

УДК 004.8

5.2.2. Математические, статистические и инструментальные методы экономики (физико-математические науки, экономические науки)

**АВТОМАТИЗИРОВАННЫЙ СИСТЕМНО-КОГНИТИВНЫЙ АНАЛИЗ И КЛАССИФИКАЦИЯ ВСЕХ СТАТЕЙ НАУЧНОГО ЖУРНАЛА КУБГАУ ЗА 20 ЛЕТ ПО СПЕЦИАЛЬНОСТЯМ ВАК РФ НОВОЙ НОМЕНКЛАТУРЫ**

Луценко Евгений Вениаминович

д.э.н., к.т.н., профессор

[Web of Science ResearcherID S-8667-2018](https://orcid.org/0009-0001-9212-1000)

Scopus Author ID: 57188763047

РИНЦ SPIN-код: 9523-7101

[prof.lutsenko@gmail.com](mailto:prof.lutsenko@gmail.com)

<http://lc.kubagro.ru>

[https://www.researchgate.net/profile/Eugene\\_Lutsenko](https://www.researchgate.net/profile/Eugene_Lutsenko)

*Кубанский Государственный Аграрный университет имени И.Т.Трубилина, Краснодар, Россия*

Цель работы состоит в разработке интеллектуальной системы автоматизированной классификации публикаций по научным специальностям ВАК РФ новой номенклатуры. Для достижения этой цели применен известный метод искусственного интеллекта: автоматизированный системно-когнитивный анализ и его программный инструментарий – интеллектуальная система «Эйдос». В результате работы создано интеллектуальное облачное Эйдос-приложение, размещенное в полном открытом бесплатном доступе, которое может быть с успехом применено всеми желающими для достижения поставленной цели со своими текстами. В работе приводится подробный численный пример достижения поставленной цели, основанный на реальных публикациях в Научном журнале КубГАУ за 20 лет его работы: с 2003 по 2023 годы. Актуальность работы обусловлена тем, что для новой номенклатуры научных специальностей ВАК РФ интеллектуальная система классификации публикаций, находящаяся в полном открытом бесплатном доступе, создана впервые

Ключевые слова: АВТОМАТИЗИРОВАННЫЙ СИСТЕМНО-КОГНИТИВНЫЙ АНАЛИЗ, АСК-АНАЛИЗ, ИНТЕЛЛЕКТУАЛЬНАЯ СИСТЕМА «ЭЙДОС», СПЕЦИАЛЬНОСТИ ВАК РФ НОВОЙ НОМЕНКЛАТУРЫ, КЛАССИФИКАЦИЯ, НАУЧНЫЕ РАБОТЫ, ПУБЛИКАЦИИ

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5.2.2. Mathematical, statistical and instrumental methods of economics (physical and mathematical sciences, economic sciences)

**AUTOMATED SYSTEM-COGNITIVE ANALYSIS AND CLASSIFICATION OF ALL ARTICLES OF THE SCIENTIFIC JOURNAL KUBSAU FOR 20 YEARS IN THE SPECIALTIES OF THE HIGHER ATTESTATION COMMISSION OF THE RUSSIAN FEDERATION OF THE NEW NOMENCLATURE**

Lutsenko Evgeny Veniaminovich

Doctor of Economics, Candidate of Technical Sciences, Professor

Web of Science ResearcherID S-8667-2018

Scopus Author ID: 57188763047

RSCI SPIN code: 9523-7101

[prof.lutsenko@gmail.com](mailto:prof.lutsenko@gmail.com) <http://lc.kubagro.ru>

[https://www.researchgate.net/profile/Eugene\\_Lutsenko](https://www.researchgate.net/profile/Eugene_Lutsenko)

*Kuban State Agrarian University named after I.T.Trubilin, Krasnodar, Russia*

The purpose of the work is to develop an intelligent system of automated classification of publications on scientific specialties of the Higher Attestation Commission of the Russian Federation of a new nomenclature. To achieve this goal, a well-known artificial intelligence method has been applied: automated system–cognitive analysis and its software tools - the intelligent system called "Eidos". As a result of the work, an intelligent cloud-based Eidos application has been created, placed in full open free access, which can be successfully used by everyone to achieve their goal with their texts. The paper provides a detailed numerical example of achieving this goal, based on real publications in the Scientific Journal KubGAU for 20 years of its work: from 2003 to 2023. The relevance of the work is due to the fact that for the new nomenclature of scientific specialties of the Higher Attestation Commission of the Russian Federation, an intelligent classification system of publications, which is in full open free access, was created for the first time

Keywords: AUTOMATED SYSTEM-COGNITIVE ANALYSIS, ASC-ANALYSIS, INTELLIGENT SYSTEM "EIDOS", SPECIALTIES OF THE HIGHER ATTESTATION COMMISSION OF THE RUSSIAN FEDERATION OF NEW NOMENCLATURE, CLASSIFICATION, SCIENTIFIC PAPERS, PUBLICATIONS

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### 1. Introduction

The formation of an academic and scientific school of economics and knowledge management involves the creation of an effective system of scientific publications in this field of science.

At the same time, authors, publishers (employees of the editorial offices of scientific journals), dissertation councils, scientific supervisors of final qualification works, master's, candidate and doctoral dissertations have a question about which scientific specialties of the Higher Attestation Commission of the Russian Federation of the new nomenclature a certain publication or work belongs to, i.e. e. they test the hypothesis that the publication belongs to a certain specialty.

Traditionally, the answer to this question is given by experts who do it in a non-formalized way based on their intuition, experience, and professional competence.

The disadvantages of the traditional hike are:

- a certain subjectivity and incomparability of expert assessments;
- high costs of labor and time of experts, the high cost of their work;
- the danger of insufficient consideration of scientific specialties that are little known to experts (systemic problems);
- difficulties in finding and attracting experts to work due to their small number and very high workload.

The problem solved in the work is that, on the one hand, the classification of publications by scientific specialties of the Higher Attestation Commission of the Russian Federation is traditionally carried out by experts, and on the other hand, this approach has a number of fundamental shortcomings that make it relevant to search for or develop other new alternative approaches to the classification of scientific publications. without these shortcomings.

The purpose of the work is to develop an intelligent system for the

automated classification of publications according to the scientific specialties of the Higher Attestation Commission of the Russian Federation of the new nomenclature.

To solve the problem and achieve the goal, applied automated system-cognitive analysis (ASC-analysis) and its software tools - the intellectual system "Eidos".

Text ASC-analysis (Lutsenko, 2003-2023) allows you to solve a number of tasks for intelligent text processing, which you can read more about in the works [12, 13].

## 2. Goals, objectives and methods

As a result of the decomposition of the goal, the following sequence of research tasks, standard for ASC-analysis, was obtained, which are the stages of achieving the goal. You can read more about this sequence of tasks in [12, 13].

In this work, due to limitations on its volume, we will not consider in detail the solution of all these problems, but only very briefly consider the solution of the first 6 problems and in a little more detail the problem of classifying articles by scientific specialties of the Higher Attestation Commission of the Russian Federation of the new nomenclature.

A detailed description and justification of the methodological apparatus used (quantitative and qualitative methods), as well as methods and techniques used to collect and analyze original data, is given in (Lutsenko, 2023). There are no strict restrictions in the methodological and technological apparatus of ASC-analysis and the Eidos system that could affect the integrity and validity of the results obtained.

## 3. Results

### Task-1. Cognitive structuring of the subject area

At this stage of the ASC analysis, the task is set, i.e. solved:

- what is the object of modeling;
- what are the factors acting on it;
- and what are the results of the influence of these factors.

We will assume that in this work, the object of modeling is the passports of scientific specialties of the new nomenclature.

As factors, we will consider various words and scientific terms found in the passports of scientific specialties.

As the results of the influence of these factors, we will consider the degree of similarity of specific scientific texts: dissertations, scientific monographs and scientific articles, with the semantic cores of passports of scientific specialties of the new nomenclature, as well as groups of scientific specialties, scientific directions, and academic degrees.

## Task-2. Formalization of the subject area

At this stage of the ASC analysis:

- the source of the initial data is determined, the data are prepared for input into the Eidos intellectual system, which is currently the only software tool for ASC analysis;

– classification and descriptive scales and gradations are being developed;

– classification and descriptive scales and gradations are used to encode the initial data, resulting in a training sample. The training sample, in fact, is the original data, normalized using classification and descriptive scales and gradations.

