Program	**Program NUCLEU PN 09-13 02 14**
Project title (ENG):	**Integrated system for the assessment of ecological status and diversity Danube Delta lotic aquatic systems**
Project title (RO):	**Sistem integrat de evaluare a starii ecologice si diversitatii sistemelor acvatice lotice din Delta Dunarii**
Duration	2013-2015
Team Leader	Catalina Stoica
Summary (short description) ENG	The project objective was the assessment of the ecological status and diversity of aquatic lotic systems of the Delta. To accomplish this objective, the methodology for assessing the ecological status defined at national level was tested, considering that Romania's accession to the EU imposed as national priority obligation to harmonize national legal framework with EU legislation which includes the Water Framework Directive (WFD). Thus, in the four phases of the project carried out during 2013-2015, both state variables that influence the composition and structure of phytoplankton and macroinvertebrates as well as the dynamics of biological elements were characterized, the rare metal contamination (Au, Ag, Ti Zr) and radioactive metals (R, U, Th, K) were assessed and potential vectors for pathogens from benthic invertebrates' fauna structure were identified.
Summary (short description) RO	Proiectul si-a propus evaluarea starii ecologice si diversitatii sistemelor acvatice lotice din Delta Dunarii. Pentru indeplinirea acestui obiectiv, metodologia de evaluare a starii ecologice stabilita la nivel national a fost testata, in conditiile in care aderarea Romaniei la UE a impus ca prioritate nationala obligativitatea armonizarii cadrului legislativ national cu legislatia UE care cuprinde in domeniul apelor Directiva Cadru Apa (WFD). Astfel, in cadrul celor patru faze ale proiectului desfasurate in perioada 2013-2015, au fost caracterizate atat variabilele de stare care influenteaza compozitia si structura organismelor fitoplanctonice si zoobentonice, dinamica acestor elemente biologice, evaluarea privind contaminarea cu metale rare (Au, Ag, Ti, Zr) şi metale radioactive (Ra, U, Th, K) a probelor de apă de suprafaţă şi sediment prelevate din zona de studiu, cat si identificarea in structura faunei de nevertebrate bentonice de la nivelul sistemului ecologic Delta Dunarii a unor specii – potentiali vectori pentru agentii patogeni.
Dissemination of the results	
PhD Thesis – Title RO, ENG	Evaluarea starii ecologice a ecosistemelor acvatice lotice: compozitia si structura faunei bentale, Catalina Stoica, 2016
	Ecological status assessment of lotic aquatic ecosystems: the composition and the structure of benthic fauna
Full-paper ISI	Catalina Stoica, Stefania Gheorghe, Jana Petre, Irina Lucaciu, Mihai Nita-Lazar, *Tools for assessing Danube Delta systems with macro invertebrates* Environmental Engineering & Management Journal EEMJ) 13(9): 2243-2252; „Gheorghe Asachi" Technical University Iasi, 2014, Print ISSN: 1582-9596 eISSN: 1843-3707
	Catalina Stoica, Stefania Gheorghe, Irina Lucaciu, Elena Stanescu, Iuliana Paun, Daniela Niculescu, *The impact of chemical compounds on benthic invertebrates from the Danube and Danube Delta systems*, Soil and Sediment Contamination: An International Journal 23(7): 763-778; Taylor&Francis Group, 2014, ISSN: 1532-0383 print / 1549-7887 online
	C. Stoica, J. Camejo, A. Banciu, M. Nita-Lazar, I. Paun, S. Cristofor, O. Rocha Pacheco, M. Guevara Lopez, *Water quality of Danube Delta systems: ecological status and prediction using machine-learning algorithms*, Water Science and Technology, 73(10):2413-2421, 2016.

Full-paper ISI	S. Gheorghe, C. Stoica, I. Paun, I. Lucaciu, M. Nita-Lazar, S. Cristofor, *Ecotoxicological tests used as warning system for Danube Delta quality assessment*, Journal of Environmental Protection and Ecology, 17(1): 171-181, 2016.
	S. Gheorghe, I. Lucaciu, I. Paun, C. Stoica, E. Stanescu, *Environmental exposure and effects of some micropollutants found in Romanian surface waters*, Journal of Environmental Protection and Ecology, 15(3):878-889, 2014.
Full-paper BDI	Catalina Stoica, Stefania Gheorghe, Iuliana Paun, Elena Stanescu, Cristina Dinu, Jana Petre, Irina Lucaciu, *Long term biological changes along Danube Delta systems after industrialization period*, Romaqua 91 (1), 14-21, 2014.
Conferences (platform, poster, abstract / full-paper)	Catalina Stoica, Stefania Gheorghe, Iuliana Păun, Elena Stanescu, Cristina Dinu, Jana Petre, Irina Lucaciu, *Long-term biological changes along Danube Delta systems after industrialization period* PREZENTARE ORALA, INCD ECOIND International Symposium "The Environment and The Industry" (SIMI 2013), 29-30 Octombrie 2013, Bucuresti
	Stefania Gheorghe, Catalina Stoica, Irina Lucaciu, Elena Stanescu, Daniela Niculescu, *Toxic effects of water and sediments collected from Danube Delta based on microbiotests battery response*, PREZENTARE ORALA, The Central and Eastern European Conference on Health and the Environment. The Environment – A Platform for Health, 25-30 Mai 2014, Cluj-Napoca
	Alina Banciu, Catalina Stoica, Mihai Nita-Lazar, Daniela Niculescu, Sergiu Cristofor, *Prevalence of potentially pathogenic microorganisms` populations associated with benthic macroinvertebrates in Danube-Danube Delta systems*, POSTER, INCD ECOIND International Symposium "The Environment and The Industry" (SIMI 2015), 29-30 Octombrie 2015, Bucuresti
	Stefania Gheorghe, Catalina Stoica, Iuliana Paun, Irina Lucaciu, Mihai Nita-Lazar, Sergiu Cristofor, *Ecotoxicological tests used as warning system for Danube Delta quality assessment*, PREZENTARE ORALA, INCD ECOIND International Symposium "The Environment and The Industry" (SIMI 2015), 29-30 Octombrie 2015, București
	Catalina Stoica, Stefania Gheorghe, Jana Petre, Irina Lucaciu, Mihai Nita-Lazar, *Tools for assessing Danube Delta systems with macro invertebrates*, POSTER, 7th International Conference Environmental Engineering and Management – Integration Challenges for Sustainability, 18-21 Septembrie 2013, Viena, Austria
	Catalina Stoica, Jorge Camejo Marino, Alina Banciu, Sergiu Cristofor, Osvaldo Rocha Pacheco, Miguel Guevara Lopez, *Water quality of Danube Delta systems: ecological status and prediction using machine-learning algorithms* POSTER, 7th IWA Young Water Professionals Eastern European Conference, 17-19 Septembrie 2015, Belgrad, Serbia).