

<b>Program</b>	<b>Program PN II, contract nr. 31-089/2007</b>
<b>Project title (ENG):</b>	<b>Impact assessment respirable particulate pollution PM 2.5 in urban areas with intense traffic on the health of the population</b>
<b>Project title (RO):</b>	<b>Evaluarea impactului poluarii cu pulberi respirabile PM 2.5 din zonele urbane cu trafic rutier intens asupra starii de sanatate a populatiei</b>
<b>Duration</b>	2007-2010
<b>Team Leader</b>	Senior Researcher Eng. Elena Bucur
<b>Summary (short description) ENG</b>	<p>Issues addressed in the project, in collaboration with the Polytechnic University of Bucharest and the National Institute of Public Health as partners in the consortium, topical international scientific community, has proposed and carried out a series of activities targeting air quality and implications of pollution PM2.5 dust on the population in urban areas.</p> <p>Tests conducted in two of the busiest areas of Bucharest, the intersection Razoare and university were supposed to determine the concentration of particulates PM 2.5, heavy metals and PAHs adsorbed on powders and determining changes in the composition of body fluids (blood and urine) if exposed. Bioassays were conducted by the staff of Brigade Road INSP Bucharest while correlation tests and interpreting the results of UPB.</p>
<b>Summary (short description) RO</b>	<p>Problematika abordata in cadrul proiectului, realizat in colaborare cu Universitatea Politehnica Bucuresti si Institutul National de Sanatate Publica in calitate de parteneri in consortiu, de actualitate pentru comunitatea stiintifica internationala, si-a propus si a realizat o serie de activitati vizand calitatea aerului si implicatiile poluarii cu pulberi PM2.5 asupra populatiei din zonele urbane.</p> <p>Testele efectuate in doua dintre cele mai aglomerate zone din Bucuresti, intersectia Razoare si Universitate au presupus determinarea concentratiei de pulberi PM 2.5, metale grele si PAH-uri adsorbiti pe pulberi cat si determinarea schimbarilor aparute in compozitia fluidelor biologice (sange si urina) in cazul expusilor. Testele biologice au fost efectuate de catre INSP asupra personalului Brigazii rutiere a Municipiului Bucuresti in timp ce testele de corelatie si interpretarea rezultatelor de catre UPB.</p>
<b>Dissemination of results</b>	
Full-paper ISI	<b>Elena Bucur</b> , Liviu Ionita, Mihaela Petrescu, Consideration concerning impact assessment of pollution with breathable PM 2.5 particulate matters. Part 1. Pollution monitoring in urban areas with intense road traffic, <b>JEPE</b> , Vol. 11, No. 3, pg. 809-814 ( <b>2010</b> );
	<b>Elena Bucur</b> , A. Danet, Particulate matter and polycyclic aromatic hydrocarbon air pollution in areas of Bucharest with heavy road traffic, <i>Rev Chimie</i> , 67(4), 621-625 (2016)
Conferences (platform, poster, abstract / full-paper)	<b>Elena Bucur</b> , Liviu Ionita, Mihaela Petrescu, Considerations concerning impact assessment of pollution with breathable PM 2,5 particulate matters. Part. 1 Pollution monitoring in urban areas with intense road traffic, International Symposium on sanitary and Environmental Engineering – SIDISA, Florence 24/27 June <b>2008</b> .
	<b>Elena Bucur</b> , Mihaela Petrescu, Liviu Ionita, Considerations Concerning Impact Assessment of Pollution with Breathable PM 2.5 Particulate Maters; Part 3. Pollution monitoring in urban areas with intense road traffic, International Workshop, A XXX-a Conferinta Nationala de Chimie, Org.: OLTCHIM Rm. Valcea, 08-10 October, Calimanesti-Caciulata, Book of abstracts,pg. 325, <b>2008</b>
	Valeriu Danciulescu, <b>Elena Bucur</b> , Liviu Ionita, Adrian Simion Pollution with Particulate Matter in Targoviste city, A XXX-a Conferinta Nationala de Chimie, Org.: OLTCHIM Rm. Valcea, 08-10 October, Calimanesti-Caciulata, Book of abstracts,pg. 324, <b>2008</b> ; ISBN-978-973-750-124-0