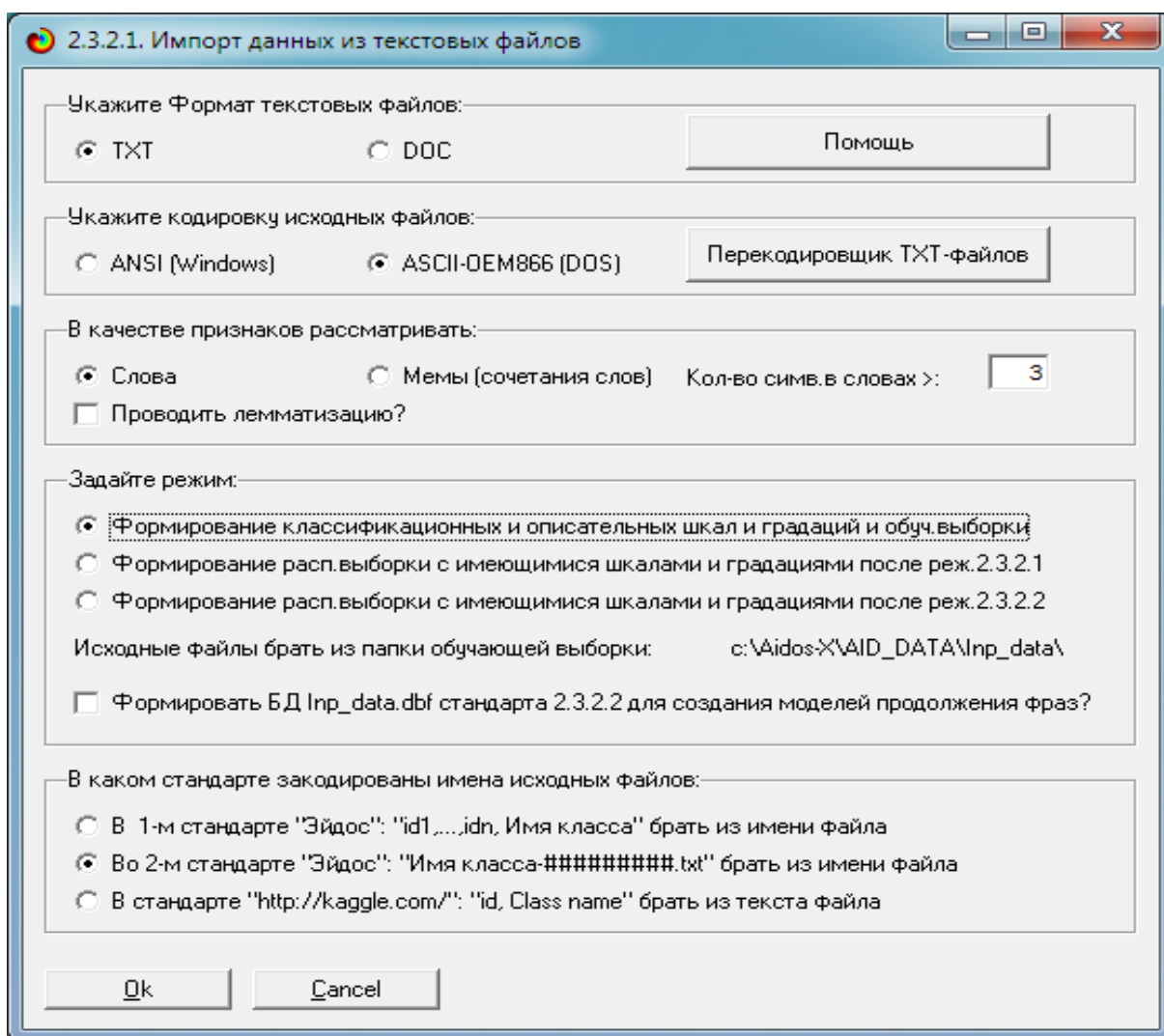
As *input* to create a model, passports of scientific specialties of the nomenclature of scientific specialties were used, for which academic degrees are awarded, with VAK website, approved by order of the Ministry of Science and Higher Education of the Russian Federation of February 24, 2021 No. 118, which are in full open free access on many sites [1].

After downloading passports from the site: <https://phdru.com/laws/nomenklatura/> they were converted to txt files in an online service: <https://tools.pdf24.org/ru/pdf-to-txt> and recoded to OEM866 encoding in an offline converter: <https://anton-pribora.ru/recoder/>.

To enter passports into the Eidos system, one of the 6 automated program interfaces (API) of the Eidos system was used, providing various options for entering textual, tabular and graphic data into the Eidos system, namely API-2.3.2.1 (Figure 1), which provides data entry into the Eidos system from text files.

At the same time, the names of the files of scientific specialties were simply the cipher of the specialty and its name, and these files were located in the folder: c:\Aidos-X\AID\_DATA\Inp\_data.

As a result of API-2.3.2.1, classification (Table 1) and descriptive [1] scales and gradations were created, and then the initial data were encoded with their help and a training sample was obtained [1]:



**Drawing1– Screen control form API-2.3.2.1 of the Eidos system with parameters for formalizing the subject area**

**Table1– Classification scales and gradations of scientific specialties of the Higher Attestation Commission of the Russian Federation (fragment)**

Code	Name of the scientific specialty of the Higher Attestation Commission of the Russian Federation
1	CLASS-1.1.1. Real, complex and functional analysis
2	CLASS-1.1.10. Biomechanics and bioengineering
3	CLASS-1.1.2. Differential Equations and Mathematical Physics
4	CLASS-1.1.3. Geometry and topology
5	CLASS-1.1.4. Theory of Probability and Mathematical Statistics
6	CLASS-1.1.5. Mathematical logic, algebra, number theory and discrete mathematics
7	CLASS-1.1.6. Computational Mathematics
8	CLASS-1.1.7. Theoretical mechanics, machine dynamics
9	CLASS-1.1.8. Solid Mechanics
10	CLASS-1.1.9. Mechanics of liquid, gas and plasma
eleven	CLASS-1.2.1. Artificial intelligence and machine learning
12	CLASS-1.2.2. Mathematical modeling, numerical methods and software packages
13	CLASS-1.2.3. Theoretical computer science, cybernetics
14	CLASS-1.2.4. cyber security
15	CLASS-1.3.1. Space physics, astronomy (branch of science - technical)
16	CLASS-1.3.1. Space physics, astronomy (branch of science - physical and mathematical)
17	CLASS-1.3.10. Physics of low temperatures (branch of science - technical)
18	CLASS-1.3.10. Physics of low temperatures (branch of science - physical and mathematical)
19	CLASS-1.3.11. Physics of semiconductors (branch of science - physical and mathematical)
20	CLASS-1.3.12. Physics of magnetic phenomena (branch of science - technical)
21	CLASS-1.3.12. Physics of magnetic phenomena (branch of science - physical and mathematical)
22	CLASS-1.3.13. Electrophysics, electrophysical installations (branch of science - technical)
23	CLASS-1.3.13. Electrophysics, electrophysical installations (branch of science - physical and mathematical)
24	CLASS-1.3.14. Thermal physics and theoretical heat engineering (branch of science - technical)
25	CLASS-1.3.14. Thermal physics and theoretical heat engineering (branch of science - physical and mathematical)
26	CLASS-1.3.15. Physics of atomic nuclei and elementary particles, high energy physics (branch of science - technical)
27	CLASS-1.3.15. Physics of atomic nuclei and elementary particles, high energy physics (branch of science - physical and mathematical)
28	CLASS-1.3.16. Atomic and molecular physics (branch of science - technical)

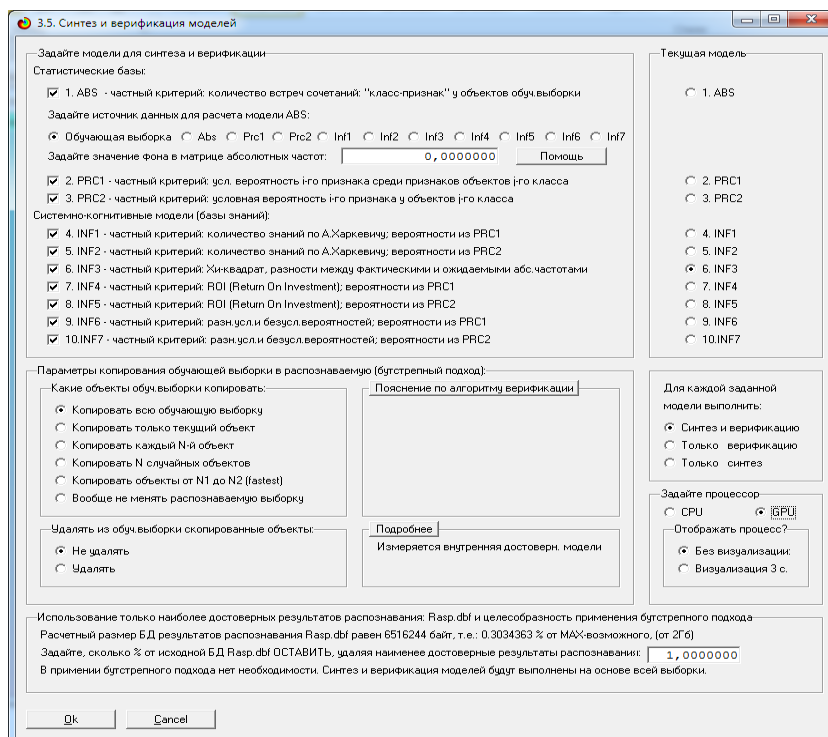
29	CLASS-1.3.16. Atomic and molecular physics (branch of science - physical and mathematical)
thirty	CLASS-1.3.17. Chemical physics, combustion and explosion, physics of extreme states of matter (branch of science - technical)
31	CLASS-1.3.17. Chemical physics, combustion and explosion, physics of extreme states of matter (branch of science - physical and mathematical)
32	CLASS-1.3.17. Chemical physics, combustion and explosion, physics of extreme states of matter (branch of science - chemical)
33	CLASS-1.3.18. Physics of beams of charged particles and accelerator technology (branch of science - technical)
34	CLASS-1.3.18. Physics of beams of charged particles and accelerator technology (branch of science - physical and mathematical)
35	CLASS-1.3.19. Laser physics (branch of science - technical)
36	CLASS-1.3.19. Laser physics (branch of science - physical and mathematical)
37	CLASS-1.3.2. Instruments and methods of experimental physics (branch of science - technical)
38	CLASS-1.3.2. Instruments and methods of experimental physics (branch of science - physical and mathematical)
39	CLASS-1.3.20. Crystallography, crystal physics (branch of science - physical and mathematical)
40	CLASS-1.3.21. medical physics
41	CLASS-1.3.3. Theoretical physics
42	CLASS-1.3.4. Radiophysics (branch of science - physical and mathematical)
43	CLASS-1.3.5. Physical electronics (branch of science - technical)
44	CLASS-1.3.5. Physical electronics (branch of science - physical and mathematical)
45	CLASS-1.3.6. Optics (branch of science - physical and mathematical)
46	CLASS-1.3.7. Acoustics (branch of science - physical and mathematical)
47	CLASS-1.3.8. Condensed state physics (branch of science - technical)
48	CLASS-1.3.8. Condensed state physics (branch of science - physical and mathematical)
49	CLASS-1.3.9. Plasma Physics (branch of science - technical)
50	CLASS-1.3.9. Plasma Physics (branch of science - physical and mathematical)
51	CLASS-1.4.1. Inorganic chemistry
52	CLASS-1.4.10. colloid chemistry
53	CLASS-1.4.11. Bioinorganic chemistry
54	CLASS-1.4.12. Petrochemistry
55	CLASS-1.4.13. Radiochemistry
56	CLASS-1.4.14. Kinetics and catalysis
57	CLASS-1.4.15. Solid State Chemistry
58	CLASS-1.4.16 Medical chemistry
59	CLASS-1.4.2. Analytical chemistry
60	CLASS-1.4.3. Organic chemistry
61	CLASS-1.4.4. Physical chemistry
62	CLASS-1.4.5. Chemoinformatics (branch of science - technical)
63	CLASS-1.4.6. Electrochemistry
64	CLASS-1.4.7. Macromolecular compounds
65	CLASS-1.4.8. Chemistry of organoelement compounds
66	CLASS-1.4.9. Bioorganic chemistry
67	CLASS-1.5.12. Zoology
68	CLASS-1.5.13. Ichthyology
69	CLASS-1.5.14. Entomology
70	CLASS-1.5.16. Hydrobiology
71	CLASS-1.5.19. soil science
72	CLASS-1.5.2. Biophysics (tech.)
73	CLASS-1.5.2. Biophysics (physics and mathematics)
74	CLASS-1.5.21. Plant Physiology and Biochemistry
75	CLASS-1.5.3. Molecular biology (branch of science - biological, medical)
76	CLASS-1.5.3. Molecular biology (branch of science - physical and mathematical)
77	CLASS-1.5.3. Molecular biology (branch of science - chemical)
78	CLASS-1.5.4. Biochemistry (branch of science - biological)
79	CLASS-1.5.4. Biochemistry (branch of science - chemical)
80	CLASS-1.5.6. Biotechnology (branch of science - chemical, technical)

