

Program	Program NUCLEU PN 16-25 03 10
Project title (ENG):	Researches on application procedures sonochemical in degradation of organic compounds from wastewater.
Project title (RO):	Cercetari privind aplicarea procedeeelor sonochimice la degradarea compusilor organici din ape uzate.
Duration	2016 - 2017
Team Leader	Senior Researcher Chem. Mihaela Iordache
Summary (ENG) (short description)	The project aims to implement and develop the technology to remove organic compounds from water using sonochemical processes. It has established the degree of removal of organic compounds from water by sonochemical processes and efficiency of removal of organochlorine compounds analyzed by ultrasonic irradiation experiments of aqueous solutions using an ultrasonic bath and an ultrasonic probe. The results presented in this study demonstrate the utility of ultrasound in degradation of organochlorine compounds.
Summary (RO) (short description)	Proiectul are ca obiectiv implementarea si dezvoltarea unei tehnologii de indepartare a compusilor organici din ape utilizand procedee sonochimice. S-a stabilit gradul de indepartare a compusilor organici din ape prin procedee sonochimice si eficienta de indepartare a compusilor organoclorurati analizati prin experimentari de iradiere cu ultrasunete pe solutii apoase utilizand o baie de ultrasonare si o sonda ultrasonica. Rezultatele prezentate in acest studiu demonstreaza utilitatea ultrasunetelor in degradarea compusilor organoclorurati.
Dissemination of results	
Full-paper ISI	M. Iordache , L. R. Popescu, L. F. Pascu, I. Iordache, A. Marinoiu, Ultrasonic irradiation a chlorinated organic compounds (Tetrachlorethylene, Tetrachloroethene, 1, 1, 2 Trichloroethane) from water, <i>Revista de Chimie</i> , 68, 5, (2017)
Full-paper BDI	M. Iordache , I. Iordache, D. Schitea, L.- R. Popescu, L. F. Pascu, Sono - chemical degradation of organic compounds from wastewater, <i>Progress of Cryogenics and Isotopes Separation</i> , ISSN 1582-2575, 19, 1, (2016) 91-98
Conferences (platform, poster, abstract / full-paper)	M. Iordache , L.- R. Popescu, I. Iordache, L. F. Pascu, A. Marinoiu, Experimente de iradiere cu ultrasunete pe solutii apoase cu continut de 1,1,2 Triclorethan, <i>Conferinta Nationala de Chimie, Calimanesti – Caciulata</i> , Octombrie, 2016