CENTRALIZING TABLE OF PROJECTS AND RESULTS OF RESEARCH ACTIVITIES
The year 2018

Crt. No.	Project	No. CD contract	Product resulting from the CD activity (Technology/Method/Methodology)
1	Advanced research on the intercellular and metabolic relationships of microalgae-bacteria in the innovative granular system for wastewater treatment, project code PN-III-P4-ID-PCE-2016-0865, ALBAREL, Stage II of 2018	PN III, Program 4 84 12.07.2017 AA1/2018	Technical-scientific documentation regarding the characterization of the intertrophic relationships between the microalgae-bacteria constituent microorganisms, operational parameters and limiting factors of the process, as well as kinetic parameters
2	Biocides - from legislation to ecological impact Phase 1: Mechanisms of action of biocidal substances on some bacterial strains with pathogenic potential	PN 18 05 02 01 38N 2018 AA 1/2018	Methodology for testing the effectiveness of biocidal products, such as antiseptics and chemical disinfectants (TP2)
3	Biocides - from legislation to ecological impact Phase 2: Evaluation of the toxic effects generated by biocidal products on aquatic (micro)organisms	PN 18 05 02 01 38N 2018 AA 2/2018	Biological model / methodology for evaluating the toxicity of disinfectant-type biocidal products
4	Computerized monitoring technology of microbiological parameters of drinking water, intended for water quality management at the national level (BIOWATER) Stage 2 / 2018: "Design, realization and implementation of software modules for computerized monitoring of the microbiological parameters of drinking water and testing in laboratory conditions of the computerized monitoring technology"	PN-III-P2-2.1-PED-2016-0965 No. 79PED / 2017	Verification / validation at the laboratory level of the immunofluorescence methodology for the detection of pathogenic bacteria in water and of the computerized technology for monitoring the quality of water intended for human consumption
5	The selection and dissemination of antibiotic resistance genes at the level of wastewater treatment plants in the aquatic environment and the clinical sector Stage 1/2018	PN-III-P4 No. 10 / 2018	Standard operating procedures for the microbiological analysis of water and sludge samples in sewage treatment plants and hospital units
6	Innovative research in support of reaching national targets aligned with EU policy, regarding waste management in the context of the circular economy concept INODES, Activity 1 / Mar-Dec 2018	PN 18 05 04 01 No. 38 N/2018, AA 1/2018	Evaluation method of the mobile metal fraction from ashes
7	Innovative research in support of reaching national targets aligned with EU policy, regarding waste management in the context of the INODES circular economy concept, Activity 2 / Mar-Dec 2018	PN 18 05 04 01 No. 38 N/2018, AA 1/2018	Methodology for destabilizing existing emulsified systems in used oil waste
8	Innovative research in support of reaching national targets aligned with EU policy, regarding waste management in the context of the INODES circular economy concept, Activity 3 / Mar-Dec 2018	PN 18 05 04 01 No. 38 N/2018, AA 1/2018	Method for evaluating the tendency of slagging and melt formation for the incineration of sludge resulting from sewage treatment plants

9	Innovative research in support of reaching national targets aligned with EU policy, regarding waste management in the context of the INODES circular economy concept, Activity 4 / Mar-Dec 2018	PN 18 05 04 01 No. 38 N/2018, AA 1/2018	The technological option for the removal of phosphates from waste water using the red sludge waste generated during the manufacture of alumina, thermally treated
10	Innovative research in support of reaching national targets aligned with EU policy, regarding waste management in the context of the INODES circular economy concept, Activity 4 / Mar-Dec 2018	PN 18 05 04 01 No. 38 N/2018, AA 1/2018	The technological option for removing heavy metals from mine waters using the red mud waste generated during the manufacture of alumina, treated with heat and acid
11	Research on establishing the state of soil quality in different intensively cultivated agricultural areas in Romania, acronym CLIMASOL, Oct-Dec 2018	PN 18 05 02 03 No. 38N/2018, AA.4/2018	Good practice guide to combat the degradation and desertification of agricultural lands in Romania
12	The efficiency of the valorization of industrial by-products through the development for farm animals of some innovative nutritional strategies friendly to animals, humans and the environment, a component of sustainable agriculture	MADR sectoral plan ADER 2020 No. 612/2015	Study on the characterization of some industrial by-products likely to be used as feed additives in the food of dairy cows
13	The efficiency of the valorization of industrial by-products through the development for farm animals of some innovative nutritional strategies friendly to animals, humans and the environment, a component of sustainable agriculture	MADR sectoral plan ADER 2020 No. 612/2015	Study regarding the physico-chemical and microbiological characterization of samples of combined feed and raw materials
14	The efficiency of the valorization of industrial by-products through the development for farm animals of some innovative nutritional strategies friendly to animals, humans and the environment, a component of sustainable agriculture	MADR sectoral plan ADER 2020 No. 612/2015	Identification of risk factors and evaluation of the impact of the application of nutritional solutions for dairy cows on the environment through microbiological and heavy metal determinations in excreta samples
15	New nutritional solutions for laying hens, rich in cellulose, decisive in increasing the competitiveness of a poultry unit by reducing production costs and increasing egg quality	PN III No. 43 PTE/2016	Identification of the microbiological and physico-chemical risk indicators as well as the evaluation of the impact on the environment for the feed recipes used in the macrotest
16	New nutritional solutions for laying hens, rich in cellulose, decisive in increasing the competitiveness of a poultry unit by reducing production costs and increasing egg quality	PN III No. 43 PTE/2016	Study regarding the analysis of the effectiveness of the two nutritional solutions in maintaining the quality of the environment and the application of the analytical ranking method (AHP) to establish the nutritional solution proposed for implementation
17	The transition of the occupational health and safety management system to the requirements of the new ISO 45001: 2018 standard and its integration with the quality and environmental management systems implemented according to ISO 9001:2015 and ISO 14001:2015 respectively	PN 18 05 04 02 No. 38N /2018, AA no. 4/2018	Methodology for the transition of the occupational health and safety management system (OHSMS) to the requirements of the new standard and the training of personnel in order to implement the legal requirements of OSH and the new standard
18	The transition of the occupational health and safety management system to the requirements of the new ISO 45001: 2018 standard and	PN 18 05 04 02 No. 38N /2018, AA	Study regarding the implementation of the methodology in an organization and the integration of this system with the quality and