Table 1 is given in full in [12, 13].

### Task-3. Synthesis of statistical and system-cognitive models

Synthesis and verification of models in the "Eidos" system is carried out in mode 3.5 (Figure 2).

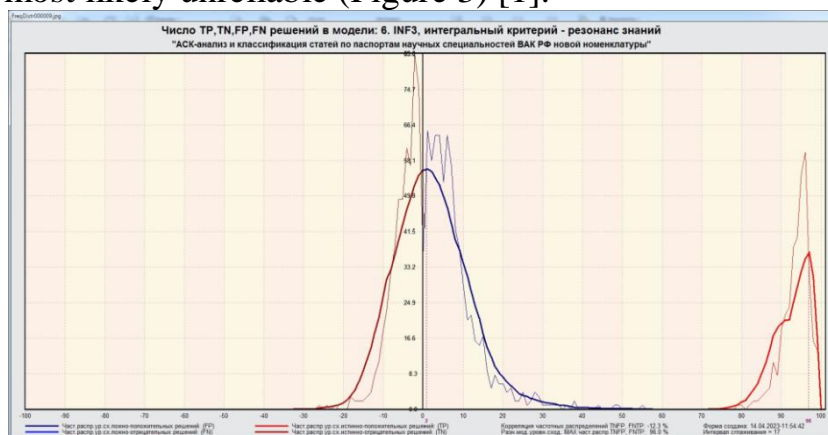
The Eidos system has an adequate internal criterion for the reliability of solving the problems of identification, forecasting, decision making and research of the simulated subject area by studying its model. This criterion allows for an internal audit of the reliability of models, which can be used for many purposes, in particular, it allows you to set a filter for low-reliability results. Figure 2 shows that the option is set to leave 100% of the most recognition results in the output forms.



**Drawing2– Screen form of the mode of synthesis and verification of models**

### Task-4. Model Verification

Model verification, i.e. assessment of their reliability, carried out by classifying the passports of scientific specialties for these specialties. Figure 3 shows that decisions about not belonging to a class are always true, and decisions about belonging are both true and false, and it is clear which decisions with which level of similarity it makes sense to pay attention to (these are decisions with a similarity level above 70%), and which ones it would be correct to ignore as most likely unreliable (Figure 3) [1].



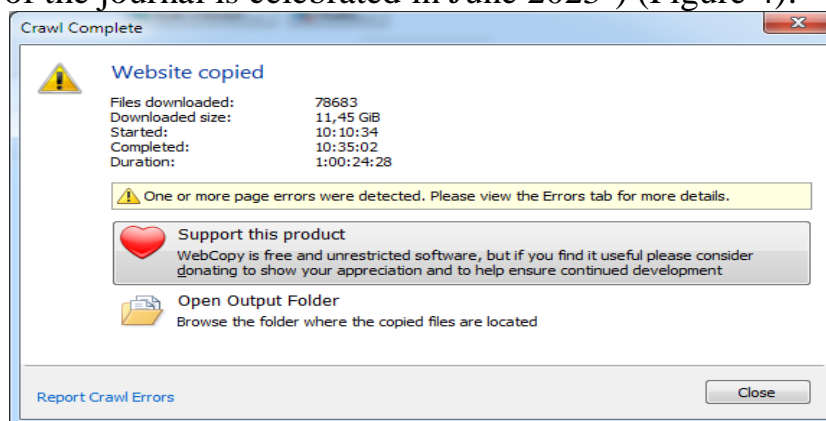
**Drawing3– Frequency distributions of the number of positive and negative true and false solutions depending on the level of similarity of training sample objects with classes in the Inf3 model**

### Task-5. Choosing the Most Reliable Model

As the current model for solving the problem of identification (classification) in mode 5.6, we set the model Inf3(Lutsenko, 2023).

## Task-6. Solution of the problem of identification (classification)

Directly from the website of the Scientific Journal of KubSAU:<http://ej.kubagro.ru/>using Website copied program<sup>1</sup>downloaded 8406 articles published in the journal for 20 years of its work for 2003-2023 (the 20th anniversary of the journal is celebrated in June 2023<sup>2</sup>) (Figure 4):



**Drawing4– Screen form with information about the program of the program Website copied**

This program was used because it made it possible to download from the journal's website a fairly large amount of necessary information (11.45 GB). Note that the popular Teleport Pro program did not allow this.

As a result of the work of the Website copied program with the preservation of the structure of the site <http://ej.kubagro.ru/> directories were obtained by the years of the journal's work, inside of which there are subdirectories by journal numbers, inside which, in turn, there are various folders, incl. folders with pdf-files of articles (Figure 5).

After downloading all the journal articles, there was a problem copying them all into one folder for further processing. Doing it manually is very labor intensive. In addition, in each issue, the article files have the same names: the names of the article files are simply the serial numbers of the articles in the issue. Therefore, it was necessary not only to copy the articles from the subdirectories in which they are located, but also to rename the article files.

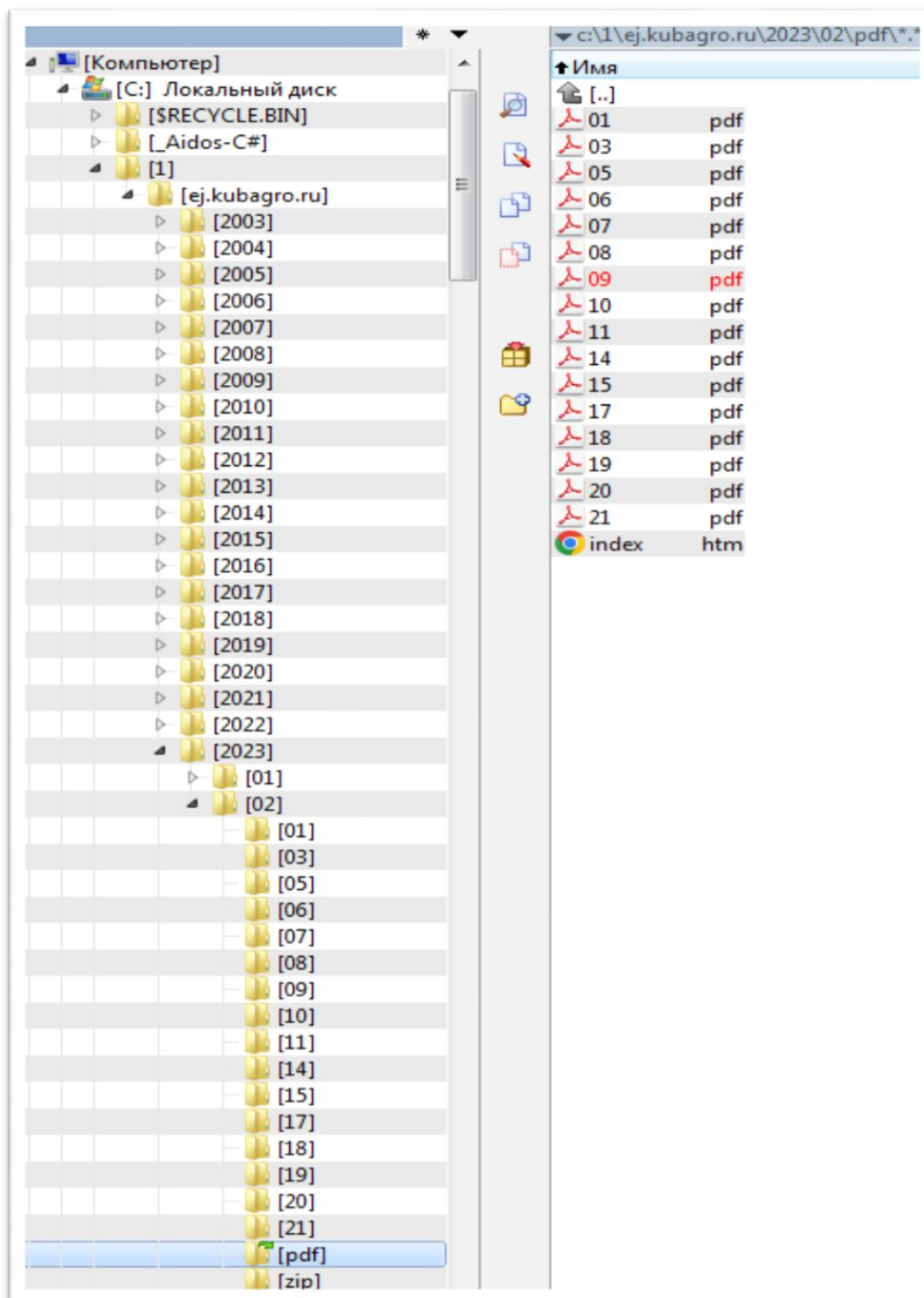
It would be convenient if the file name of the article consisted of the year of its publication, the issue number of the journal and the number of the article in this issue.

