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# FORMAL AND STRUCTURAL PATTERNS AND CLASSIFICATION OF OIL INDUSTRY TERMINOLOGY IN THE GERMAN LANGUAGE

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#### Abstract

In the present day world, the transformation to globalisation has been carried out by the rapid growth of many different sectors of society. In this sense, the dynamic development has also involved the oil sector. Currently, the oil and gas industry is one of the most important of fast developing spheres of the world economy. The scale of the oil and gas industry certainly results in the advancement of international cooperation and exchange of technological experience. This requires reasonable technical liaising between experts at the international level. Translators play an important role when translating oil and gas terms from and into German. They are direct intermediaries without whom communication between representatives of different countries is unachievable. Obtaining a competent translation from and into German means understanding the linguistic peculiarities of terms used in the German oil and gas industry. In this connection there is a great need for a comprehensive and comprehensive study of the composition of terms in the modern German language in the oil and gas sphere, which determines the relevance of the subject of this study, because terminology in the field of oil and gas can cause certain obstacles and difficulties when translating individual elements into other languages. The objective of this paper is to carry out a study of the main sources of oil and gas terminology formation in German, to define the concepts of term and terminology, to analyse the formal-structural features and to study the classification of oil industry terms in the modern German language.

**Keywords:** terms, terminology, oil and gas industry, oil and gas sphere, oil, gas, the modern German language, vocabulary, lexis, classification of terms, formal-structural features of terms.

## **1 INTRODUCTION**

Since ancient times, people have been aware of oil and gas. According to the opinion of archaeologists and historians, the inhabitants of Asia Minor, Greece, Egypt and China knew how to take advantage of oil long ago. In some parts of the world, the places where oil and gas came out were considered sacred. Oil was widely used almost everywhere, e.g. in medicine, construction and the automotive industry. The emergence of German oil and gas terms is linked to the history of the oil and gas industry in Germany. Oil and gas terminology has expanded and continues to increase as a result of human activity and economic development. Updating of terminology occurs together with the appearance of new techniques, the elimination of old ways of working and the end of life of instruments or devices.

In this framework, English has become the main medium of communication in the oil and gas industry. This is primarily due to the fact that English is the dominant language in the international oil and gas industry and

most new technologies and processes are developed in English. However, German, as one of the world's leading languages, also contributes to the terminology of this industry. In this paper we will review: 1) the general concept of the term and terminology; 2) the formal and structural features of oil industry terms in modern German; 3) the classification of German terms in the oil and gas industry.

# 2 METHODS

In the framework of this study the following approaches were applied: 1. Theoretical analysis refers to identification and examination of specific facets, indicators, attributes, traits, and qualities of phenomena. By dissecting, organizing, and systematizing the facts, we were able to find patterns and unique aspects in them and formulate an overarching principle or guideline. Understanding the core of the phenomena under study was made easier with the assistance of synthesis and analysis. 2. Theoretical methods to the study of literature, namely techniques such creating a bibliography, which is a list of sources chosen for the work in relation to the issue being studied; Abstracting refers to a succinct summary of the primary ideas and provisions of one or more works on a shared topic; outlining is the process of taking more in-depth notes, with the major concepts and provisions of the work serving as the foundation; Annotating refers to providing a concise summary of the overall content of a book or article; citing involves recording exact quotes, factual information, or numerical values.3. Analysis and synthesis. Analysis allows us to determine what parts the object under study consists of, what its features are, and synthesis enabled us to connect the parts derived during analysis into something whole. As a result of which there was a connection of knowledge obtained during the use of analysis into a unified system. 4. Comparative method, which allowed us to set up similarities and differences between objects and phenomena. 5. Inductive and deductive methods are the logical techniques of summarizing obtained data by practical consideration. With the inductive method, we assumed the course of thoughts from private judgements to a general conclusion, with the support of deductive - from a general judgement to a private conclusion. 6. Research and summarizing (generalization) the experience of scientists aimed at analysing the state of practice, revealing the best approaches.

