

Program	Program NUCLEU PN 09-13 03 15
Project title (ENG):	Development of hybrid technologies based on advanced oxidation – membrane processes for a better recovery / reuse of wastewater
Project title (RO):	Dezvoltarea tehnologiilor hibride de tip oxidare avansata – procese membranare pentru cresterea gradului de recuperare / reutilizare a efluentilor uzati
Duration	2014-2015
Team Leader	Lucian Constantin
Summary (short description) ENG	Assessment of treatment / degradation flows of organic pollutants from aqueous systems via TiO ₂ assisted photocatalyse and heterogeneous photocatalyse – membrane hybrid processes. Elucidation of heterogeneous photocatalyse degradation kinetics and mechanisms for target pollutants.
Summary (short description) RO	Evaluarea posibilității de tratare / degradare a unor poluanți organici din sisteme apoase prin fotocataliză heterogenă cu TiO ₂ și procedee hibride fotocataliză heterogenă – procese membranare. Elucidarea cineticii de degradare și a mecanismelor de degradare prin fotocataliză heterogenă a poluanților țintă.
Dissemination of results	
PhD Thesis – Title RO, ENG	Aplicatii ale fotocatalizei heterogene cu TiO ₂ in degradarea avansata a poluantilor organici din ape uzate (RO) TiO ₂ heterogenous photocatalyse in advanced treatment of wastewater containing organic pollutants (EN)
Full-paper ISI	L. Constantin, I. Nițoi, I. Cristea, P. Oancea, C. Orbeci, A. C. Nechifor, <i>Degradation of Triclosan by TiO₂ – UV irradiation in aqueous solutions</i> , Revista de Chimie, Vol. 66, No.5, pp. 597-600, 2015, ISSN:0034-7752, WOS:000355126000001 L. A. Constantin, I. Nițoi, I. Cristea, P. Oancea, <i>Kinetics of 5-Fluorouracil degradation by heterogenous TiO₂ photocatalysis</i> , Revista de Chimie, vol.67. no.8, pp.1447-1450, 2016, ISSN: 0034-7752, WOS:000384514200007
Conferences (platform, poster, abstract / full-paper	L.A. Constantin, I. Nițoi, G. Batrînescu, I. Cristea, G. Nechifor, <i>Degradation of triclosan from aqueous systems using a photocatalytic membrane reactor</i> , 15th International Multidisciplinary GeoConferences SGEM, 16-25 June 2015, Albena, Bulgaria, Book 5, vol 1, pg 191-205, 2015, ISI Proceedings, WOS:000370813400025, ISBN:978-619-7105-39-1, ISSN: 1314-2704