

Program	Program Nucleu, PN 09 -13 01 12
Project title (ENG):	Research regarding development of methods for hazardous organic substances / priority hazardous emissions from stationary sources determination: PAHs, phenols and halogenated organic compounds
Project title (RO):	Cercetari privind elaborarea metodelor de determinare a unor substante organice periculoase/prioritar periculoase din emisiile surselor fixe: HAP-uri, fenoli si compusi organici halogenati
Duration	2009-2013
Team Leader	Senior Researcher Eng. Elena Bucur
Summary (short description) ENG	<p>Starting from the lack of standardized methods for organic compounds dangerous emitted into the air from stationary sources determining in the project were developed and validated a number of methods to determine the series of compounds emitted into the air from stationary sources: PAHs, the phenols and chlorophenols (phenol, a-cresol, m + p cresol, xylenol 2-6, 3-5 xylenol 3-4 xylenol 2-3 xylenol, 2-chlorophenol, dichlorophenol 2-4, 2-6 dichlorophenol, pentachlorophenol) and of certain halogenated organic compounds (1,1-dichloroethane, 1,2-dichloroethane, vinyl chloride). Studies have been extended in the last stages of the project and the surrounding ambient air influence on indoor air quality.</p> <p>In this sense it was developed a methodology for approaching and solving crisis situations seeing indoor air quality applied in three case studies aiming to influence the level of air pollution outdoors on air quality inside buildings, the report I / E, statistical correlations.</p>
Summary (short description) RO	<p>Pornind de la lipsa metodelor standardizate pentru determinarea compusilor organici periculosi emisi in aer din sursele fixe, in cadrul proiectului au fost dezvoltate si validate o serie de metode de determinare a unor serii de compusi emisi in aer din sursele fixe industriale: PAH-urilor, a fenolilor si clorfenolilor(fenol, o-cresol, m+p cresol, 2-6 xilenol, 3-5 xilenol, 3-4 xilenol, 2-3 xilenol, 2-clorfenolului, 2-4 diclorfenolului, 2-6 diclorfenolului, pentaclorfenolului) si a unor compusilor organici halogenati (1,1- dicloretan, 1,2- dicloretan, clorura de vinil). Studiile au fost extinse in ultimile etape ale proiectului si asupra influentei claitatii aerului inconjurator asupra calitatii aerului din interiorul cladirilor.</p> <p>In acest sens a fost elaborata o metodologie de abordare si rezolvare a situatiilor de criza vazand calitatea aerului interior aplicata in trei studii de caz vizand influenta nivelului de poluare a aerului in exterior asupra calitatii aerului din interiorul cladirilor, raportul I/E, corelatii statistice.</p>
Dissemination of results	
Full-paper ISI	E. Bucur , A. Danet, Indoor/Outdoor correlations regarding indoor air pollution with particulate matter, EEMJ , acceptat spre publicare
	E. Bucur , A. Vasile, M. Petrescu, A. Danet, Indoor air quality assessment in spaces designed for office activities: PAH's and phenols, JEPE , Vol. 17, No. 1, pg. 9-17 (2016)
	E. Bucur , M. Petrescu, G. Vasile, L. Pascu, R. Diodiu, How protected are we indoor? Indoor air pollution with particulate matter in an office building from Bucharest., SGEM 2014, Albena, Bulgaria, 17-26.06.2014
Conferences (platform, poster, abstract / full-paper)	Elena Bucur , Andrei Vasile, Mihaela Petrescu, How protected from pollution are we indoor? - method for vinyl chloride from indoor air determining, SIMI 2011, Bucharest, 16-18nov 2011, vol II, pg. 221-226

Conferences (platform, poster, abstract / full-paper)	Elena Bucur , Ileana Nicolescu, Chromatographic methods for the determination of phenols from stationary emission sources, The XXXI-st Romanian Chemistry Conference 6-8 october, Ramnicu Valcea, Book of abstracts, pg. 225, 2010 ; ISBN-978-973-750-194-3
	Bucur Elena , Petrescu Mihaela, Andrei Vasile, Indoor air quality – A methodological approach for the investigation, The XXXII-st Romanian Chemistry Conference, 3-5.10.2012