# **3 RESULTS**

# 1. A General Concept of the Term and Terminology

Various Russian and foreign researchers have dealt with the issues of terminology at different times. The most prominent representatives of modern <u>Russian</u> terminological research are O. S. Akhmanova, L. Yu. Buyanova, S. V. Grinev, S. A. Chaplygina and others. <u>Foreign</u> researchers who have studied the issues of terminology include O. Wüster, A. Rey, R. Jackendof, G. Felber and others.

What is a term in modern science of linguistics? How does it differ from terminology?

<u>The term</u>, as we have found out in the course of our research, in the general sense is a verbal designation of a concept included in the system of concepts of a certain field of professional knowledge.

<u>*Terminology*</u>, as a set of terms, is often interpreted as an independent sector of any national language, closely related to professional activity.

However at the moment, as it appears to us, there is no specific definition that would fully disclose the concept of "term" in all its glory. There is an opinion among linguists that in the theory of terminology a term is not only many-sided, but also a fundamentally mixed object of research, which is why, according to linguists, it is so challenging to identify something generalisable.

In the modern science there are several approaches to the definition of the term: some scientists, as we have seen, give a logical definition of the term, others - a descriptive definition. A term is distinguished by contrasting it with its negation. This diversity of the definition of the term is explained by the fact that the term is the subject of study of several sciences at the same time. It is known that the same term can be included in different terminological systems. This, according to A. A. Reformatsky, creates interscientific terminological homonymy [8].

Each science, as indicated in the relevant literature, includes in the determination of a concept its own understanding and its own features. For example, the logic considers any word as a term if it is given a strict definition. This understanding of a term originated in ancient Greek science from the time of Plato. Philosophers understand a term as an abbreviated designation of a definition, thus equating them with each other. Linguists, on the contrary, consider a term as the name of a concept, and a definition as an extended interpretation of this name.

There are many other options for defining a term, as well as a large number of its variations. Let us list some of them. For example, in the Large Encyclopaedic Dictionary one can find such a definition that <u>a term</u> is a

word or a phrase combination that designates a concept of a special field of knowledge or some activity [4].

According to O.S. Akhmanova, <u>a term</u> is a word or word combination of a special (e.g., technical) language, which is created to accurately express special concepts and subjects [1, p.28].

Z.I. Komarova, emphasising the lexical character of a term, gives the following definition of a term: "<u>A term</u> is a word or word combination that denotes a special subject or scientific concept, limited by variation and place in a certain terminology" [6, p. 61].

According to V.P. Danilenko <u>a term</u> is "a word of a special field of use, which is the name of a special concept and requires variations" [5, p. 28].

A.N. Baranov states that <u>terms</u> can be defined as words of science and applications of scientific disciplines, as well as words denoting specific realities of areas of specific practical human activity [2, p. 23].

In turn, V.M. Leitchik in his works writes that <u>a term</u> is a lexical unit of a particular language for special purposes, denoting a general precise or abstract concept of the theory of a certain special field of knowledge or activity [7, p. 32].

There are also many other determinations of the concept of "term". In the course of our research we found out that several definitions of the same term can be found in the dictionary. The presence of several definitions is the result of using a term to nominate special concepts belonging to different conceptual systems. Terminological polysemy is eliminated by defining the terminological system or subsystem to which the word belongs.

For simplicity and convenience, in our study we will adhere to the general sense of the concept of term and terminology described above.

# 2. Formal and Structural Characteristics of Oil Industry Terms in the Modern German Language

Terminological units, as emphasized in the literature, are formed on the basis of already existing words or from the roots of lexical units of general and special vocabulary.

All structural types of word patterns typical for the German language (simple words, derivatives, compound words) are distinguished among terminological units in the field of oil industry.

Regarding the form in any field of terminological lexicon, as a rule, two main groups of terms are distinguished:

1. word terms (monolexemic, i.e., one-word terms);

2. terms of word combinations (polylexemic, i.e. multisyllabic) [3, p.15].

It should be noted that according to the internal structure terminological units are divided into <u>single-component</u> and <u>multi-component</u>.

For example, <u>single-component</u> ones: Ablagerung (field), Blende (hole), Feld (field), Schub (thrust); <u>multi-component</u> ones: Abrasivität des Gesteins (rock abrasiveness), Kapazitätstrommel (capacitive drum), analoges Reservoir (analogue reservoir), Linearitätsgesetz (law of linearity).