For example, the article file: c:\1\ej.kubagro.ru\2023\02\pdf\09.pdf should be named: Year2023\_Numb02\_Art09.pdf.

<sup>1</sup> <https://www.cyotek.com/cyotek-webcopy>

<sup>2</sup>From the first editorial staff of the journal, this 20th anniversary of the journal will be celebrated only by its founder Prof. E. V. time as the head of the CIT KubGAU.





**Drawing5– The structure of directories and subdirectories of the website of the Scientific Journal of KubGAU (<http://ej.kubagro.ru/>) obtained by the Website copied program**

In order to automate the copying and renaming of article files from the file structure shown in the figure, the author has written a small program, the source code of which is given below (programming language xBase ++, the developer of this language is the company:<https://www.alaska-software.com/>):

```

*****
PROCEDURE Main()

    LOCAL Getlist := {}, oProgress, oDialog
    LOCAL Disk_name := DISKNAME()
    LOCAL Cur_dir := CURDIR()
    LOCAL Disk_dir := Disk_name+"\ "+Cur_dir // Путь на папку с системой
    LOCAL oScr, NumbYears

    DC_IconDefault(1000)

    aY := Directory("20*.*", "D")
    aYears := {}
    IF LEN(aY) > 0
        FOR j=1 TO LEN(aY)
            AADD(aYears, aY[ j, F_NAME ])
        NEXT
    ENDIF
    NumbYears = LEN(aYears)

    IF NumbYears > 0

        ZapDir('AllArticles', .T.)
        IF FILEDATE("AllArticles",16) = CTOD("/")
            DIRMAKE("AllArticles")
        ENDIF

        FOR y=1 TO NumbYears

            oScr := DC_WaitOn('Копирование статей номеров журнала за период: '+aYears[1]+'-
'+aYears[NumbYears]+' годы. Обрабатывается: '+aYears[y]+' год. Немного
подождите!!!', ,,,,,,,,,,F.)

            DIRCHANGE(Disk_dir+'\'+aYears[y])
            aNej := Directory("*.*", "D")
            aJournalNumb := {}
            IF LEN(aNej) > 0
                FOR j=1 TO LEN(aNej)
                    AADD(aJournalNumb, aNej[ j, F_NAME ])
                NEXT
            ENDIF
            NumbJournal = LEN(aJournalNumb)

            IF NumbJournal > 0

                FOR nJ = 1 TO NumbJournal

                    DIRCHANGE(Disk_dir+'\'+aYears[y)+'\'+aJournalNumb[nJ]+'pdf\')
                    aNpdf := Directory("*.pdf")
                    aArticlePdf := {}
                    IF LEN(aNpdf) > 0
                        FOR j=1 TO LEN(aNpdf)
                            AADD(aArticlePdf, aNpdf[ j, F_NAME ])
                        NEXT
                    ENDIF
                    NArticlePdf = LEN(aArticlePdf)

                    IF NArticlePdf > 0
                        FOR j=1 TO NArticlePdf
                            Name_SS = aArticlePdf[j]
                            Name_DD =
Disk_dir+'\AllArticles\Year'+aYears[y]+'_Numb'+aJournalNumb[nJ]+'_Art'+aArticlePdf[j]
                            COPY FILE (Name_SS) TO (Name_DD)
                        NEXT
                    ENDIF
                NEXT
            ENDIF
            DC_Impl(oScr)
        NEXT
    ENDIF

    LB_Warning('Копирование статей с заменой имени завершено успешно !!!')

RETURN
*****

```

Then the pdf-files of articles were converted into DOS-TXT format. This is necessary for entering the texts of articles into the Eidos system in the automated programming interface 2.3.2.1 (API-2.3.2.1), which is one of the 6 APIs of the Eidos system and is used in this task.

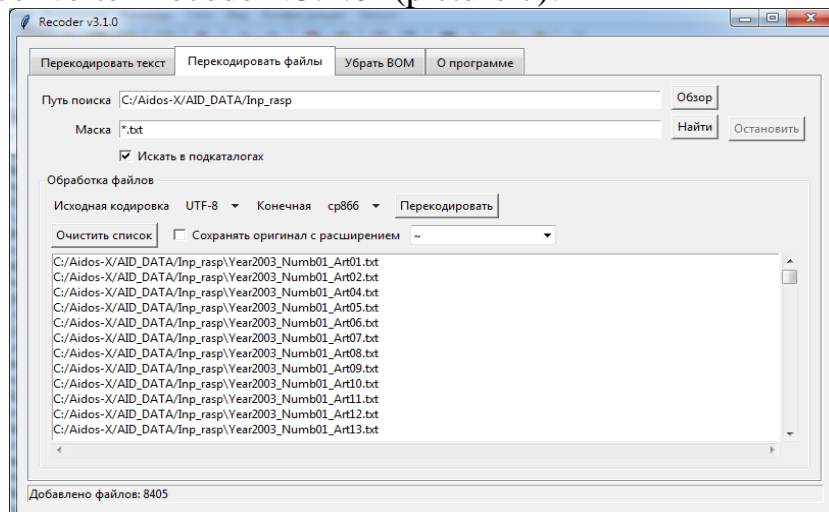
The conversion itself was carried out offline in the PDF2TXT program.<sup>3</sup>, which, as it turned out as a result of numerous experiments conducted by the author, is almost the only program that converts such a huge number of files (8406) at a time, which is extremely convenient (Figure 6).



**Drawing6– Screen form with program informationPDF2TXT**

Note that numerous online services with which experiments were carried out did not provide this.

After converting PDF->TXT article files, it is necessary to recode txt-files into OEM866 encoding (DOS, Cyrillic). For this purpose, we used a very convenient converter Recoder v3.1.0<sup>4</sup> (picture 7):



**Drawing7– Screen form with program informationRecoder v3.1.0**

To enter classified articles into the Eidos system, we also use API-2.3.2.1 (Figure 1), but we will place the files with the texts of the articles in the folder: c:\Aidos-X\AID\_DATA\Inp\_rasp and in the API-2.3.2.1 options we will set:

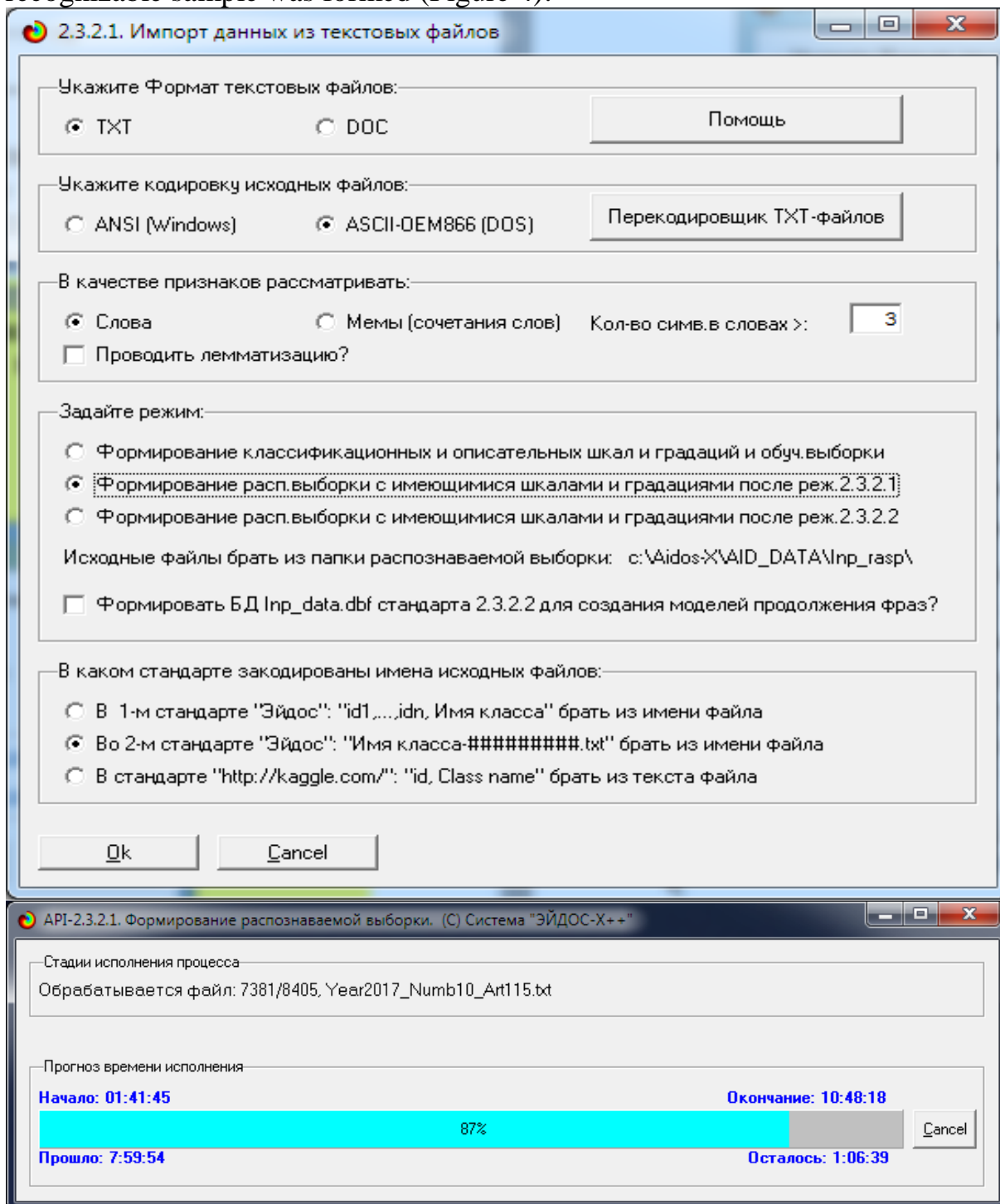
<sup>3</sup> <https://www.pdf2txt.com/download>

