

<b>Program</b>	<b>PNCDI II/PROGRAM 4. PARTENERIATE IN DOMENII PRIORITARE 2007-2013/ Nr. contract de finantare 32142/2008</b>
<b>Project title (ENG):</b>	<b>Hybrid biotechnological procedure for treatment of wastewater with high ammonium load - HIBROX</b>
<b>Project title (RO):</b>	<b>Procedeu biotehologic hibrid pentru epurarea apelor uzate cu continut ridicat de amoniu - HIBROX</b>
<b>Duration</b>	2008-2011
<b>Team Leader</b>	Eng. Viorel Patroescu
<b>Summary</b> (short description) ENG	The project achieved biotechnological investigation of hybrid solutions (biomass in suspension and biofilm) for advanced treatment of wastewater with high ammonia and identified the main microorganisms through modern molecular techniques and estimated their activity. Experimental models were constructed for partial nitrification/SHARON and anaerobic ammonium oxidation/Anammox of municipal fermented sludge dewatering effluents, on which the reaction parameters were tested.
<b>Summary</b> (short description) RO	Proiectul a realizat investigarea unor solutii biotehnologice hibride (cu biomasa in suspensie si biofilm) pentru epurarea avansata a apelor uzate cu continut ridicat de amoniu si identificarea microorganismelor implicate prin tehnici moleculare moderne si estimarea activitatii acestora. Au fost construite modele experimentale pentru nitrificarea partiala/SHARON si oxidarea anaeroba a amoniului/Anammox a efluentilor de la deshidratarea namolurilor fermentate orasenesti, pe care au fost testati parametrii de reactie.
<b>Dissemination of results</b>	
Full-paper BDI	Lăcrămioara Diana Robescu, Cătălina Raluca Mocanu, <b>Viorel Pătroescu</b> , Costel Bumbac, Dan Niculae Robescu. 2012. <i>Mathematical Modeling of Sharon Biological Wastewater Treatment Process</i> . U.P.B. Sci. Bull., Series D, Vol. 74, Iss. 1, 229-236
Conferences (platform, poster, abstract / full-paper)	<b>Viorel Patroescu</b> , Costel Bumbac, Mihaela Moise, <i>Ammonium Rich Wastewater Treatment via Nitrite: A Case Study</i> , International Symposium „Environment and Industry”, Bucuresti, 2011