There are also <u>affixal</u> terminological units in German oil and gas, which include terms with a base containing a root and affixes.

For example, Kessel (boiler), Bindung (bond), brennbar (fuel), Klinker (clinker), Stilllegung (decommissioning), Abschreibung (depreciation), Kühlung (cooling), Topping (topping), Totalisator (totalisator), Twinning (twinning), Geophysiker (geophysicist), Geologe (geologist), Elastomer (elastomer), Erzieher (educator), Economizer (economiser), Konvektor (convector), Zuordnung (distribution), Antischaummittel (antifoam), Antifouling (antifouling), Biogenese (biogenesis), Frostschutzmittel (antifreeze), Vaseline (petrolatum), Salbe (ointment), Lagerfähigkeit (persistence), etc.

As we have noticed, the formation of terminological units by doubling, addition of bases, repetition of two or more words, which by their morphological structure can be both root and derivative, is of special interest among scientists.

<u>Collocation</u> is the joining of two or more root morphemes in one word.

For example, Ofen (furnace), Fischerei (fishing), Aufschluss (outcrop), Schlammstein (outcrop), Meerwasser (mudstone), Rückspülung (seawater), Spülung (backwash), Abwasser (flush), Wasserscheide (waste water),

Bypass (bypass), Nebenprodukt (by-product), Knopf - up, Schott (bulkhead), Brachflächen (mature fields), Fläche - zu - Volumen (area - to - volume), Antiklopf (anti-shock), Ampere - Stunde (ampere - hour), Luft - zu - Luft (air - to - air).

<u>Compound terms</u> of the German oil industry are recorded in the form of three structural varieties: 1) as <u>paired words</u>; 2) <u>solid words</u>; 3) <u>compound words</u>, each of which is characterised by word-formation and structural-semantic properties.

<u>Paired terms</u> are formed from two different words, the bases of which are morphologically coinciding, semantically correlated independent lexical units. The components of paired terms are composed on the basis of a conjunction, but they are not grammatically, but lexico-semantically dependent on each other.

For example, Wärmeträgeröl (open-hearth fuel oil), Enteisungsmittel (de-icing fluid).

<u>Solid terms</u> are formed on the basis of word formation by combining two or more bases into one lexical unit. The components of compound terms are independent and are used independently outside of these formations.

For example, Erdöl (oil) - Erd+öl, Frostschutz (antifreeze) - Frost+schutz, Neogenese (neogenesis) - Neo+ genese.

<u>Compound terms</u> are formed on the basis of two, three, four, five or more components in one lexical whole (i.e. by attaching various word-forming affixes to the root-bases of the first component).

<u>Complex terminological units</u> are <u>one-word terms</u> that have at least two root morphemes. For example, Ampere-Stunde (ampere-hour), Verkehrsstopp (transport stop), Grundwasser (groundwater), Freizeit (rest), Level-wind (wind level), Petrochemieindustrie (petrochemical industry), Abfälle - Wasser (waste water), Wassereinzugsgebiet (watershed), Wellenlänge (wavelength), Bohrloch (well).

Thus, in the course of analysing monolexemic and polylexemic terms of the German language, we found that polylexemic terms prevail over monolexemic terms in the oil industry terminosystem of the analysed language.

In the composition of monolexemic terminological units of the German oil industry, we have discovered in the course of the analysis that three main structural types of terms are distinguished in the literature: <u>simple</u>, <u>affixal</u> and <u>complex terms</u>. In the German terminological lexicon, the largest number of terms are root terms, the smallest number are compound terms.

For example, anfänglicher Lagerstättendruck (initial formation pressure), marginale Wahrscheinlichkeit von Kohlenwasserstoffen (marginal probability of hydrocarbons), mittlerer Viskositätsindex (average viscosity index), Mischmetalloxid (mixed metal oxide), modulierendes Regelventil (modulating control valve), unterbrechungsfreie Stromversorgung (uninterruptible power supply).

