

## ABSTRACT

**Title:** “Translation Problems of Texts on the Oil and Gas Industry’s Eco-technology Topic”.

**Author:** O. N. Graur, Specialist’s program student, Group 512-15, Institute of Translatology and Multilanguage Studies.

**Research Supervisor:** E.V. Vinogradova, Associate Professor of the Chair of Translatology and Interpretation.

**Research Initiator:** Pyatigorsk State University; 9 Kalinin St., the city of Pyatigorsk, Stavropol District.

**Thematic Justification of the Research:** is determined by the fact that translation in oil and gas industry sphere is still in high demand. Furthermore, the oil and gas industry is integrated with many spheres, like politics, economy, technology, science, etc. As a result of the ongoing progress in the industry, constant technological development, new problems appear. The main sphere of our interest is eco-friendly innovations in the oil and gas industry. The texts correspond with the general features of sci-tech prose style which are high terminology density, strict style of narration, specific grammatical patterns, etc.

This research focuses on the use of modern digital humanities technologies in translating the terminology and the texts of eco, namely the use of the resources of corpus linguistics. In the course of the research, an algorithm has been developed for using linguistic corpuses to solve the difficulties that arise while translating texts about eco-friendly innovations from English into Russian.

**The aim of the study:** is to identify the translation problems that arise when translating specific texts and to determine the best ways to overcome them using linguistic corpuses.

### **Objectives of the research:**

1) to classify theoretical foundations in the special translation sphere, that help provide high-quality translation of texts on oil and gas eco-friendly innovations;

- 2) to study general characteristics of sci-tech prose style;
- 3) to identify translation problems and ways to overcome them;
- 4) to improve the translating process of specific texts using modern digital technologies;
- 5) to analyze general characteristics of texts on oil and gas eco-friendly tech innovations;
- 6) to provide linguistic commentary on the text translated by us;
- 7) to compare machine and written translations of an English text «Oil, Gas Industry Discovers Innovative Solutions To Environmental Concerns»;
- 8) to develop an algorithm for translating the special terminology of texts on oil and gas eco-friendly tech innovations from English (PN) into Russian (IN) using linguistic corps.

**Theoretical and practical significance of the research:** is the fact that we study translation methods and classify sci-tech terminology in the descriptions of innovative environmentally-friendly technologies used in the oil and gas industry. New terminology on the topic is appearing constantly, which presents difficulties for translators. The study proposes an algorithm for coinages translation of oil and gas industry using machine translation services. The glossary of **common and specialized scientific** terms was developed and may prove useful not only to beginners, but to **practising translators as well.**

**Results of the research:** the graduation qualification paper is devoted to the translation problems of texts on oil and gas eco-friendly tech innovations. The author succeeded in fulfilling all the tasks put forward in the Introduction to the Research Paper.

The particular interest of this paper is analyzing and overcoming problems of text and terminology translation. Special patterns of sci-tech and oil and gas industry kinds of texts were also examined.

We studied the features of the scientific prose style, then compared them with the ones of the texts on oil and gas eco-friendly tech innovations. More

attention was paid to the problems of translating the special terminology of the texts.

Further we were able to identify the main translation problems. As the main one is terminology translation, we considered the classification and identified an algorithm for translating terms and terminological phrases. Special terms are of particular interest for our study, since it is one of the main characteristics of a sci-tech and oil and gas eco-friendly technological innovations concerning texts.

In the second chapter, we described the general grammatical, stylistic and other characteristics of sci-tech texts, and then compared them with the features of the text translated. Among other features of the texts on environmentally-friendly technology, we accentuated the accuracy and brevity of the narration, high special terminology density, use of certain grammatical constructions. The difficulty of translating texts on this subject is translating specialized terminology, regular words used as terms, neologisms that keep appearing due to the rapid technological development.

Then, we performed a translation and linguistic analysis of the text translated by us. The lexical features were analyzed using digital technologies, like linguistic corps “Voyant Tools” and “COCA”, and “Google Translator” as the program for machine translation.

We examined stylistic, grammatical and lexical characteristics of texts on oil and gas eco-friendly tech innovations, paying attention to the problems of translating special terminology. The developed glossary, which includes terms on the related topics, can be useful for future translators as well as for professionals.

**Recommendations:** The results of the conducted research, in particular, the algorithm and the glossary, can be used by translators in the field of oil and gas industry related translation and applied to the training of interpreters and translators at different levels of academic studies (BA, MA and specialists courses) in teaching students with majors in translatology, interpretation and translation.