

Program	Program NUCLEU PN 09-13 02 15
Project title (ENG):	Evaluating the quality of the environment and ground water in an ecosystem characterized by seasonal growth and development of tourism activities
Project title (RO):	Evaluarea calitatii factorilor de mediu apa si sol intr-un ecosistem caracterizat prin cresterea si dezvoltarea activitatilor turistice sezoniere
Duration	2013 - 2014
Team Leader	Senior Researcher Chem. Mihaela Iordache
Summary (ENG) (short description)	The project aims to assess surface water quality and soil in areas with predominantly tourist activities. Has conducted a study on pollution of the average water and soil in the area are Baile Olanesti, Calimanesti - Caciulata, Voineasa, Obarsia Lotrului, Govora, localities Mihaesti and Costesti and Transalpina (altitude 1700 m, altitude 2145 m - Peak. Lespezi, altitude 2135 m - Step Urdele, Ranca, Novaci). In general it has been found a very small amount of soil pollution by heavy metals (nickel, copper, cadmium, lead, zinc, chromium), and sulfates. Found pollution potentially significant with total petroleum hydrocarbons (downstream of Baile Olanesti, 4 km upstream cap and Voineasa) and significant pollution with total petroleum hydrocarbons (upstream of Baile Olanesti and 4 km downstream of Obarsia Lotrului). This pollution is due undeveloped parking spaces and parking cars on carpet plant. Pollution is a registered cumulative effect of seasonal tourist activities and activities (household and industrial) deployed in those areas.
Summary (RO) (short description)	Proiectul are ca obiectiv evaluarea calitatii apei de suprafata si a solului din zone cu activitati preponderent turistice. S-a realizat un studiu cu privire la poluarea factorilor de mediu apa si sol din zona statiunilor Baile Olanesti, Calimanesti – Caciulata, Voineasa, Obarsia Lotrului, Baile Govora, localitatilor Mihaesti si Costesti si Transalpina (altitudine 1700 m, altitudine 2145 m – Vf. Lespezi, altitudine 2135 m – Pasul Urdele, Ranca, Novaci). In general s-a constatat o poluare nesemnificativă a solului cu metale grele (nichel, cupru, cadmiu, plumb, zinc, crom) și sulfati. S-a gasit o poluare potential semnificativa cu total hidrocarburi din petrol (aval de Baile Olănești, la 4 km în amonte de Căciulata si Voineasa) și o poluare semnificativă cu total hidrocarburi din petrol (amonte de Băile Olănești și 4 km în aval de Obarsia Lotrului). Această poluare se datorează locurilor de parcare neamenajate și staționarea mașinilor pe covorul vegetal. Poluariile inregistrate reprezinta un efect cumulat al activitatilor turistice sezoniere si activitatilor (gospodaresti si industriale) desfasurate in zonele respective.
Dissemination of results	
Full-paper ISI	M. Iordache , L.-R. Popescu, L.-F. Pascu, C. Lehr, S. Neamțu, I. Iordache, Evaluation of the quality of environmental factors, soil and water in the Parang Mountains, Romania, <i>Rev. Chim. Bucharest</i> , 66, 7, (2015) 1009-1015
Conferences (platform, poster, abstract / full-paper)	M. Iordache , L.R. Popescu, The impact of tourism activities on water and soil in areas with seasonal activity, <i>The 33rd National Chemistry Conference, Caciulata-Calimanesti</i> , 01-03. 10. 2014