	its integration with the quality and environmental management systems implemented according to ISO 9001:2015 and ISO 14001:2015 respectively	no. 4/2018	environmental management systems
19	Innovative solutions for the conservation and protection of water quality through conventional and non-conventional processes SINOVAP	38 N/2018 PN 18 05 03 01	Technology for removal by sonolysis associated with biological processes of aliphatic halogenated compounds from underground sources intended for drinking water (ME)
20	Innovative solutions for the conservation and protection of water quality through conventional and non-conventional processes SINOVAP	38 N/2018 PN 18 05 03 01	Water treatment technology from underground sources with a high content of NH4+ in the presence of iron and manganese in a reduced state
21	Innovative solutions for the conservation and protection of water quality through conventional and non-conventional processes SINOVAP	38 N/2018 PN 18 05 03 01	Technology for reducing the polluting potential of water from underground sources intended for drinking water through combined enzymatic-membrane processes (ME)
22	Innovative solutions for the conservation and protection of water quality through conventional and non-conventional processes SINOVAP	38 N/2018 PN 18 05 03 01	Technology for the degradation of micropollutants such as Fluorouracil (5 FU) and Bisphenol A (BA) from municipal wastewater through advanced oxidation (ME) processes
23	Innovative solutions for the conservation and protection of water quality through conventional and non-conventional processes SINOVAP	38 N/2018 PN 18 05 03 01	Wastewater treatment technology resulting from the fermentation industry through hybrid (conventional-non-conventional) processes (ME)
24	New approaches, techniques, methods and methodologies for air quality assessment in the context of climate change and the updating of international environmental regulations BATC-AER, phase 1+2, activity A.1.3. and A.2.3	38N/2018 PN 18 05 02 02	Methodology for evaluating the level of chemical pollution and the level of smell starting from the values of the technological parameters for determining the concentration of NH3, H2S and smell applied to the activity of intensive pig breeding
25	New approaches, techniques, methods and methodologies for air quality assessment in the context of climate change and the updating of international environmental regulations BATC-AER, phase 1+2, activity A.1.4. and A.2.4	38N/2018 PN 18 05 02 02	Methodology for research approach to biomonitoring of air quality with sentinel species
26	New approaches, techniques, methods and methodologies for air quality assessment in the context of climate change and the updating of international environmental regulations BATC-AER, phase 1+2, activity A.1.5. and A.2.5	38N/2018 PN 18 05 02 02	Analytical method of determining the H2S concentration in the surrounding air
27	New approaches, techniques, methods and methodologies for air quality assessment in the context of climate change and the updating of international environmental regulations BATC-AER, phase 1+2, activity A.1.5. and A.2.5	38N/2018 PN 18 05 02 02	Analytical method for determining the concentration of mercaptans in the surrounding air
28	New approaches, techniques, methods and methodologies for air quality assessment in the context of climate change and the updating of international environmental regulations BATC-AER, phase 2, activity A.2.2	38N/2018 PN 18 05 02 02	Smell management plan