<sup>4</sup> <https://anton-pribora.ru/recoder/>

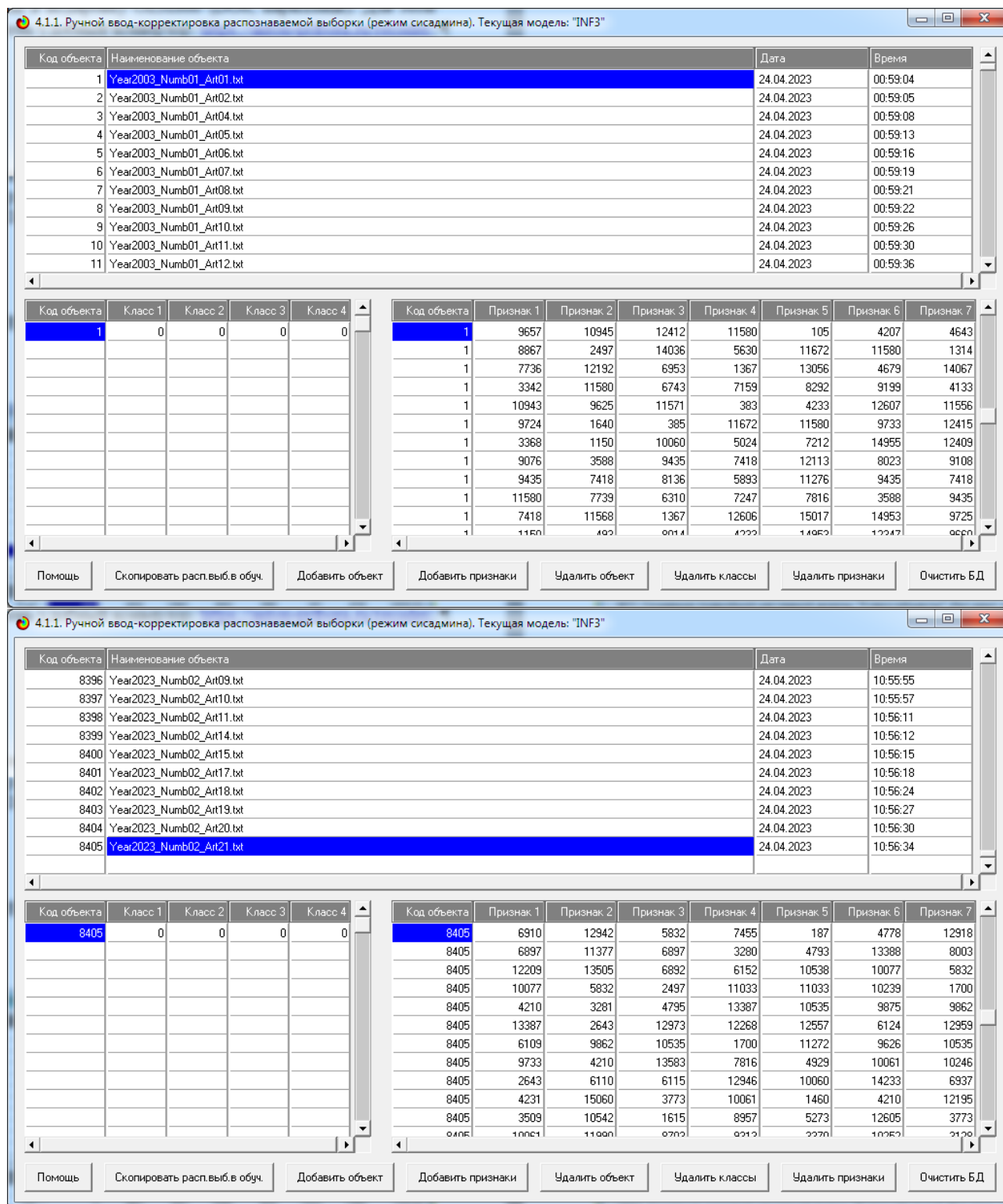
"Formation of a recognizable sample with the available scales and gradations after mode 2.3.2.1" (Figure 8) /

It is necessary to pay attention to the fact that the input of a recognizable sample of 8406 txt-files with a total volume of 241 MB into the Eidos system took quite a long time: 8 hours.

As a result of the operation of API-2.3.2.1 with the specified parameters, a recognizable sample was formed (Figure 4):



**Drawing8– Screen control form API-2.3.2.1 of the Eidos system with parameters for entering a recognizable sample**

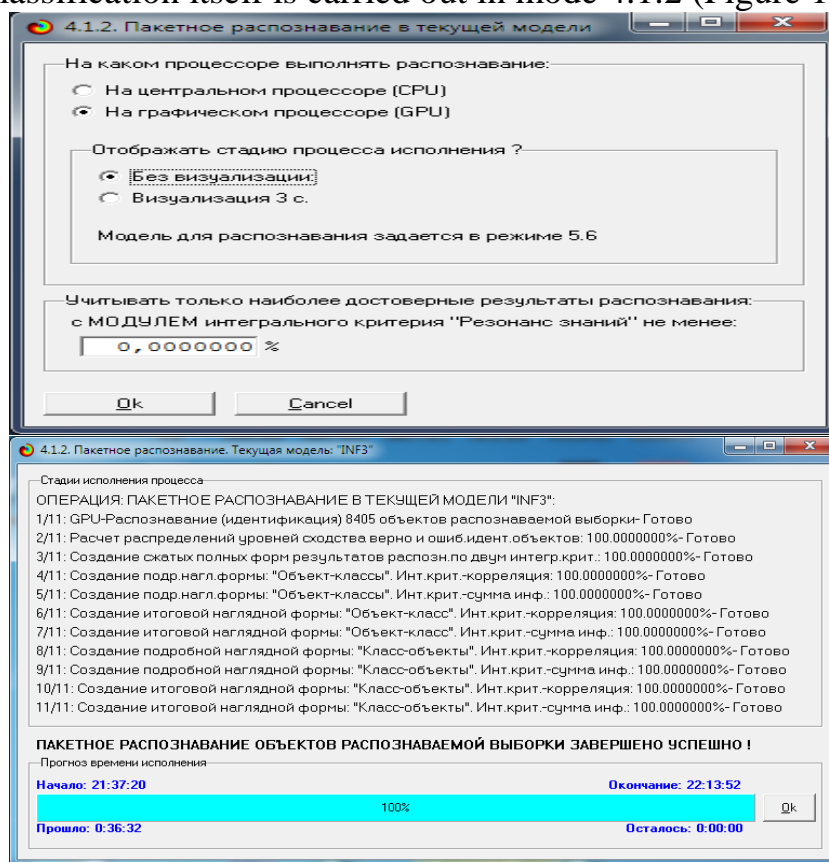


**Drawing9 – Recognizable sample (fragment)**

The upper window shows the name of the object of the recognizable sample (in this case, the classified article), and the lower right window shows the gradation codes of descriptive scales (codes of words that were found in the

passports of scientific specialties of the Higher Attestation Commission of the Russian Federation).

The classification itself is carried out in mode 4.1.2 (Figure 10).



