SJIF Impact Factor: 6.260| ISI I.F.Value:1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 5 | Issue: 2 | February 2020 - Peer Reviewed Journal

USING THE INFORMATION ON A HISTORY OF CHEMISTRY IS A FACTOR FOR DELIVERING QUALITY AND EFFICACY OF EDUCATION

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ABSTRACT
This article discusses the history materials in higher education institutions and the need to improve the course of chemistry History. As students learn in-depth knowledge of science as well as its history, it equips them with modern knowledge and helps them to understand modern chemistry. Based on the interviews with the students, we conclude that this course will be studied by future professionals with great interest and that the knowledge gained will contribute to the development of science. The textbooks and manuals recommended by this course do not provide sufficient background information for thinkers, past, present, and future of chemical science and industry in Uzbekistan.
KEY WORDS: *History of chemistry, principle of historicity, stoichiometric, chemical evolution, synthesis art.*

INTRODUCTION

While studying each subject, its path to emergence, development, and its present-day status, stages of this path, the contribution of researchers, and professionals are a very important factor in the study of all the creatures. It is important to know how you approach them. Therefore, the study of the history of science is a key factor in the development of this discipline as a holistic system based on comprehensive, in-depth and detailed, logically integrated data. [4] The Law of the Republic of Uzbekistan 'On Education' emphasizes students' national and spiritual self-awareness, the ability to effectively use modern science and technology, to master all disciplines and to become future professionals. [3]

The course "History of Chemistry" is included in the curriculum as a subject of study in chemistry faculties of higher educational institutions of the Republic of Uzbekistan. "History of Chemistry" should play an integral role in the system of chemical sciences. This course is intended to establish the links between the natural sciences and the humanities.

Early chemical concepts began with the discovery of fire. Cooking, smelting metals, making ceramic products, fermenting sugars and making cosmetics are the result of that trend. Cosmetics were used long before writing. In the Middle East, cosmetics have been a major part of personal hygiene. The Egyptians paid special attention to the freedom and beauty of their bodies. This was important to all the members of society. "The oil is the medicine of the body," writes Amenhotep-III (1411-1375), and Pharaoh Seti-I (1313-1292) issued a special decree to supply his army with cosmetic oils. [5]

Chemical knowledge is not readily available, and it is a historic fact that their vast reserves have been created by the work of our thinkers who have been researching the field of chemistry. The history of the formation of chemical thinking is a controversial process. The creative work of thinkers and the history of science is a complement of knowledge we need to know. Such knowledge is not only important in the worldview; it is also a great source of educational opportunities. [6]

For students, the history of chemistry is not only a new source of evidence and information but also an important source of knowledge in the field of chemistry. The history of chemistry has come a long way in the difficult and contradictory way. Because at the heart of any successes are triumphs and losses. At the core of successes and failures is the mysterious power of excitement and critical thinking.

MATERIALS AND METHODS

The history of chemistry and related learning materials make it possible to perceive this subject as a dynamic process of living and continuously updated and ever-changing flows of hypotheses and viewpoint, and ideas.

I think it is time to include such information in the textbooks for undergraduate students' chemistry curriculum and programs. Indeed, there is a great deal

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of sense at the bottom of the decision to organize science circles and under the motto "Let's be worthy successors to our great ancestors" starting from the new 2019/2020 school year, using interactive methods to turn schools into a center of spirituality and enlightenment, culture, and to implement "five initiatives". [1]

Even in the golden fund of the wisdom of the wise people of Uzbekistan, there is a great deal of clear meaning. One of them is "It is a debt for everyone knowing his/her seven ancestors." It must be understood "Start knowing the history form yourself!"

One of the world-renowned writers, the great poet Alexander Sergeyevich Pushkin's statement that "Respect for the past is the main different aspect from being wildly" has not lost its value. The famous inscription of the well-known commander of the second world organizer, Georgiy Konstantinovich Zhukov, says: "Whoever shoots the ball in history will catch it in the future cannon." It is permissible for us to accept history without changing it.

