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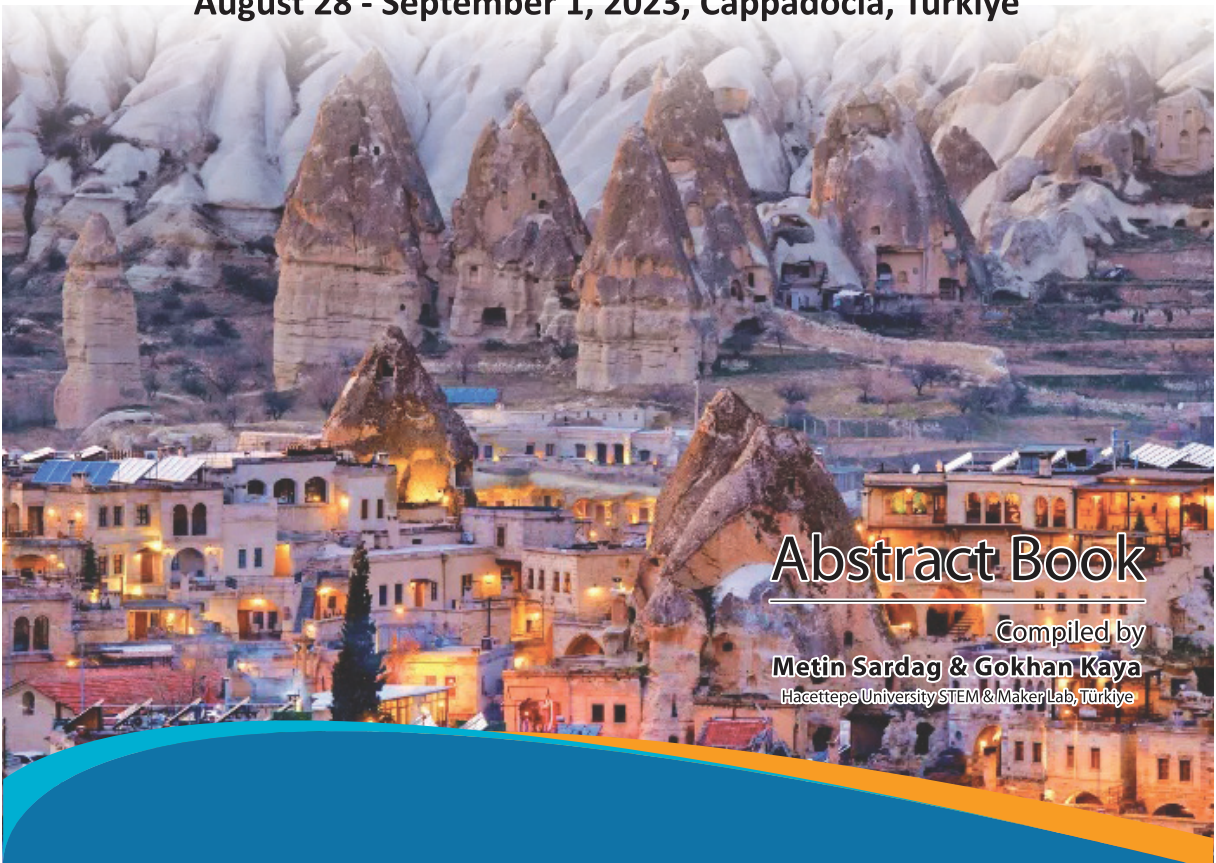


**ESERA**

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*Cappadocia*  
TÜRKİYE

The 15<sup>th</sup> Conference of the European Science Education Research Association (ESERA)

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**Abstract Book**

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PROFQUI of the Federal University of Rio Grande do Sul. We created a YouTube channel, which features the solution of stoichiometry exercises of increasing level of difficulty. The videos were recorded using a smartphone and edited in a free software, in a process that can be reproduced by any teacher who has access to the internet. In this way, our work mainly aims to develop such materials to serve as an inspiration for teachers to create their own classroom materials, based on the school reality in which they are engaged. Questionnaires were applied before and after using the material. The data collected was analysed from the perspective of Bardin's content analysis. It showed great results in terms of improving Stoichiometry learning, results verified through a questionnaire about the students' perception of the stoichiometry content, a pre and a post-test, as well as, another about the students' impression of the material produced.

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### **1023 Characterising the Educational Potentials of Citizen Science Mobile Applications Related to Biodiversity**

Giuliana Morbidoni-Davicino<sup>1</sup>, María Carla Lábaque<sup>2,3</sup>, [Leticia Garcia-Romano](#)<sup>1,3</sup>

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#### **Abstract**

Twenty free-download citizen science mobile applications (apps) aimed at teaching and learning about biodiversity conservation are characterised. The analysis includes characteristics related to multimedia, content, citizen engagement and collaborative learning. The results show that there is a diversity of areas of knowledge on biodiversity where citizen science can be developed, and that multimedia resources favour the successful identification of organisms. In addition, several apps allow citizens not only to collect data but also to participate in scientific projects, thus favouring collaborative learning and recognition of their immediate environment. It is recommended that teachers select apps such as Naturalista, Natusfera, PlantNet, Appear, Geovin and Global Observer, since they have the greatest potential for taxonomic identification and offer the possibility of linking more closely with scientific projects related to biodiversity conservation.

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### **598 The Explanations of Physics Teachers in Classes With Remote Laboratories**

[Ignacio Idoyaga](#)<sup>1</sup>, Nahuel Moya<sup>1</sup>, Gabriela Varela Belloso<sup>2</sup>, María-Gabriela Lorenzo<sup>1,3</sup>

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#### **Abstract**

This paper presents a qualitative descriptive study on the explanations of three university Physics' teachers in kinematics classes with remote labs. These technological tools, made up of software and hardware, allow teachers and students to carry out experimental activities at a