We have also identified other terminological units in the terminology of the oil and gas industry of the German language. Among them we can distinguish the following types of terms:

#### 1. Three-component terms:

- by the "N+Adj+N" type, e.g. Modell der Lagerstättentechnik (tank engineering model), gemeinsame Betriebsvereinbarung (joint operating agreement), Abfallbelebtschlamm (spent activated sludge), Luftbehandlungsanlage (air treatment plant), Milliarden Kubikfuß (billion cubic feet), etc.;

- by the structural model "Adj+Adj+N", e.g. Heizöl-Restbestand (residual oil fuel), unabhängiges Atemschutzgerät (autonomous breathing apparatus), ideales spezifisches Gewicht (ideal specific gravity), etc;

- <u>terminological units without a preposition</u> (in terms of the prepositional element), e.g. Unterbrechungsfreie (uninterruptible power supply), Stromversorgung (power supply), Schieferbekämpfungsmittel (shale regulator), Stromverbrauch (electricity consumption), etc.

- <u>terms including prepositions</u>, e.g. Vorkaufsrecht (right of first refusal), Antifriktionseigenschaft von Erdöl (antifriction property of oil), Asche von Erdölprodukten (ash of oil products), Brennbarkeit von Erdölprodukten (flammability of oil products), Verdampfung von Erdölprodukten (vaporisation of oil products), Entflammbarkeit von Erdölprodukten (combustibility of oil products), Klassifizierungsmerkmale eines Schiffes (classification characteristics of the vessel), Wärmeleitfähigkeitskoeffizient (heat transfer coefficient), kubischer Ausdehnungskoeffizient (cubic expansion coefficient), linearer Ausdehnungskoeffizient (linear expansion coefficient), Zusammensensetzung des Bohrlochstroms (well flow rate composition), Zusammensetzung des Salzes in Lösung (salt composition in solution), Kontrolle des Formationsdrucks (formation pressure control), Kontur des Ölsands (oil sands contour), etc.

Based on our work, we have concluded that the vast majority of prepositional three-component terms in German are built according to the structural model "N+Prep(of)+N+N".

#### 2. Four-component terminological combinations.

They can be classified into two most frequent patterns:

- "N+N+N+N", e.g. Oxidationsstabilität eines Erdölprodukts (oxidative stability of the petroleum product), Gleitfähigkeit eines Erdölprodukts (sliminess of the petroleum product), Kohlenstoffrückstände eines Erdölprodukts (carbon residue of the petroleum product), Gasturbinenkraftwerk (gas turbine power plant), . tester), Drahtleitungsprüfgerät (wire Sicherheitsdatenblatt data (safetv sheet). Schlammgrubenfüllstandsanzeiger (sludge pit level indicator), Schadstoffableitungseliminierungssystem (pollutant discharge elimination system), Lochfraßwiderstandsäquivalenzzahl (equivalent pitting resistance number), playa lakes joint venture, Selbsterkennungspunkt eines Erdölprodukts (oil product self-identification point), Plan zur Vermeidung von Regenwasserverschmutzung (storm water pollution prevention plan), Ablagerungsneigung eines Erdölprodukts (tendency of the petroleum product to settle), Kohlenmonoxid-Nichtübertretungsgebiet (carbon monoxide inaccessibility zone).

- "Adj+N+N+N", e.g. Dynamische Viskosität von Erdölprodukten, funktionelle Kompatibilität von Erdölprodukten, thermische Stabilität von Erdölprodukten, Schwerlast-Schleudersystem (thermal stability of petroleum products), Heißwasserspeicher (hot water storage), Mittel zur Kontrolle von Zirkulationsverlusten (circulation loss control facility), separates Regenwasserkanalsystem (storm water drainage system), Erdgasfeldanlage (a natural gas field system), Erdgasanlagenflüssigkeiten (natural gas plant liquid), Erdgasressourcenbasis (a natural gas resource base), physikalisches Abfallbehandlungsverfahren (a physical waste treatment process).

#### 3. Five-component terms.

- For example, the term "Beton-Schwerwerlastplattform-Bohrinsel" (concrete gravity platform rigid drilling rig) is formed according to the scheme "Adj+Adj+Adj+Adj+Adj+Adj+Adj+N", where the first four components are adjectives, and the fifth component is a noun and acts as the core component.

