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Proposal for the Teaching of the Unit "Chemical Reactions" in the Context of the 1st Lyceum Chemistry Course in the Light of the "Student-Young Researcher" Didactic Approach †

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Abstract: The didactic proposal refers to the unit "Chemical reactions", which is taught in the context of the 1st Lyceum Chemistry course. The proposal is based on the "student - young researcher" didactic approach [1]. We support that when a student has acquired the necessary theoretical infrastructure and the laboratory experience, using various methods, from teacher-led learning to self-led discovery, he will be able to face an unknown problem in the laboratory and design a strategy to solve it. Our proposal consists of 10 teaching periods. During the first five periods, students deepen their knowledge of the concept of chemical reactions. During the following five periods, through guided discovery, working in groups, students perform 10 chemical reactions [2], write and understand the relevant chemical equations and observations during the experiment, and answer some evaluation questions. Finally, this process concludes with the students in the laboratory facing an unknown problem that requires them to design a strategy to solve it. This didactic approach was applied in the 2nd General Lyceum of Galatsi, in the 2nd semester of 2020, with 21 participating students, with very positive results.

Keywords: chemistry course; didactic proposal; chemical reactions; didactic approach; student-young researcher.

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Conflicts of Interest

The authors declare no conflict of interest.

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