S2.1 – International Teacher Survey on Green and Sustainable Chemistry Practical Activities

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Chemistry teachers worldwide engage students in practical activities in different ways and for different reasons. In most countries, little is known about what teachers do during their laboratory sessions and whether they are using activities related to green chemistry or sustainability. To fill this gap, a major international survey was recently developed to collect a large baseline of data by surveying high school teachers about the frequency and type of practical activities that they use with their classes and their use of activities related to green or sustainable chemistry. This Symposium will describe the design, implementation and some results of the survey.

Madeleine Schultz will introduce the project, including the design of survey questions and the logistics required to run it in many languages and contexts.

Iztok Devetak will present the survey results from Slovenian in-service lower and upper secondary school chemistry teachers. Results indicate that 72% of in-service teachers think that the main reason for not implementing experimental work more into their teaching is the lack of time during chemistry lessons. Almost all teachers (92%) believe that experimental work is an important vehicle to introduce green and sustainable chemistry to students, but only 26% of them also conduct such experiments in school.

Dusica Rodic will describe the importance of this survey in the Republic of Serbia, related to a national objective dedicated to enhancing the quality of education, specifically targeting knowledge and skills pertinent to sustainable development. Insights gleaned from teachers who are integrating this transformation into their approach will be explored and discussed.

Marina Stojanovska will present the results of the survey in North Macedonia (in Macedonian and Albanian) and activities that have followed on from this. The survey results served as a foundation for further investigation within a master's thesis focused on developing and implementing activities aiming to foster eco-friendly habits among students, particularly as the activities involved outdoor learning in real-world environments outside the school premises.

Finally, *Seamus Delaney* will round off the symposium with a preliminary analysis of the full set of results across all countries so far involved (as of March 2024, 46 countries and in 37 languages). The feasibility of how the findings could be used to inform teacher

practice, professional learning programs and innovation in curriculum will be critiqued and discussed.

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