

SOME NEW APPROACHES TO GENERATING THE REDOX REACTIONS EQUATIONS

The paper presents a critical analysis of the major deficiencies in the presentation of the topic “redox reaction” in a modern high school chemistry course. The authors propose new methodological approaches to teaching of this subject. When generating the redox equations by electron-ion balance it is preferable to take the change in the oxidation as the basis, but not the balance of ion charge. The circuit of any redox reaction, if it takes place in a solution and can assume the formation of more than one strong electrolyte with different ions combinations, the products cannot be specified in molecular form. The equations of redox reactions, in which there are two reducing agent (or two oxidizer), which represent different substances, or as a result of which two products of oxidation or reduction are formed, are incorrect, as they reflect the parallel reactions.

Key words: redox reaction, oxidation degree, oxidizing agent, reducing agent, oxidation, reduction, electron balance, electron, electron-ion balance, electron transport.

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About the authors: **Elfimov Valeriy Ivanovich** — Candidate of Chemical Sciences, Associate Professor, Department of General and Analytical Chemistry, **Moscow State University of Mechanical Engineering (MAMI)**, 38 Bol'shaya Semenovskaya str., Moscow, 107023, Russian Federation; elfimovvi@mail.ru;

Myasoedov Evgeniy Mikhaylovich — Candidate of Chemical Sciences, Associate Professor, Department of General Chemistry, **Moscow State University of Mechanical Engineering (MAMI)**, 38 Bol'shaya Semenovskaya str., Moscow, 107023, Russian Federation; **Moscow State University of Civil Engineering (MGSU)**, 26 Yaroslavskoe shosse, Moscow, 129337, Russian Federation; emm@list.ru;

Stepina Irina Vasil'evna — Candidate of Technical Sciences, Associate Professor, Department of General Chemistry, **Moscow State University of Civil Engineering (MGSU)**, 26 Yaroslavskoe shosse, Moscow, 129337, Russian Federation; sudeykina@mail.ru.

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