- The term combination "Korrosionsschutzeigenschaftenschaften des Erdölprodukts" (anti-corrosion properties of petroleum products) is formed according to the scheme "N+Adj+N+Prep+Adj+N". To define the interrelationship of the components, the term can be divided into two semantic parts:

1) Korrosionsschutzeigenschaften - the main part;

2) des Erdölprodukts - dependent (des acts as a link).

- The third five-component term "die strukturelle Verträglichkeit des Erdölerzeugnisses" (constructional compatibility of oil products) is formed according to the model "Adj+N+N+Prep+Adj+N". Dividing this five-component term into two semantic parts, it can be observed that "die strukturelle Verträglichkeit is the main part and des Erdölerzeugnisses is the dependent part, where des also fulfils the function of connection.

Thus, in the course of the study we have revealed that the most productive structural models of German oil industry terms are the "N+N" and "Adj+N" models. Among the terms with three components in German the structural model of "N+N+N" type dominates. The least productive structural models in German are "Adj+N+N" and "Adj+Adj+N". Four-component terminological combinations in German belong to different models in terms of their structure. According to our observations, the most used model is "N+N+N+N+N". Five-component terms made up the smallest group among multi-component terminological units in the field of oil and gas in German. Among them, the following structural models of five-component terms were identified: "Adj+Adj+Adj+Adj+Adj+N", "N+Adj+N+Prep+Adj+N", "Adj+N+N+Prep+Adj+N".

## 3. Classification of Oil Industry Terms in the German Language

All lexical units used by oil industry workers, as we found out in the course of our research, can be divided into groups based on their informational importance and the function they fulfil:

- 1. general scientific lexicon;
- 2. cross-industry vocabulary;
- 3. terms or narrowly specialized professional vocabulary;
- 4. specialized vocabulary (industry word);

- 5. abbreviations.
- 1. General scientific lexicon.

In the group of general scientific lexicon functioning in the term system of oil business in German language, the verbal nouns prevail, for example, die Lösung (solution), Entstehenung (emergence), Zersetzung - decomposition, Absenkenung - settling, Ablagernung - sedimentation, Umwandelnung - transformation, Verschwelenung - disappearance, Fördernung - advancement, Bedeutenung - meaning, Verschiebenung - displacement, Anreichernung - enrichment, Versenkenung - lowering, Überdeckenung - overlapping, Bedingenung - conditioning, Voraussetzenung - precondition, Bildenung - formation, Reifenung - maturation, etc.

The terms of the following fields of knowledge function in the oil discourse:

- general technical terminology (model - Modell, mechanism - Mechanismus, machine - Maschinerie, detail - Detail, organ - Stelle, body - Corpus, configuration - Configuration, etc.);

- terms of fundamental disciplines: physics (pressure - Druck, temperature - Temperatur, volume - Volumen, power - Leistung, Kapazität, density - Dichte, mass - Masse), mathematics (angle - Winkel, square - Quadrat, triangle - Dreieck, zero - o, Null, radius - Radius, diameter - Durchmesser), chemistry (solution - Solution, surfactant - Tenside, fluid - Fluidum, antifreeze - Anti-frostschutzmittel, concentration - Konzetrierung, suspension - Suspension, substance - Materie, Substanz, acid - Acidum, alkali - Luge, inhibitor - Inhibitor).

In the dissertation work by A.K. Suleymanova generalised research is used, which revealed the presence of a sufficient number of general scientific terms in the studied terminosystem - 33%. According to A.K. Suleymanova, linguostatistical analysis of oil discourse showed insignificant differences in the number of general scientific terms, which suggests that the stylistic differences of works that are aimed at specialists have no influence on the lexical composition of general scientific terms in them [9].

#### 2. Profession-oriented and cross-industry vocabulary.

Terminology of the oil and gas industry is connected with a variety of sciences of natural and technical profile, which allows the development of methodological ambiguity of the term.

