

Program	Program CEEEX Modul IV, contract 54/7.09.2005
Project title (ENG):	Testing and implementation of advanced methods for metals determination in particulate air emissions from incinerators including in accordance with European Community Directives
Project title (RO):	Testarea si implementarea metodelor performante de determinare a metalelor din pulberile emisiilor atmosferice inclusiv de la incineratoare in conformitate cu directivele comunitatii europene
Duration	2005-2007
Team Leader	Senior Researcher Eng. Liviu Ionita
Summary (short description) ENG	<p>The project has proposed extending accreditation to Air Pollution laboratory with methods to solve the problem quantify heavy metal content in the flue gases emitted by stationary sources, including incinerators and providing technical equipment necessary to ensure compliance with environmental legislation of EU unambiguous application.</p> <p>In order to observe the ultimate objective of the project was imposed completing laboratory infrastructure with 1 atomic absorption spectrophotometer with graphite furnace atomizer and 1 isokinetic particulate sampler. For the determination of metals in particulate emitted by stationary sources was implemented European standard EN 14385 "Stationary source emissions. Determining the total emission of As, Cd, Cr, Co, Cu, Mn, Ni, Pb, Sb, Tl and V". The method was validated and RENAR accredited.</p>
Summary (short description) RO	<p>Proiectul si-a propus extinderea acreditarii laboratorului Poluare Aer cu metode care sa rezolve problema cuantificarii continutului de metale grele din gazele reziduale emise de sursele stationare , inclusiv de la incineratoare precum si asigurarea dotarii tehnice necesare pentru a asigura conformitatea cu legislația de mediu a UE și aplicarea uniformă a acesteia.</p> <p>In vederea respectarii obiectivului final al proiectului s-a impus completarea infrastructurii laboratorului cu: 1 spectrofotometru de absorbtie atomica cu atomizare in cupor de grafit si 1 prelevator izocinetic de pulberi. Pentru determinarea metalelor din pulberile emise de sursele staționare a fost implementat standardul european EN 14385: „Emisii ale surselor fixe. Determinarea emisiei totale de As, Cd, Cr, Co, Cu, Mn, Ni, Pb, Sb, Tl și V”. Metoda a fost validata si acreditata RENAR.</p>
Dissemination of results	
Full-paper ISI	Cristina Necsulescu, Liviu Ionita , Elena Bucur, Stationary sources emissions. Total Cd, Cr, Cu determination in exhaust gases from incinerations, JEPE, Vol. 9, No. 1, pg. 1-14, 2008
Conferences (platform, poster, abstract / full-paper)	Elena Bucur, Liviu Ionita , Mihaela Petrescu, Mercury determination in flue gases from stationary sources, including incinerators, SIMI 2007" Bucharest, October 25-27,Proceedings, vol.II, pg. 196-201, 2007, ISSN 1843-5831