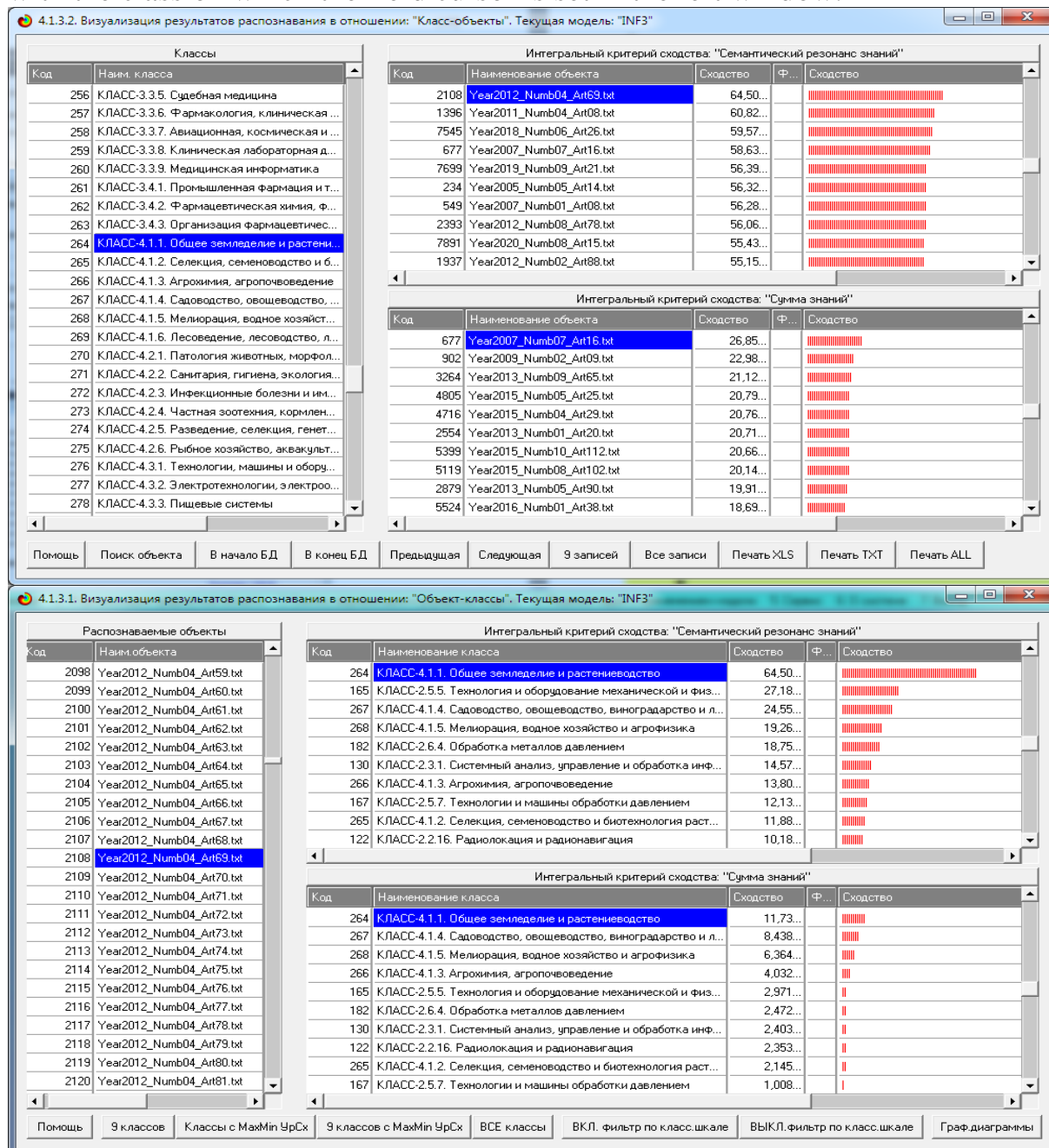
**Drawing10– Screen forms of recognition mode 4.1.2**

It should be noted that a quantitative comparison of each of the 8406 articles published in the Scientific Journal of KubGAU over 20 years of its work with 361 classes corresponding to the scientific specialties of the Higher Attestation Commission of the Russian Federation of the new nomenclature, according to 15101 signs (words) was carried out by the Eidos system on a graphic processor (GPU ) ASUS GeForce GTX770 graphics cards with NVIDIA GK104 graphics processor with 1536 shader processors in less than 36 minutes 32 seconds. According to the author, this is a good result, because getting it required  $8406 \cdot 361 \cdot 15101 = 45\,824\,981\,166$  summations of products and calculation of 11 output forms based on the results of recognition, moreover, the output forms were calculated on the central processor (CPU i7) and 99.9% of the time was spent on calculating the output forms.

Some classification results are shown in figures 11, 12 and tables 2 and 3.

*In the 1st screen form of Figure 10* on the left we see the names of classified articles, and on the right - classes corresponding to the scientific specialties of the Higher Attestation Commission of the Russian Federation of the new nomenclature, sorted in descending order of the degree of similarity with them of the article on which the field cursor is set in the left window.

*On the 2nd screen form of Figure 10* on the left we see the names of the classes corresponding to the scientific specialties of the Higher Attestation Commission of the Russian Federation of the new nomenclature, and on the right the classified articles sorted in descending order of the degree of similarity with the class on which the field cursor is set in the left window.



**Drawing11– Examples of screen forms with detailed results of the classification of texts of articles on scientific specialties of the Higher Attestation Commission of the Russian Federation in the Inf3 SC model**

Both output forms in the upper right window show the results when using the integral criterion "Knowledge Resonance", and in the lower window - the integral criterion: "sum of knowledge".

4.13.3. Итоговая наглядная форма результатов распознавания: "Объект-класс". Текущая модель: "INF3"

Код	Интегральный критерий
1	Семантический резонанс знаний
2	Сумма знаний

Пояснения по смыслу частных и интегральных критериев

Частн. крит.: 7 моделей знаний      Инт. крит.: "Сумма знаний"      Инт. крит.: "Резонанс знаний"

Код объекта распозн. выборки	Наименование объекта распознаваемой выборки	Код класса с МАХ ур. сход.	Наименование класса с МАХ уровнем сходства	МАХ уровень сходства	Код класса с MIN ур. сход.	Наименование класса с MIN уровнем сходства	MIN уровень сходства	Достоверность	Дата	Время
2102	Year2012_Numb04_Art63.txt	302	КЛАСС-5.2.3. Региональная и от...	42.546	295	КЛАСС-5.11.3. Практическая тео...	-15.665	29.106	29.04.2023	21:57:45
2103	Year2012_Numb04_Art64.txt	173	КЛАСС-2.6.12. Химическая техн...	18.709	239	КЛАСС-5.12.4. Когнитивное мод...	-5.570	12.139	29.04.2023	21:57:45
2104	Year2012_Numb04_Art65.txt	137	КЛАСС-2.3.8. Информатика и ин...	20.357	221	КЛАСС-3.1.20. Кардиология	-7.041	13.699	29.04.2023	21:57:45
2105	Year2012_Numb04_Art66.txt	305	КЛАСС-5.2.6. Менеджмент	58.334	221	КЛАСС-3.1.20. Кардиология	-12.560	35.447	29.04.2023	21:57:45
2106	Year2012_Numb04_Art67.txt	98	КЛАСС-1.6.9. Геофизика (физ-мат)	8.672	258	КЛАСС-3.3.7. Авиационная, кос...	-5.276	6.974	29.04.2023	21:57:45
2107	Year2012_Numb04_Art68.txt	267	КЛАСС-4.1.4. Садоводство, ово...	34.619	337	КЛАСС-5.7.1. Онтология и теори...	-3.777	19.198	29.04.2023	21:57:45
2108	Year2012_Numb04_Art69.txt	264	КЛАСС-4.1.1. Общее земледели...	64.509	294	КЛАСС-5.11.3. Практическая тео...	-6.652	35.581	29.04.2023	21:57:45
2109	Year2012_Numb04_Art70.txt	176	КЛАСС-2.6.15. Мембраны и мем...	34.071	294	КЛАСС-5.11.3. Практическая тео...	-5.723	19.897	29.04.2023	21:57:45
2110	Year2012_Numb04_Art71.txt	162	КЛАСС-2.5.22. Управление каче...	29.578	10	КЛАСС-1.1.9. Механика жидкост...	-10.879	20.228	29.04.2023	21:57:45
2111	Year2012_Numb04_Art72.txt	296	КЛАСС-5.12.1. Междисциплинар...	26.142	88	КЛАСС-1.6.18. Науки об атмосф...	-9.369	17.755	29.04.2023	21:57:45
2112	Year2012_Numb04_Art73.txt	152	КЛАСС-2.5.12. Аэродинамика и ...	10.956	221	КЛАСС-3.1.20. Кардиология	-6.409	8.683	29.04.2023	21:57:45
2113	Year2012_Numb04_Art74.txt	266	КЛАСС-4.1.3. Агрохимия, агропо...	54.631	221	КЛАСС-3.1.20. Кардиология	-5.677	30.154	29.04.2023	21:57:45
2114	Year2012_Numb04_Art75.txt	203	КЛАСС-2.9.4. Управление проце...	30.821	290	КЛАСС-5.11.1. Теоретическая те...	-6.944	18.882	29.04.2023	21:57:45
2115	Year2012_Numb04_Art76.txt	135	КЛАСС-2.3.6. Методы и системы...	65.118	290	КЛАСС-5.11.1. Теоретическая те...	-15.320	40.219	29.04.2023	21:57:45
2116	Year2012_Numb04_Art77.txt	264	КЛАСС-4.1.1. Общее земледели...	27.244	294	КЛАСС-5.11.3. Практическая тео...	-7.031	17.137	29.04.2023	21:57:45
2117	Year2012_Numb04_Art78.txt	265	КЛАСС-4.1.2. Селекция, семено...	22.735	63	КЛАСС-1.4.6. Электровиния	-5.692	14.214	29.04.2023	21:57:45
2118	Year2012_Numb04_Art79.txt	111	КЛАСС-2.1.6. Гидротехническое ...	71.161	221	КЛАСС-3.1.20. Кардиология	-9.179	40.170	29.04.2023	21:57:45

Помощь    В начало БД    В конец БД    Предыдущая    Следующая

**Drawing12– Examples of screen forms with detailed results of the classification of texts of articles on scientific specialties of the Higher Attestation Commission of the Russian Federation in the Inf3 SC model**