In the oil and gas sphere there are terms of the following contiguous fields of knowledge: Geology (rock - Gesstein, reservoir - Reservoir, crust - Crust, lithological section - Lithological, sand - Sand, sandstone - Sandstein, shale - Schiefer, cavernousness - Schwellkörper, mud - Bohrklein, sediment - Sediment), geophysics (azimuth - Azimut, azimuthal angle - Azimutwinkel, zenith angle - Zenitwinkel, logging - Bohrlochmessung).

The meaning of the common vocabulary is difficult to sugarcoat. This language series is important for specialised interaction, because with highly specialised terms, general terms professionally direct the message (in written or spoken format) and make it easier to understand professional words. Also, when compiling for any companies their own dictionaries and glossaries it is necessary to pay attention to the "closedness" of oil terminology and take into account the fact that one and the same term in Russian can correspond to two or more meanings in German and other languages, but all this depends on the specific oil company and the specifics of its work.

## 3. The terms themselves or narrowly specialised vocabulary.

Narrow-specialised vocabulary is a rather important part of professional discourse, which updates the understanding of a particular scientific field and represents parts of special knowledge. Terms in professional communication have a great influence on the most productive activity of specialists.

A.K. Suleimanova, dealing with issues in the field of professional terminology, found out that narrowly specialised vocabulary makes up 58% of all terms. Due to the frequent repetition of vocabulary, such a large percentage. The terminological lexicon of this field is shown by borrowed and Russian terms: oil - Erdöl, drilling - Bohren, well - Bohrloch, derrick - Bohrturm, bit - Bohrmeißel, mud - Bohrklein, vibrating screen - Vibrationssieb, drilling mud - Bohrspülung, pump station - Pumpstation, naphtha - Naphta, bitumen - Bitumen, wellbore - Bohrloch, porosity - Porosität, casing - Futterrohkolonne, etc.

The survey of the university students regarding the translation of oil and gas terms revealed that they always have difficulties in translation. It turned out that simple general scientific and general technical terms do not cause any difficulties in translation, as their meanings can be easily found in dictionaries. But when it comes to highly specialised terms, which are not so easy to find in dictionaries, their translation becomes a huge problem. Also, it has been observed that in real life, professionalisms are not used as often because they are

replaced by jargonisms or slangs, which makes translation even more complicated.

4. Specialised vocabulary (industry word).

These have arisen because of the structural or semantic complexity of the term, e.g.,

secret column = tail pipe (in Russian "flying")

crumpled pipe = mashed pipe (in Russian "noodle")

candlestick = stubbing board (in Russian "shop")

cement plug = abandonment/cement plug (in Russian "goat")

metal trap = junk basket (in Russian "spider")

tubing =oil-well tubing/production string (in Russian "pasta").

In German: Fangglocke = ein 53 vergrößertes Rohr am oberen Ende des Verrohrungsstrangs, das als Trichter dient, um Bohrwerkzeuge in den oberen Teil des Bohrlochs zu führen (bell = enlarged pipe at the top of the casing, which serves as a funnel to guide the drilling tool to the top of the well), Gleitschuh = Traktorist (shoe - tractor driver), Welpe = Trog an der Zementieranlage (trough at the cementing unit).

In the formation of industry words the representation of terminology is clearly evident, as colloquial words of everyday nature, e.g. Ei (egg), Ferkel (piglet), Weihnachtsbaum (Christmas tree), Kerze (candle) can be used as specialized vocabulary.

Properly chosen professional vocabulary words are usually names and characterize the main features of a concept, e.g. a process or a property. At the very beginning of their appearance, professionalisms exclude unjustified borrowed terms and other names from colloquial speech.

Most of the terms that emerged as professional slangs are later introduced into the official communication of oil and gas industry specialists, and later - into dictionaries or other literature, receiving the status of terms. For example, the terms pig, egg, Christmas tree, candle, worm, etc., which emerged as professionalisms, are used in the official communication of oil and gas industry specialists. At the moment of expansion of oil and gas industry terms, such professionalisms are included in the terminological dictionaries of the speciality as official terms.

Many professional words in German-language oil terminology are based on the polysemousness of terms. The results of the research showed that the main meanings of oil and gas terms are categorized into four groups:

- 1) names of human or animal body parts;
- 2) household objects;
- 3) names of animals, insects, birds;
- 4) natural phenomena.

