

Report on the activity in the framework of the European Inventor Network



To be sent to:

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Name of the alumnus who implemented the activity

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Short description of the activity

Two demonstrative chemistry sessions were conducted for 9th, 10th, and 11th-grade students, showcasing analytical chemistry principles through engaging experiments. Topics included fluorescence-based detection, blood detection with luminol, precipitation reactions, and element combustion. The sessions also highlighted gender equality in STEM, encouraging female participation in science.

Date and place of the activity

Vilnius University, Life Sciences Center, 2024-11-07/08

Audience (number and age of the participants)

Approximately 60-70 students, aged 14 to 17.

Outcomes and achievement

Ex: qualitative information, such as testimonials or success stories

The demonstrative chemistry sessions successfully engaged students by combining visually striking experiments with discussions on real-world applications of analytical chemistry. Students showed high interest, actively participated in discussions, and asked insightful questions about fluorescence, forensic chemistry, and element identification. A notable success was the enthusiasm sparked by the luminol blood detection experiment, which led to discussions on forensic science careers. Additionally, students expressed curiosity about how fluorescence is used in medical diagnostics. Teachers provided positive feedback, noting that the sessions enhanced students' understanding of chemical principles beyond textbooks and inspired further interest in STEM fields.

Recommendations

Ex: any recommendation for Future activities based on the Experience and outcomes of This grant-funded activity

Attachments: Any supporting documents (such as photographs, testimonials or other relevant materials) that help illustrate the activity's impacts and effectiveness should be sent to mchopin@epo.org. These supporting documents might be posted on the European Inventor Network webpage.

Based on the positive response and engagement observed during the sessions, it is recommended to:

Expand the scope and introduce more hands-on experiments or interactive activities, as these particularly capture attention, especially "flashy and colourful" experiments, which then lead to intriguing discussions.

Incorporate more gender equality discussions: while gender equality was addressed, more focused activities could be integrated to explicitly discuss women's achievements in STEM and showcase these achievements (at least partially) with experiments.

Introduce environmental concepts: emphasizing environmentally friendly practices and sustainable chemical processes will not only make students aware of the importance of sustainability but also spark interest in how chemistry can contribute to solving global challenges like pollution and resource depletion. These concepts, again, can be illustrated with oxidizing reactions, explosions, detection of pollutants and heavy metals to retain the interest of the audience.