29	New approaches, techniques, methods and methodologies for air quality assessment in the context of climate change and the updating of international environmental regulations BATC-AER, phase 1+2, activity A.1.3. and A.2.3	38N/2018 PN 18 05 02 02	Methodology of evaluating the level of NH3 emission from the housing process based on the value of excreted N applied to the activity of intensive breeding of poultry
30	New approaches, techniques, methods and methodologies for air quality assessment in the context of climate change and the updating of international environmental regulations BATC-AER, phase 1+2, activity A.1.3. and A.2.3	38N/2018 PN 18 05 02 02	The applied method of determining excreted N through the direct analysis of the litter from the intensive rearing of birds
31	New approaches, techniques, methods and methodologies for air quality assessment in the context of climate change and the updating of international environmental regulations BATC-AER, phase 1+2, activity A.1.3. and A.2.3	38N/2018 PN 18 05 02 02	The applied method of determining Nexcretat by the nitrogen balance method from the intensive rearing of birds
32	New approaches, techniques, methods and methodologies for air quality assessment in the context of climate change and the updating of international environmental regulations BATC-AER, phase 1+2, activity A.1.3. and A.2.3	38N/2018 PN 18 05 02 02	The method of determining the volatilization coefficient of NH3 from the litter from the intensive rearing of birds
33	New approaches, techniques, methods and methodologies for air quality assessment in the context of climate change and the updating of international environmental regulations BATC-AER, phase 1+2, activity A.1.6. and A.2.6	38N/2018 PN 18 05 02 02	The recipe for preparing sound-absorbing composite material from thermal power plant ash and household sterile waste
34	New approaches, techniques, methods and methodologies for air quality assessment in the context of climate change and the updating of international environmental regulations BATC-AER, phase 1+2, activity A.1.6. and A.2.6	38N/2018 PN 18 05 02 02	The recipe for preparing sound-absorbing composite material from power plant ash and power plant slag waste
35	New approaches, techniques, methods and methodologies for air quality assessment in the context of climate change and the updating of international environmental regulations BATC-AER, phase 1+2, activity A.1.6. and A.2.6	38N/2018 PN 18 05 02 02	The recipe for preparing sound-absorbing composite material from thermal power plant ash and ash from the burning of seed husks
36	New approaches, techniques, methods and methodologies for air quality assessment in the context of climate change and the updating of international environmental regulations BATC-AER, phase 1+2, activity A.1.6. and A.2.6	38N/2018 PN 18 05 02 02	The recipe for preparing sound-absorbing composite material from thermal power plant ash waste and wood waste
37	New approaches, techniques, methods and methodologies for air quality assessment in the context of climate change and the updating of international environmental regulations BATC-AER, phase 1+2, activity A.1.6. and A.2.6	38N/2018 PN 18 05 02 02	The recipe for preparing sound-absorbing composite material from power plant ash
38	New approaches, techniques, methods and methodologies for air quality assessment in the context of climate change and the updating	38N/2018 PN 18 05 02 02	The recipe for the preparation of composite materials with sound-absorbing properties from steel slag waste

	of international environmental regulations BATC-AER, phase 1+2, activity A.1.6. and A.2.6		
39	Experimental research on the application of water treatment/potability and purification technologies in order to improve their management - ELFIT, Phase 1/2018	38N/2018 PN 18 05 03 02	Treatment process of wastewater with metal content (Zn, Cu, Ni and Fe) by phytoremediation using the aquatic plant Lemna minor L
40	Experimental research on the application of water treatment/potability and purification technologies in order to improve their management - ELFIT, Phase 2/2018	38N/2018 PN 18 05 03 02	Process of treating deep waters with nitrogen content by electrochemical methods
41	The development of advanced analytical methodologies for the detection and identification of emerging contaminants and their biodegradation products from environmental factors (water, soil, mud) and biota	38N/2018 PN 18 05 01 01 AA no. 2/2018	LC-MS/MS method for the determination of endocrine disruptors from the class of bisphenols and their biodegradation products in aquatic systems
42	The development of advanced analytical methodologies for the detection and identification of emerging contaminants and their biodegradation products from environmental factors (water, soil, mud) and biota	38N/2018 PN 18 05 01 01 AA no. 2/2018	SPE-LC-MS/MS method for the quantification of some beta-blockers and metabolites from wastewater samples
43	Development of advanced analytical methodologies for the detection and identification of emerging contaminants and their biodegradation products from environmental factors (water, soil, sludge) and biota	38N/2018 PN 18 05 01 01 AA no. 2/2018	Chromatographic methods for the identification and quantification of some products obtained from the degradation of some herbicides from the class of chlorphenoxycarboxylic acids in water samples
44	Development of advanced analytical methodologies for the detection and identification of emerging contaminants and their biodegradation products from environmental factors (water, soil, sludge) and biota	38N/2018 PN 18 05 01 01 AA no. 2/2018	Gas chromatographic methods for the detection of some pollutants associated with microplastics from the phthalate class and organochlorine pesticides
45	Development of advanced analytical methodologies for the detection and identification of emerging contaminants and their biodegradation products from environmental factors (water, soil, sludge) and biota	38N/2018 PN 18 05 01 01 AA no. 2/2018	Methods for determining platinum metals (Ir, Pd, Pt, Rh, Ru) from water, soil and vegetation samples
46	Development of advanced analytical methodologies for the detection and identification of emerging contaminants and their biodegradation products from environmental factors (water, soil, sludge) and biota	38N/2018 PN 18 05 01 01 AA no. 2/2018	Analytical methodologies for the detection of inorganic and organic Hg using atomic absorption spectrometry coupled with the cold vapor technique from biological samples
47	Development of advanced analytical methodologies for the detection and identification of emerging contaminants and their biodegradation products from environmental factors (water, soil, sludge) and biota	38N/2018 PN 18 05 01 01 AA no. 2/2018	Analytical methodologies for the determination of halogenated organic compounds and degradation products from industrial wastewater