It should be noted the fact that most of the rig elements have names related to animals, but are not related to them. For example, Hundezwinger - means not a dog box, but a driller's cabin. You can also take Wildkatze - bridges. Fisch - a tool, like a piece of pipe that falls down a well, Schwein - a scraper to clean the pipe, Hund - low-profit origin.

When translating texts from the oil and gas industry, it is necessary to take into account a huge number of expressions of metaphors and it is one of the most key concepts related to oil and gas production used in oil and gas production, which is associated with a wide range of concepts: lift string (used to lift fluids), candlestick (holds the drill string lantern), drill rotor table (the drill rotor sits on a table), trap (a device used to extract small objects from the wellbore), collar (a ring used to seal to prevent liquid or gas from entering piston pumps); pulsation (well failure), well feed, well circulation, well exit, the well may have hydrocarbon fractures, the well itself may be low-yielding and blind, the well may also breathe in and out. Oil can be dead, mobile and migrating. Oil is therefore seen as a living thing that has two states - alive and immobile, i.e. dead.

5. <u>Oil and gas industry abbreviations</u> can be represented by linguistic and non-linguistic units. For example, abbreviations represent concise information about some phenomenon, process, requirement to some object, for example, M bit (M stands for type) means that this bit can be used when drilling soft rocks, and MZ, also a bit - when drilling soft and sandy rocks. The linguistic abbreviation relates it to the initial term and is explained through it, because it represents a contraction of the term, which is expressed by a compound

word or phrase, and therefore has a "double" role, it establishes the place of the abbreviation and indicates the subject area to which it belongs and also, indicates the main useful features of the object.

Because of the huge number of meanings when translating abbreviation terms, translation linguists advise choosing the right one based on the context. Most German-language abbreviations do not have abbreviated analogues in Russian. When you look up the meaning of terms in dictionaries, their meaning may be different or one dictionary may give more translations than another.

Oil and gas industry terms have the same situation, because abbreviations and acronyms play an important role, as they can be used to quickly convey a huge amount of information. The more regular updates of technical thoughts there are, the more abbreviations and acronyms there are.

## 4 CONCLUSIONS

As a result of this study, when examining the issues related to the definition of the general concept of term and terminology, to the identification of formal and structural features of oil industry terms in the modern German language, to the study and analysis of the classification of German language terms in the oil and gas industry, we came to the following conclusion:

1) The internal structure of the terminological system of the oil industry appears as an internally organized set of interconnected and interdependent units, the specificity of which is expressed in the structural and semantic organization of word formation.

A term is a word or a word combination of a special sphere of use, which is a nomination of a concept and has its definition.

Terminology of a certain field of knowledge is a system of terminological units of a given science or branch of production, which correlates with the system of concepts of the corresponding field of knowledge.

2) In the field of terminological vocabulary of the German language, from the point of view of form or structure, two main groups of terms are distinguished: words (single-word or one-component, monolexemic terms) and word combinations (multi-component, polylexemic terms).

There are three main structural types of terminological units in the composition of one-component terms: simple, affixal and complex (compound) terms. German terminology is characterized by a rather large content of one-component terminological units.

Two-component terms prevail over independent and other polysemic terminological units in the oil and gas sphere in German. The results of the study show that the most productive structural models for two-component terms of the oil industry in German are the models of "N+N" and "Adj+N" types.

3) Multi-component oil and gas terms in German are characterized by a diverse internal structure. They include not only two-component, but also three-component, four-component and five-component terminological combinations. Terminological combinations with three or four components form a small number of polysemic terms of the oil industry. The formation of complex term combinations may be due to the inability of one-component terms to fulfil the nominative function. Five-component terms are the smallest group of polysemic terms in the German oil and gas industry.

4) Terminological units are included in a variety of classifications based on the following characteristics: principles of their origin, form and structural features, semantic features, types and degree of abstraction of concepts, degree of usage, subject matter of the nominated concepts.

Thus, this study allows us to conclude that the terminological system of the oil industry in German is a relatively young system, based on the system of general literary word formation and is open for further development and replenishment, because it possesses the necessary word formation and semantic means.

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