**Table2– Generalizing the results of the classification of texts of articles by scientific specialties of the Higher Attestation Commission of the Russian Federation in the system-cognitive model Inf3 (positive solutions, sorting by article number, fragment)**

article number	Name of the article in the format: year_journal number_journal article number	Scientific specialty code	Name of scientific specialty	The similarity of the article with the passport special%
1	Year2003_Numb01_Art01.txt	118	CLASS-2.2.12. Devices, systems and products for medical purposes	30.673
2	Year2003_Numb01_Art02.txt	144	CLASS-2.4.5. Energy systems and complexes	32.743
3	Year2003_Numb01_Art04.txt	130	CLASS-2.3.1. System analysis, information management and processing, statistics	41.194
4	Year2003_Numb01_Art05.txt	135	CLASS-2.3.6. Information security methods and systems, information security	43.368
5	Year2003_Numb01_Art06.txt	205	CLASS-2.9.6. Air navigation and operation of aviation equipment	28.854
6	Year2003_Numb01_Art07.txt	203	CLASS-2.9.4. Transportation process management	35.801
7	Year2003_Numb01_Art08.txt	322	CLASS-5.4.7. Sociology of management	40.749
8	Year2003_Numb01_Art09.txt	134	CLASS-2.3.5. Mathematical and software support for computing systems, complexes and computer networks	29.833
9	Year2003_Numb01_Art10.txt	260	CLASS-3.3.9. Medical Informatics	33.728
10	Year2003_Numb01_Art11.txt	135	CLASS-2.3.6. Information security methods and systems, information security	34.461
11	Year2003_Numb01_Art12.txt	162	CLASS-2.5.22. Product quality management. Standardization. Organization of production	38.853
12	Year2003_Numb01_Art13.txt	208	CLASS-2.9.9. Logistic transport systems	26.864
13	Year2003_Numb01_Art14.txt	1	CLASS-1.1.1. Real, complex and functional analysis	16.656
14	Year2003_Numb01_Art15.txt	24	CLASS-1.3.14. Thermal physics and theoretical heat engineering (branch of science - technical)	13.155
15	Year2003_Numb01_Art16.txt	130	CLASS-2.3.1. System analysis, information management and processing, statistics	30.806
16	Year2003_Numb01_Art17.txt	125	CLASS-2.2.4. Instruments and methods of measurement (by type of measurement)	16.844
17	Year2003_Numb01_Art18.txt	254	CLASS-3.3.3. pathological physiology	18.016
18	Year2003_Numb01_Art19.txt	199	CLASS-2.9.1. Transport and transport-technological systems of the country, its regions and cities, organization of production in transport	45.009
19	Year2003_Numb02_Art01.txt	3	CLASS-1.1.2. Differential Equations and Mathematical Physics	26.114
20	Year2003_Numb02_Art02.txt	162	CLASS-2.5.22. Product quality management. Standardization. Organization of production	20.270
21	Year2003_Numb02_Art03.txt	162	CLASS-2.5.22. Product quality management. Standardization. Organization of production	18.632
22	Year2003_Numb02_Art04.txt	3	CLASS-1.1.2. Differential Equations and Mathematical Physics	30.959
23	Year2003_Numb02_Art05.txt	273	CLASS-4.2.4. Private animal husbandry, feeding, feed preparation and livestock production technologies	22.126
24	Year2003_Numb02_Art06.txt	3	CLASS-1.1.2. Differential Equations and Mathematical Physics	17.958
25	Year2003_Numb02_Art07.txt	137	CLASS-2.3.8. Informatics and information processes	43.585
26	Year2003_Numb02_Art08.txt	135	CLASS-2.3.6. Information security methods and systems, information security	25.624
27	Year2003_Numb02_Art09.txt	273	CLASS-4.2.4. Private animal husbandry, feeding, feed preparation and livestock production technologies	23.792
28	Year2003_Numb02_Art10.txt	267	CLASS-4.1.4. Horticulture, vegetable growing, viticulture and medicinal crops	27.841
29	Year2003_Numb02_Art11.txt	162	CLASS-2.5.22. Product quality management. Standardization. Organization of production	38.406
30	Year2003_Numb02_Art12.txt	137	CLASS-2.3.8. Informatics and information processes	35.209
31	Year2003_Numb02_Art13.txt	135	CLASS-2.3.6. Information security methods and systems, information security	13.740
32	Year2003_Numb02_Art14.txt	130	CLASS-2.3.1. System analysis, information management and processing, statistics	34.793
33	Year2003_Numb02_Art15.txt	284	CLASS-5.1.4. Criminal Law Sciences	57.120
34	Year2003_Numb02_Art16.txt	56	CLASS-1.4.14. Kinetics and catalysis	8.526
35	Year2003_Numb02_Art17.txt	284	CLASS-5.1.4. Criminal Law Sciences	27.893
36	Year2003_Numb02_Art18.txt	284	CLASS-5.1.4. Criminal Law Sciences	27.301
37	Year2003_Numb02_Art19.txt	16	CLASS-1.3.1. Space physics, astronomy (branch of science - physical and mathematical)	26.836



