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Editorial

We have launched the second issue of our 9th year. I am happy to announce that our indexing process in ASCI-Database has been completed. (<https://ascidatabase.com/masterjournallist.php?v=Journal+of+the+Turkish+Chemical+Society+Section+C%3A+Chemical+Education+>)

In this issue, we have updated our editorial advisory board. At the end of this process that was initiated by DergiPark Academic as a requirement, we are happy that both our editorial advisory board members have agreed to continue

our editorial advisory board membership and that we have included many valuable national and international chemistry educators in the editorial advisory board. We believe that this situation will strengthen our journal.

In this issue, three research papers were published. In the first paper, Gacanoğlu (2024) matched the chemistry questions in the Higher Education Institutions Exam, Basic Proficiency Test and Field Proficiency Test (AYT) sessions implemented in 2024 with the achievements of the 2018 Secondary School Chemistry Course Curriculum. Thus, she examined the scope validity in terms of subject size. She also evaluated the questions in line with the opinions of the students who answered these questions in 2024 and graduated from secondary education institutions. A total of 37 graduate students, 30 of whom took the exam for the first time and 7 of whom took the exam more than once, participated in the study. She determined that the students did not have difficulty in answering the Chemistry test questions asked in the TYT session of the 2024 YKS exam they found the questions quite easy, but they found the Chemistry test questions in the AYT session difficult, and they thought that the most difficult question was prepared from the "Chemistry and Electricity" unit. To examine the content validity dimension, a total of 20 questions, 7 of which were TYT and 13 of which were AYT Chemistry test questions, were matched with the achievements of the 2018 Secondary Education Chemistry Course Curriculum. It was determined that TYT-2024 chemistry test questions were prepared from .7.87% of the total gains of the 2018 Chemistry Course Curriculum, and AYT-2024 chemistry test questions were prepared from 11.02% of the total gains of the 2018 Chemistry Course Curriculum, therefore the content validity was determined to be low.

In the second paper, Beyazgül and Alpat (2024) examined the theses and articles on misconceptions in photosynthesis in Turkey and abroad using the meta-synthesis method and discussed the relationship between them in detail. The authors first created a coding according to the meta-synthesis method and examined the studies within certain criteria (such as publication language, year, data collection tools, sample, research method, data analysis methods and misconceptions). Accordingly, 15 studies, including 2 theses and 13 articles, were analyzed. Most of the studies (f=2) were conducted in Hacettepe University Journal of Faculty of Education and CBE-Life Sciences Education journals. Seven of the analyzed studies were in Turkish and eight were in English. In the studies, 9 tests (concept test, science process skills test, conceptual understanding test) were used as data collection tools. The sample size was between 50-100 in 4 of the studies and between 0-50 in 3 of the studies. Based on the findings of the studies, Beyazgül and Alpat stated that most of the studies in this field were conducted at the university level. The aim of 8 of the studies was only to determine misconceptions. They suggested that more studies should be conducted to eliminate the misconceptions identified and the results obtained should be applied in the education process. They emphasized the importance of re-application after a certain period of time in order to get feedback after the applications related to the elimination of misconceptions.

In the third paper, Çiftçi and Aydın (2024) have focused on the evaluation of middle school science course videos and interactive content provided by EBA, which was created by the Ministry of National Education. EBA provides a large number of instructional videos and interactive materials that allow teachers to improve their lessons and better interact with students. The data obtained were analyzed using document analysis technique.

In this evaluation process, the authors analyzed key variables such as duration, number of views, class distribution of videos, and alignment with educational objectives. In the study, a total of 924 lesson videos and 282 interactive materials from fifth to eighth grades were carefully reviewed by an expert science educator by watching each piece twice.

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 March 2025

Kind regards

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

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