change. In the last month of 2022, Dr. from Charles University, Faculty of Education. Martin Rusek joined us as a vice editor. We would like to thank him for joining us and welcome him.

In this issue, three research papers were published. In the first paper, Şenocak and Arpacı (2023) has investigated the research trends in Nanoscience and Nanotechnology (NST) Education through a bibliometric mapping analysis. They expected that their study can provide a guide for new studies, identify the trends in the field and compare the existing research on this topic. They used VOSviewer software to examine and visualize bibliometric networks between the research units. The bibliometric analysis included a total of 196 articles published between 2001 and 2021 in peer-reviewed journals covered by the Web of Science database. Their results indicated that the most used keywords were nanotechnology, hands-on learning, upper-division undergraduate, graduate education, and laboratory instruction. The most-productive countries in NST education research were the United States, Israel, France, and Taiwan. The results provided a comprehensive review to understand the recent developments in NST education research.

In the second paper, Çiftçi and Aydın (2023) have examined the metaphors and analogies in the 6th grade science textbook by using the document analysis method. The data related to the research consists of metaphors and analogies in the textbook taught in the 6th grade science course written between 2021-2022. The metaphors and analogies identified by the researchers in the aforementioned book were presented to 24 science teachers, who are experts in the field via the internet. Finally, it has been determined that metaphors and analogies are used very little in the mentioned book.

In the third study, Demir (2023) aimed to reveal the research tendency in the studies on the views of teachers on the chemistry course curriculum in Turkey between the years 2007-2022. She reached a total of 49 scientific studies, 19 of which were postgraduate theses and 30 of which were research articles. The reached studies were analyzed using the content analysis method with the help of the analysis form created. According to the results of the analysis, it was understood that the doctoral theses were less in number compared to the articles and master's theses, the Turkish writing language was preferred in all the studies identified, and the most studies were conducted at Atatürk and Gazi University. In addition, she found that the qualitative research method was mostly used in the studies; the interview form was the most preferred data collection tool, and the content analysis method was the most preferred data analysis method; it was concluded that the views of teachers on the 2007 curriculum were examined, along with the chemistry curriculum at the 9-12 grade level. In the light of all these results, some suggestions are presented for future studies on the subject of research. As a result, it was concluded that this study could help researchers in the field by showing research trends.

Finally, I hope that the interest in JOTCS-C will continue increasingly in the following years. It was important to publish a qualified chemistry education journal in our country, and especially to carry out this process within the Turkish Chemical Society for us. I would like to thank on behalf of our editorial board all the authors who submitted articles, and all reviewers for their professional comments.

See you in the new issue in September 2023

Kind regards

Prof. Dr Canan NAKİBOĞLU Editor-in-chief, JOTCS-C

References

Şenocak, E., & Arpacı, İ. (2023). A Bibliometric Analysis on Nanoscience and Nanotechnology Education Research. *Journal of Turkish Chemical Society Section C:Chemistry Education (JOTCS-C), 8*(1), 1-30.

- Çiftçi, B., & Aydın, A. (2023). Determining the Metaphors and Analogies in the 6th Grade Science Textbook. *Journal of Turkish Chemical Society Section C:Chemistry Education (JOTCS-C), 8*(1), 31-48.
- Demir, E. (2023). Investigation of the Studies (2007-2022) on Teacher's Opinions on Chemistry Curriculum. *Journal of Turkish Chemical Society Section C:Chemistry Education (JOTCS-C), 8*(1), 49-82.