

|   |   |
|---|---|
| <b>Program</b>                            | <b>Program Nucleu PN 18 05 01 01</b>  |
| <b>Project title (ENG):</b>               | <b>Development of advanced analytical methodologies for the detection and identification of emerging contaminants and their biodegradation products from environmental factors (water, soil, sewage sludge) and biota</b>   |
| <b>Project title (RO):</b>                | <b>Dezvoltarea unor metodologii analitice avansate pentru detectia si identificarea contaminantilor emergenti si a produsilor lor de biodegradare din factori de mediu (apa, sol, namol) si biota – EMERGMET</b>  |
| <b>Duration</b>                           | 2018  |
| <b>Team Leader</b>                        | Senior Researcher 1 <sup>st</sup> chem. Toma Galaon   |
| <b>Summary ENG</b><br>(short description) | The <b>EMERGMET</b> Project is focused on a major interest topic for human health and also for environmental protection, namely the increasing degree of contamination of water, soil, sewage sludge and biota with emergent xenobiotic compounds. The main project objective is development of new and complex analytical methodologies comprising extraction, purification and concentration methods together with sensitive and specific instrumental methods, all of them employed to determine different representative groups of emergent contaminants and metabolites from relevant and complex matrices: surface and waste water, soil, sewage sludge and biota.                          |
| <b>Summary RO</b><br>(short description)  | Proiectul <b>EMERGMET</b> abordeaza un topic de importanta majora pentru sanatatea umana si protectia mediului si anume: contaminarea din ce in ce mai accentuata a factorilor de mediu apa, sol, namol si a biotei cu substante xenobiotice emergente. Obiectivul general al proiectului este dezvoltarea unor metodologii analitice complexe alcatuite din metode de extractie, purificare si concentrare si metode instrumentale de analiza (specifice si sensibile) pentru determinarea unor clase reprezentative de contaminanti emergenti si metaboliti ai acestora dintr-un serie de matrici relevante pentru compusii tinta: apa de suprafata, apa uzata, sol, namol de epurare si biota. |
| <b>Dissemination of results</b>           |   |
| PhD Thesis – Title<br>RO, ENG             | <i>Identificarea unor caracteristici ale solurilor, vegetației și apelor prin metode fizico-chimice și electrochimice convenționale și neconvenționale-</i> <b>drd. Cristina Dinu</b><br>Identification of soil, vegetation and water characteristics by conventional and unconventional physical-chemical and electrochemical methods  |
|   | <i>Dezvoltarea de noi metode cromatografice pentru detectia contaminantilor organici in probe de mediu-</i> <b>drd. Vasile Iancu</b><br>Development of new chromatographic methods for the detection of organic contaminants in environmental samples   |
|   | <i>Dezvoltarea de metode de tratare a apelor reziduale în vederea diminuării impactului unor poluanți organici asupra ecosistemelor acvatice-</i> <b>drd. Diana Puiu</b><br>The development of wastewater treatment methods in order to reduce the water ecosystem impact of some organic pollutants  |
| Full-paper ISI                            | <b>Florentina Laura Chiriac, Iuliana Paun, Florinela Pirvu, Liliana Cruceru, Luoana Florentina Pascu, Toma Galaon, Parallel between offline-SPE-LC-MS and direct injection LC-MS methods for Acrylamide detection in drinking water at parts per trillion level, Revista de Chimie (Bucuresti), ISSN:0034-7752, vol. 69, no. 11, in press, 2018</b>   |

|  |   |
|--|---|
|  | <p><b>Diana Puiu, Mariana Popescu, Marcela Niculescu, Luoana Florentina Pascu, Toma Galaon,</b> Carmen Postolache, <i>Mobility of some high persistent organochlorine compounds from soil to Mentha Piperita</i>, Revista de Chimie (Bucuresti), ISSN:0034-7752, vol. 70, no. 1, in press, 2019</p>   |
|  | <p><b>Gabriela Vasile, Cristina Dinu, Anda Tenea, Claudiu Spanu, Daniel Manolache,</b> Eleonora-Mihaela Ungureanu, Corina Ene, <i>Content of some PGEs in soil and vegetation collected from roadsides</i>, Revista de Chimie (Bucuresti), ISSN:0034-7752, vol. 70, no. 1, in press, 2019</p>   |
| <p>Conferences (platform, poster, abstract / full-paper)</p> | <p><b>Anda Tenea, Cristina Dinu,</b> Eleonora-Mihaela Ungureanu, <b>Gabriela-Geanina Vasile, Marius Simion,</b> <i>Determination of rhodium from wastewater samples using ICP-EOS technique</i>, 21th International Symposium „The Enviroment and the Industry” SIMI 2018, 20-21 september, 2018, Bucuresti, ISSN-L: 1843 – 5831, pag. 366-372, 2018, DOI: 10.21698/simi.2018.fp44</p>                            |
|  | <p><b>Roxana-Elena Scutariu, Vasile Ion Iancu, Gheorghe Nechifor, Gabriel-Lucian Radu, Marius Simion, Marcela Niculescu,</b> <i>Membrane filtration efficiency on triazine herbicides in organic and aqueous solutions</i>, 21th International Symposium „The Enviroment and the Industry” SIMI 2018, 20-21 september, 2018, Bucuresti, ISSN-L: 1843 – 5831, pag. 392-399, 2018, DOI: 10.21698/simi.2018.fp48</p> |
|  | <p><b>Florentina Laura Chiriac, Iuliana Paun, Florinela Pirvu, Liliana Cruceru, Luoana Florentina Pascu,</b> <i>New LC-MS method for acrylamide determination in environmental water samples</i>, 21th International Symposium „The Enviroment and the Industry” SIMI 2018, 20-21 september, 2018, Bucuresti, ISSN-L: 1843 – 5831, pag 94-95, 2018, DOI: 10.21698/simi.2018.ab38</p>                              |
|  | <p><b>Diana Puiu, Mariana Popescu, Marcela Niculescu, Madalina Mihalache, Luoana Florentina Pascu, Vasile Iancu,</b> <i>The development of plants extraction method for gas chromatographic determination of PCBs</i>, 21th International Symposium „The Enviroment and the Industry” SIMI 2018, 20-21 september, 2018, Bucuresti, ISSN-L: 1843 – 5831, pag 100-101, 2018, DOI: 10.21698/simi.2018.ab41</p>       |