Program	**Program NUCLEU PN 09 -13 02 21**
Project title (ENG):	**Correlations between noise level and pollutants concentration in order to assess the level of air pollution induced by heavy traffic**
Project title (RO):	**Corelatii privind poluarea fonica si chimica in zonele urbane cu trafic rutier intens**
Duration	2015
Team Leader	Senior Researcher Eng. Mihai Bratu
Summary (short description) ENG	Air quality in urban areas with high traffic is the result of interactions that occur between climatic factors features area pollution from traffic and other pollution sources in the area, and the structure of Landscaping area (individual homes, buildings, parks, green spaces, etc.). All these factors were taken into account in developing the methodology for assessing air quality in urban areas with intense traffic. This methodology was the basis for the organization and carrying case studies conducted in three intersections with intense traffic in the south of Bucharest. Thus were followed: a) identifying the existence of a correlation between noise level and the concentration of NO_2, SO_2, CO ambient air; b) relationships that may exist between these indicators to estimate the level of air pollution from noise measurements.
Summary (short description) RO	Calitatea aerului in zonele urbane intens circulate reprezinta rezultatul interactiunilor care au loc intre factorii climatici caracteristici zonei, poluarea provenita de la traficul rutier si alte surse de poluare din zona, precum si structura peisagistica a zonei (locuinte individuale, blocuri, parcuri, spatii verzi, etc). Toti acesti factori au fost luati in calcul la elaborarea metodologiei de evaluare a calitatii aerului in zonele urbane cu trafic rutier intens. Aceasta metodologie a stat la baza organizarii si derularii studiilor de caz desfasurate in trei intersectii cu trafic rutier intens, in zona de sud a municipiului Bucuresti. Astfel s-au urmarit: a) identificarea existenţei unor corelaţii intre nivelul de zgomot şi concentraţile de NO_2, SO_2, CO din aerul ambiental; b) stabilirea relaţiilor care pot exista între acesti indicatori cu scopul estimării nivelului de poluare a aerului pornind de la măsurarea nivelului de zgomot.
Dissemination of results	
Full-paper ISI	V. Danciulescu, E. Bucur, L.F. Pascu, A. Vasile, M. Bratu, Research on the relationship between urban air pollution and noise levels in areas with heavy traffic, *Journal of Environmental Protection and Ecology 16, No 3, 815–823 (2015)*, 1262-1274, **ISSN:** 1311-5065, WOS:000208898800008