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

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## Editorial

We have launched the second issue of our 7th year. It was not easy to strive to publish a qualified journal within seven years, especially during an academic upgrade and similar criteria for researchers. At the end of this period, JOTCS-C was indexed in DOAJ, DRJI, ASOS index, TEİ; and the Doi numbers for the articles were assigned.

In this issue, four research papers were published. In the first paper, Paşa and Çelik (2022) investigated which digital materials were used by students in science

education, and how often they used them, and how efficient the use of digital materials was. The study was carried out with 20 middle school students studying in 8th grade science class. They found that the students stated that they frequently used digital materials during the epidemic period, which they used very little before. It has been revealed that it causes difficulties in adaptation and effective learning in the new (distance) education system. At the same time, the opinions of students who stated that processing science subjects using digital materials made it easier to comprehend the subjects were also obtained.

In the second paper, Yaralı (2022) examined the 2013 and 2018 secondary education chemistry course curricula in terms of the basic elements of the program. This research used document analysis which is one of the qualitative research methods. The analysis of the research consists of "general objectives", "units", "recommended topic titles", "numbers of learning outcomes", "course hours", "learning-teaching processes", and "measurement and evaluation" sections. Yaralı (2022) found that in the 2013 chemistry course curriculum, 9<sup>th</sup> and 10th grades were determined as "basic level", 11th and 12th grades were determined as "basic level", 11th and 12th grades were determined as "basic level", 11th and 12th grades were determined as "basic level", 11th and 12th grades were determined as "basic level", 11th and 12th grades were determined as "basic level", 11th and 12th grades were determined as "basic level", 11th and 12th grades were determined as "basic level", 11th and 12th grades were determined as "basic level", 11th and 12th grades were determined as "advanced level," and it has been seen that the general objectives of both levels are included in the curriculum. During the four years, 90 topics in 18 units were proposed in the 2013 curriculum, while 77 topics in 19 units were proposed in the 2018 curriculum. It has been observed that general information about the implementation of the program is included in both the 2013 and 2018 chemistry curricula.

In the third study, Bilir et al. (2022) examined the effects of online activities, which include reflections from daily life in different teaching methods and techniques, on the teaching images and teaching styles of pre-service chemistry teachers. The activities include methods such as context-based learning, argumentation, projectbased learning, problem-based learning, guess-eye-explain, STEM, out of-school learning, inquiry-based learning, mobile learning and nature of science teaching methods and techniques, which include reflections from daily life. In the 2021-2022 academic year, 34 pre-service chemistry teachers studying in the third and fourth years of chemistry teaching from seven different state university education faculties participated in the research. At the end of the study, it was found that online activities, which include reflections from daily life, among the teaching methods and techniques that pre-service chemistry teachers will apply in the education-teaching process, have a statistically significant effect on their teaching images and teaching styles. While pre-service chemistry teachers had both student and teacher-centered teaching images at the beginning of the research, it was concluded that they had student-centered images at the end of the research.

In the fourth and last article, the chemistry test questions in the Basic Proficiency Test (TYT) and Field Qualification Tests (AYT) in the 2019-2021 years were analyzed in terms of the acquisitions of the 2018 Secondary School Chemistry Curriculum and the content validity was evaluated in terms of subject dimension by Gacanoğlu and Nakiboğlu (2022). A total of 60 questions were analyzed, 21 of which were TYT and 39 were AYT. At the end of the study, they found that TYT chemistry test questions were mostly prepared from 9th and 10th-grade acquisitions, while AYT chemistry test questions were mostly prepared from 11th and 12th-grade acquisitions. It is also determined that the TYT-2019 chemistry test questions cover 11.8% of the 2018 Secondary School Chemistry Curriculum total acquisitions, and the TYT-2020 and TYT-2021 chemistry test questions cover 13.4% and 8.7% of all the program's acquisitions, respectively. Gacanoğlu and Nakiboğlu (2022) indicated that AYT-2019, AYT-2020 and AYT-2021 chemistry test questions were prepared from 22.0%, 18.1% and 17.3% of the total acquisitions of the 2018 Chemistry Curriculum, respectively. In addition, from the acquisitions of the "Nature and Chemistry" and "Energy Resources and Scientific Developments" units, it was concluded that there were no questions in the chemistry tests of all YKS exams between the 2019-2021 years.

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 2023.

Kind regards,

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

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