RESULT AND DISCUSSION

Many peculiarities are not sufficient for students' knowledge of chemistry in existing DTS and textbooks, which, in my opinion, are the most important and relevant at this time:

1. Introducing more historical materials into the content of chemical education and reflect on the achievements of chemistry, industry, and technology over the years of independence.

2. Equipping students with historical data using modern pedagogical technologies and elements of pedagogical skills that are embedded in the learning process.

3. Systematically integrating the issues related to the long history of chemical knowledge and their genesis to the content of all organizational forms of teaching.

4. The scientific and methodological analysis of a new generation of textbooks in chemistry, and more emphasis on the improvement of the texts of lectures and their implementation in the pedagogical process. [8]

With the ever-growing base of Chemical Science, there has been an issue of "information surplus" in chemistry education. The question of how much to teach is a new dimension in chemistry methodology, which is hard to solve. The reason is the lack of a stable and state-written textbook on chemistry history and teaching methods, the introduction of DTS in chemistry fields in higher education, and some other reasons for the need for a new approach to teaching history of chemistry courses.

In this process following things should be taken into account:

- In-depth analysis of teaching materials;
- Grouping by their importance;
- Classification of chemical knowledge based on their vital needs;
- A fair assessment of the profits and losses of chemistry for industrial and community members, and the reduction of such concerns as fear of chemistry.
- To achieve a wide range of chemical literacy, requirements such as the fundamental revision of chemistry courses in higher education should be reconsidered.

Since the materials related to the long and arduous history of chemistry are not adequately reflected in the educational process, there is a need to pay close attention to the principles of history in teaching. Unfortunately, the textbooks of the chemistry and the actual lecture texts do not give students the required information.

That is why universities will have to change their attitude toward chemistry history courses in undergraduate study. The students are struggling to reinforce the principle of historicity in other courses. This is because of the lack of resources to help them, the lack of basic knowledge in chemistry in the underlying higher education, the overlap of historical events, the course books, and manuals, and the squeezing of historical compounds due to the increase in evidence and theoretical and experimental resources in chemistry.

In modern chemistry, great strides have been made in the study of simple and complex substances. In:

- The basic stoichiometric laws have been discovered;
- A large fund of evidence was collected;
- increased their analysis;
- The concept of chemical evolution and structure is explained based on thermodynamics and kinetics;
- A new understanding of the chemical bond and the nature of the substances are formed.
- the art of synthesis has emerged;
- the laws of chemical progression and regression are revealed;
- and finally, chemical intervention in human life has intensified.

The turn of chemistry into production has increased the number of artificial and synthetic substances, resulting in a powerful technology.

The well-known Russian chemist DI Mendeleev, the inventor of the circular law, once said that "Experience is the art of interrogation of nature." Michael Faraday, a famous British chemist, and physicist with great talent have been trying to get free fluorine for 50 years, and this is the only case that the scientist failed. Henri Muassan, a young French chemist who succeeded in doing this, was awarded the Nobel Prize in Chemistry in 1906. [10]

CONCLUSION

1. American chemist Robert Woodward, who "elevated chemical synthesis to the art," in exchange for

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laboratory synthesis of various complex amino acids and antibodies, such as strychnine, cholesterol, cortisone, chlorophyll "a" and "b", deservedly deserved. (1965) [11]

2. The Italian historian Mikel Vjua, in his fundamental work, referred to such successes as a clear and appropriate expression of "subjugation of matter." It is worth noting that, thanks to the hard work of such expert scientists as R. Woodward, D. Barton, G. Braun, G. Wittig, and M.Shemyakin, organic synthesis has become a "large-block building" field of purpose. [13]

In summary, obtaining modern knowledge without a good study of the history of chemistry is a bias. Long and hard, successful and unfortunate, effective and ineffective work in the history of chemistry should be judged fairly and impartially on the scales of history, left by thousands of researchers, enthusiasts and simply for fun. It is also necessary to organize the education and upbringing of chemistry based on the historical view of a subject. We believe that it would be appropriate for the participants of continuing chemistry education to create textbooks on chemistry in the state language, to include information and materials related to the name of our country and its scholars, and to make objective and accurate corrections in the history.

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