

Demonstration of the utility and capacity of the green and white *ex-situ/on-site* methods based on single-element and multielement (μ -SPE)-SSETV- μ CCP-OES (A3)

(Activity 2.5, CO-UBB)

The activity "Demonstration of the utility and capacity of the green and white *ex-situ/on-site* methods based on single-element and multielement (μ -SPE)-SSETV- μ CCP-OES" took place on 17 July at the premises of the Faculty of Chemistry and Chemical Engineering. A number of persons from the Babeş-Bolyai University Cluj-Napoca, the Technical University of Cluj-Napoca, the Research Institute for Analytical Instrumentation Cluj-Napoca, Apele Romane, the Someş-Tisa Water Basin Administration Cluj-Napoca, Compania de ape S.A. Gilău, the Institute of Public Health Cluj-Napoca, the University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, the Cluj County Council, the National Institute of Research and Development for Isotopic and Molecular Technologies Cluj-Napoca, Centrul de Mediu şi Sănătate S.R.L. Cluj-Napoca, and Fotometric Instruments S.R.L. Bucharest as partner within the WHIGREEN project were invited and participated. The event comprised the following lectures: 1. General presentation of the project and the results obtained (Prof. Dr. Frenţiu Tiberiu, project director, and Dr. Dorin Şulea, project responsible, partner Fotometric Instruments S.R.L. Bucharest); 2. From sample combustion to microplasma – a new green approach for the multielement analysis of food (Assist. Prof. Dr. Adrian-Ioan Dudu, project member CO – UBB); 3. Portable μ -SPE system with dithizone-functionalized C18 cartridges for the *in-field* processing of water samples and the simultaneous determination of metals by SSETV- μ CCP-OES – greenness and whiteness degree assessment (Assoc. Prof. Dr. Habil. Augustin Cătălin Moţ, project member CO – UBB); 4. Practical demonstrations and discussions. On this occasion, minutes were drawn up and a list was compiled, signed by the participants, who expressed interest in the results obtained following the implementation of the PED WHIGREEN project.

Degree of achievement of the objective. The objective *Demonstration of the utility and capacity of the green and white ex-situ/on-site methods based on single-element and multielement (μ -SPE)-SSETV- μ CCP-OES* was achieved in accordance with the project implementation plan.

Results:

- Demonstration report and event minutes