

<b>Program</b>	Program NUCLEU PN 09-13.01.05
<b>Project title (ENG):</b>	Electrochemical methods based on stripping voltammetry speciation techniques used in evaluating of priority hazardous metals in surface and waste water
Project title (RO):	Metode electrochimice bazate pe tehnicile voltametriei de stripping utilizate in evaluarea speciatiei unor metale prioritare periculoase din ape de suprafata si ape uzate
<b>Duration</b>	2009-2013
<b>Team Leader</b>	Senior Researcher Eng. Valeriu Robert Badescu
<b>Summary</b> (short description)	Based on research conducted within the project have been established and validated in-house methods for determining: arsenic- species As (III) or As (V) species chromium- Cr (VI) or Cr (III) species iron Fe (III) and Fe (II) and the total manganese. The performance characteristics of methods (accuracy, reliability, repeatability, reproducibility, sensitivity, detection limit, limit of quantification, the work domain) permit their introduction into the analysis of inorganic compounds in environmental samples for surface water, groundwater and drinking water at trace levels ( $\mu\text{g} / \text{l}$ or $\text{ng} / \text{l}$ ).
<b>Summary</b> (short description) RO	Pe baza cercetarilor efectuate in cadrul proiectului au fost stabilite si validate in house metode pentru determinarea: speciilor de arsen- As (III) respectiv As (V), speciilor de crom- Cr (VI) respectiv Cr (III), speciilor de fier Fe (III) si Fe (II) precum si a manganului total. Caracteristicile de performanta ale metodelor (exactitate, fidelitate, repetabilitate, reproductibilitate, sensibilitate, limita de detectie, limita de determinare, domeniul de lucru) permit introducerea acestora in analiza compusilor anorganici din probele de mediu, pentru ape de suprafata, ape subterane si ape potabile la nivel de urme ( $\mu\text{g}/\text{l}$ sau chiar $\text{ng}/\text{l}$ ).
<b>Dissemination of results</b>	
Full-paper ISI	VALERIU ROBERT BADESCU, ANDREI NICULAE, Determination of Arsenic Species Traces from Surface and Drinking Water Using Stripping Voltammetry, Revista de Chimie, 67( 8), 1479-1483, 2016
Conferences (platform, poster, abstract / full-paper)	Valeriu Badescu, Sorin Florescu, Andreea Moise, <i>Utilization of stripping voltammetry tehnics in arsenic species determination from aqueous solutions</i> , Simpozionul International MEDIUL SI INDUSTRIA, 28 - 30 octombrie 2009
	Valeriu Badescu, Sorin Florescu, Andreea Moise, <i>The application of the electrochemical methods in the analysis of chromium species traces from surface and drinking waters</i> , INTERNATIONAL WORKSHOP "GLOBAL and REGIONAL ENVIRONMENTAL PROTECTION" GLOREP 2010, 26-28 November, 2010, Timisoara, ROMANIA
	Valeriu Badescu, Sorin Florescu, <i>Interfering effects of different substances existing in environmental matrix on As determination by stripping voltammetry</i> , Simpozionul International MEDIUL SI INDUSTRIA, 16 - 18 noiembrie 2011

<b>Program</b>	Program NUCLEU PN 16-25 01 12
<b>Project title (ENG):</b>	Elaboration and validation of advanced and selective methods for determination of iodides in aqueous solutions at trace levels
<b>Project title (RO):</b>	Elaborarea si validarea unei metode avansata si selectiva de determinare a iodurilor din solutii apoase la nivel de urme
<b>Duration</b>	2009-2013
<b>Team Leader</b>	Senior Researcher Eng. Valeriu Robert Badescu
<b>Summary</b> (short description)	It was realized a comparative study of the methods of iodide determination from different types of water, methods used currently in

	different laboratories. That study represent theoretical basis for the elaboration and validation of a method for iodide determination in our department.
<b>Summary</b> (short description) RO	A fost realizat un studiu comparativ al metodelor de determinare a iodurilor din ape de diverse proveniente, metode intalnite in practica de laborator curenta. Studiul constituie baza teoretica in vederea elaborarii si validarii unei metode in cadrul departamentului.
<b>Dissemination of results</b>	
PhD Thesis – Title RO, ENG	
Full-paper ISI	
Full-paper BDI	
Book, book chapters	
Conferences (platform, poster, abstract / full-paper	
Patents (approved or proposal)	