

<b>Program</b>	<b>Program NUCLEU PN 16 25 01 13</b>
<b>Project title (ENG):</b>	<b>Research on new methods for the determination of Sulphur content in solid and liquid fuels</b>
<b>Project title (RO):</b>	<b>Cercetari privind metode noi de determinare a sulfului din combustibili solizi si lichizi</b>
<b>Duration</b>	2016 – 2017
<b>Team Leader</b>	Researcher Eng. Ileana Crina Nicolescu
<b>Summary</b> (short description) ENG	Two methods are developed for the determination of total sulphur content in petroleum products and solid fuels (coal, coke and solid biomass). Turbidimetry and ion-chromatographic techniques are used in this purpose. To confirm the results obtained by the proposed techniques, the standard gravimetric method was used in parallel. The developed methods and the extraction procedures applied in this project are proved to be accurate and precise for the determination of sulfur content in fuels.
<b>Summary</b> (short description) RO	Proiectul isi propune dezvoltarea de metode noi pentru determinarea continutului total de sulf din produse petrolieri si combustibili solizi (carbone, cocs si biocombustibili solizi). In acest scop este utilizata metoda turbidimetrica si cea ion – cromatografica. Pentru confirmarea rezultatelor obtinute prin tehnicile propuse, s-a utilizat in paralel metoda gravimetrica de referinta. Tehnicile propuse pentru determinarea continutului de sulf, inclusiv cele de prelucrare si extractie ale acestuia din combustibili, sunt adecvate scopului propus. Parametrii de performanta obtinuti s-au incadrat in limitele impuse prin metodele standardizate.
<b>Dissemination of results</b>	
Conferences (platform, poster, abstract / full-paper)	<b>Nicolescu, I.,</b> Serbanescu A., Barbu M., Bucur E., Diodiu R., Performance evaluation of the methods used for the determination of sulphur content in fuels and biofuels, 13-14 October <b>2016</b> , <i>International Symposium “ Environment and Industry” SIMI 2016</i> , Bucuresti. <b>Ileana Crina Nicolescu,</b> Elena Bucur, Agnes Serbanescu, Raluca Diodiu, Mona Barbu, Determination of sulfur content in waste materials by ion chromatography, 28-29 september <b>2017</b> , <i>International Symposium “ Environment and Industry” SIMI 2017</i> , Bucuresti.
Full-paper ISI	<b>Ileana Crina Nicolescu,</b> Elena Bucur, Agnes Serbanescu, Raluca Diodiu, Mona Barbu, Determination of sulfur content in waste materials by ion chromatography, 28-29 september <b>2017</b> , <i>International Symposium “ Environment and Industry” SIMI 2017</i> , Bucuresti, Proceedings book , pg. 242-247
Full-paper BDI	<b>Nicolescu, I.,</b> Serbanescu A., Barbu M., Bucur E., Diodiu R., Performance evaluation of the methods used for the determination of sulphur content in fuels and biofuels, 13-14 October <b>2016</b> , <i>International Symposium “ Environment and Industry” SIMI 2016</i> , Bucuresti, Proceedings book , pg. 156-163