38	Year2004	Numb01	Art01.txt	284	CLASS-5.1.4. Criminal Law Sciences	20.389
39	Year2004	Numb01	Art02.txt	284	CLASS-5.1.4. Criminal Law Sciences	22.194
40	Year2004	Numb01	Art03.txt	284	CLASS-5.1.4. Criminal Law Sciences	40.092
41	Year2004	Numb01	Art04.txt	267	CLASS-4.1.4. Horticulture, vegetable growing, viticulture and medicinal crops	44.322
42	Year2004	Numb01	Art05.txt	267	CLASS-4.1.4. Horticulture, vegetable growing, viticulture and medicinal crops	35.121
43	Year2004	Numb01	Art06.txt	195	CLASS-2.8.6. Geomechanics, rock destruction, mine aerogasdynamics and mining thermal physics	14.614
44	Year2004	Numb01	Art07.txt	199	CLASS-2.9.1. Transport and transport-technological systems of the country, its regions and cities, organization of production in transport	21.346
45	Year2004	Numb01	Art08.txt	199	CLASS-2.9.1. Transport and transport-technological systems of the country, its regions and cities, organization of production in transport	28.123
46	Year2004	Numb01	Art09.txt	130	CLASS-2.3.1. System analysis, information management and processing, statistics	28.587
47	Year2004	Numb01	Art10.txt	162	CLASS-2.5.22. Product quality management. Standardization. Organization of production	36.061
48	Year2004	Numb01	Art11.txt	302	CLASS-5.2.3. Regional and sectoral economy	22.089
49	Year2004	Numb01	Art12.txt	269	CLASS-4.1.6. Silviculture, forestry, forest plantations, agroforestry, landscaping, forest pyrology and taxation	16.427
50	Year2004	Numb01	Art13.txt	130	CLASS-2.3.1. System analysis, information management and processing, statistics	51.403
51	Year2004	Numb01	Art14.txt	276	CLASS-4.3.1. Technologies, machines and equipment for the agro-industrial complex	27.293
52	Year2004	Numb01	Art15.txt	273	CLASS-4.2.4. Private animal husbandry, feeding, feed preparation and livestock production technologies	14.073
53	Year2004	Numb01	Art16.txt	137	CLASS-2.3.8. Informatics and information processes	25.776
54	Year2004	Numb02	Art01.txt	142	CLASS-2.4.3. Power industry	11.502
55	Year2004	Numb02	Art02.txt	257	CLASS-3.3.6. Pharmacology, clinical pharmacology	8.157
56	Year2004	Numb02	Art03.txt	195	CLASS-2.8.6. Geomechanics, rock destruction, mine aerogasdynamics and mining thermal physics	20.956
57	Year2004	Numb02	Art04.txt	267	CLASS-4.1.4. Horticulture, vegetable growing, viticulture and medicinal crops	21.770
58	Year2004	Numb02	Art05.txt	109	CLASS-2.1.4. Water supply, sewerage, building systems for the protection of water resources	22.124
59	Year2004	Numb02	Art06.txt	273	CLASS-4.2.4. Private animal husbandry, feeding, feed preparation and livestock production technologies	22.605
60	Year2004	Numb02	Art07.txt	257	CLASS-3.3.6. Pharmacology, clinical pharmacology	20.740
61	Year2004	Numb02	Art08.txt	302	CLASS-5.2.3. Regional and sectoral economy	21.572
62	Year2004	Numb02	Art09.txt	eleven	CLASS-1.2.1. Artificial intelligence and machine learning	24.739
63	Year2004	Numb02	Art10.txt	267	CLASS-4.1.4. Horticulture, vegetable growing, viticulture and medicinal crops	29.195
64	Year2004	Numb02	Art11.txt	eleven	CLASS-1.2.1. Artificial intelligence and machine learning	24.931
65	Year2004	Numb02	Art12.txt	135	CLASS-2.3.6. Information security methods and systems, information security	36.612
66	Year2004	Numb02	Art13.txt	59	CLASS-1.4.2. Analytical chemistry	34.780
67	Year2004	Numb02	Art14.txt	247	CLASS-3.2.3. Public health, organization and sociology of health	32.734
68	Year2004	Numb02	Art15.txt	264	CLASS-4.1.1. General farming and crop production	29.590
69	Year2004	Numb02	Art16.txt	264	CLASS-4.1.1. General farming and crop production	20.705
70	Year2004	Numb02	Art17.txt	276	CLASS-4.3.1. Technologies, machines and equipment for the agro-industrial complex	35.378
71	Year2004	Numb02	Art18.txt	58	CLASS-1.4.16 Medical chemistry	11.527
72	Year2004	Numb02	Art19.txt	162	CLASS-2.5.22. Product quality management. Standardization. Organization of production	17.023
73	Year2004	Numb02	Art20.txt	199	CLASS-2.9.1. Transport and transport-technological systems of the country, its regions and cities, organization of production in transport	29.631
74	Year2004	Numb02	Art21.txt	125	CLASS-2.2.4. Instruments and methods of measurement (by type of measurement)	20.187
75	Year2004	Numb03	Art01.txt	174	CLASS-2.6.13. Processes and apparatuses of chemical technologies	36.230
76	Year2004	Numb03	Art02.txt	162	CLASS-2.5.22. Product quality management. Standardization. Organization of production	36.983
77	Year2004	Numb03	Art03.txt	135	CLASS-2.3.6. Information security methods and systems, information security	41.403
78	Year2004	Numb03	Art04.txt	130	CLASS-2.3.1. System analysis, information management and processing, statistics	35.321
79	Year2004	Numb03	Art05.txt	118	CLASS-2.2.12. Devices, systems and products for medical purposes	41.181
80	Year2004	Numb03	Art06.txt	302	CLASS-5.2.3. Regional and sectoral economy	28.017
81	Year2004	Numb03	Art07.txt	165	CLASS-2.5.5. Technology and equipment for mechanical and physical-technical processing	19.558
82	Year2004	Numb03	Art08.txt	302	CLASS-5.2.3. Regional and sectoral economy	20.872
83	Year2004	Numb03	Art09.txt	1	CLASS-1.1.1. Real, complex and functional analysis	18.635
84	Year2004	Numb03	Art10.txt	1	CLASS-1.1.1. Real, complex and functional analysis	22.897
85	Year2004	Numb03	Art11.txt	162	CLASS-2.5.22. Product quality management. Standardization. Organization of production	14.731
86	Year2004	Numb03	Art12.txt	204	CLASS-2.9.5. Operation of road transport	19.152
87	Year2004	Numb03	Art13.txt	302	CLASS-5.2.3. Regional and sectoral economy	20.835
88	Year2004	Numb03	Art14.txt	302	CLASS-5.2.3. Regional and sectoral economy	23.265
89	Year2004	Numb03	Art15.txt	264	CLASS-4.1.1. General farming and crop production	28.983
90	Year2004	Numb03	Art16.txt	162	CLASS-2.5.22. Product quality management. Standardization. Organization of production	30.467
91	Year2004	Numb03	Art17.txt	267	CLASS-4.1.4. Horticulture, vegetable growing, viticulture and medicinal crops	43.900
92	Year2004	Numb03	Art18.txt	302	CLASS-5.2.3. Regional and sectoral economy	27.205
93	Year2004	Numb04	Art01.txt	235	CLASS-3.1.32. Nephrology	20.747
94	Year2004	Numb04	Art02.txt	17	CLASS-1.3.10. Physics of low temperatures (branch of science - technical)	10.519
95	Year2004	Numb04	Art03.txt	313	CLASS-5.3.7. Age-related psychology	7.082
96	Year2004	Numb04	Art04.txt	17	CLASS-1.3.10. Physics of low temperatures (branch of science - technical)	8.576
97	Year2004	Numb04	Art05.txt	thirty	CLASS-1.3.17. Chemical physics, combustion and explosion, physics of extreme states of matter (branch of science - technical)	20.233
98	Year2004	Numb04	Art06.txt	264	CLASS-4.1.1. General farming and crop production	32.601
99	Year2004	Numb04	Art07.txt	279	CLASS-4.3.4. Technologies, machines and equipment for forestry and wood processing	14.508
100	Year2004	Numb04	Art08.txt	248	CLASS-3.2.4. Occupational medicine	9.170
101	Year2004	Numb04	Art09.txt	301	CLASS-5.2.2. Mathematical, statistical and instrumental methods in economics	11.877
102	Year2004	Numb04	Art10.txt	301	CLASS-5.2.2. Mathematical, statistical and instrumental methods in economics	34.128
103	Year2004	Numb04	Art11.txt	205	CLASS-2.9.6. Air navigation and operation of aviation equipment	24.640
104	Year2004	Numb04	Art12.txt	300	CLASS-5.2.1. Economic theory	35.280
105	Year2004	Numb04	Art13.txt	137	CLASS-2.3.8. Informatics and information processes	28.275
106	Year2004	Numb04	Art14.txt	157	CLASS-2.5.17. Ship theory and structural mechanics	15.774
107	Year2004	Numb04	Art15.txt	106	CLASS-2.1.16. Labor protection in construction	20.144
108	Year2004	Numb04	Art16.txt	162	CLASS-2.5.22. Product quality management. Standardization. Organization of production	36.695
109	Year2004	Numb04	Art17.txt	247	CLASS-3.2.3. Public health, organization and sociology of health	26.104
110	Year2004	Numb04	Art18.txt	247	CLASS-3.2.3. Public health, organization and sociology of health	30.711
111	Year2004	Numb04	Art19.txt	162	CLASS-2.5.22. Product quality management. Standardization. Organization of production	23.161
112	Year2004	Numb04	Art20.txt	308	CLASS-5.3.3. Labor psychology, engineering psychology, cognitive ergonomics	28.497
113	Year2004	Numb04	Art21.txt	137	CLASS-2.3.8. Informatics and information processes	17.146
114	Year2004	Numb04	Art22.txt	47	CLASS-1.3.8. Condensed state physics (branch of science - technical)	7.960
115	Year2004	Numb04	Art23.txt	162	CLASS-2.5.22. Product quality management. Standardization. Organization of production	38.511
116	Year2004	Numb04	Art24.txt	3	CLASS-1.1.2. Differential Equations and Mathematical Physics	18.554
117	Year2004	Numb04	Art25.txt	276	CLASS-4.3.1. Technologies, machines and equipment for the agro-industrial complex	28.916
118	Year2004	Numb05	Art01.txt	264	CLASS-4.1.1. General farming and crop production	17.041
119	Year2004	Numb05	Art02.txt	264	CLASS-4.1.1. General farming and crop production	44.444
120	Year2004	Numb05	Art03.txt	137	CLASS-2.3.8. Informatics and information processes	71.803
121	Year2004	Numb05	Art04.txt	thirty	CLASS-1.3.17. Chemical physics, combustion and explosion, physics of extreme states of matter (branch of science - technical)	24.562
122	Year2004	Numb05	Art05.txt	267	CLASS-4.1.4. Horticulture, vegetable growing, viticulture and medicinal crops	25.125
123	Year2004	Numb05	Art06.txt	302	CLASS-5.2.3. Regional and sectoral economy	35.586
124	Year2004	Numb05	Art07.txt	162	CLASS-2.5.22. Product quality management. Standardization. Organization of production	44.401
125	Year2004	Numb05	Art08.txt	344	CLASS-5.7.8. Philosophical anthropology, philosophy of culture	18.975
126	Year2004	Numb05	Art09.txt	267	CLASS-4.1.4. Horticulture, vegetable growing, viticulture and medicinal crops	31.598

127	Year2004 Numb05 Art10.txt	344	CLASS-5.7.8. Philosophical anthropology, philosophy of culture	14.058
128	Year2004 Numb05 Art11.txt	130	CLASS-2.3.1. System analysis, information management and processing, statistics	36.971

*Author's development*

*Source:c:\Aidos-X\AID\_DATA\A0000002\System\Rsp\_it1k.dbf*

Table 1 can be sorted by the level of similarity of the article with the specialty passport. Then, at the beginning of the table, there will be articles classified most reliably, and at the end, on the contrary, articles related to which specialty it is not clear at all (Table 3).

**Table3– Generalizing the results of the classification of texts of articles on scientific specialties of the Higher Attestation Commission of the Russian Federation in the system-cognitive model Inf3 (positive solutions, sorting by the similarity of the article with the passport, fragment)**

article number	Name of the article in the format: year_journal number_journal article	Scientific specialty code	Name of scientific specialty	The similarity of the article with the passport special%
2759	Year2013 Numb04 Art50.txt	352	CLASS-5.8.7. Methodology and technology of vocational education	100,000
4152	Year2014 Numb08 Art39.txt	352	CLASS-5.8.7. Methodology and technology of vocational education	97.857
2955	Year2013 Numb06 Art67.txt	305	CLASS-5.2.6. Management	96.243
7126	Year2017 Numb07 Art74.txt	338	CLASS-5.7.2. History of philosophy	95.667
527	Year2006 Numb08 Art44.txt	352	CLASS-5.8.7. Methodology and technology of vocational education	93.965
559	Year2007 Numb02 Art02.txt	352	CLASS-5.8.7. Methodology and technology of vocational education	93.004
4262	Year2014 Numb09 Art68.txt	286	CLASS-5.10.1. Theory and history of culture, art	92.574
6816	Year2017 Numb04 Art72.txt	74	CLASS-1.5.21. Plant Physiology and Biochemistry	88.247
4997	Year2015 Numb07 Art09.txt	281	CLASS-5.1.1. Theoretical and historical legal sciences	86.505
1128	Year2010 Numb06 Art19.txt	281	CLASS-5.1.1. Theoretical and historical legal sciences	83.610
489	Year2006 Numb08 Art06.txt	352	CLASS-5.8.7. Methodology and technology of vocational education	82.738
3837	Year2014 Numb06 Art07.txt	12	CLASS-1.2.2. Mathematical modeling, numerical methods and software packages	82.061
1336	Year2011 Numb02 Art27.txt	74	CLASS-1.5.21. Plant Physiology and Biochemistry	81.774
1064	Year2010 Numb04 Art10.txt	305	CLASS-5.2.6. Management	79.256
434	Year2006 Numb06 Art11.txt	74	CLASS-1.5.21. Plant Physiology and Biochemistry	79.121
659	Year2007 Numb06 Art14.txt	281	CLASS-5.1.1. Theoretical and historical legal sciences	78.743
6945	Year2017 Numb06 Art07.txt	135	CLASS-2.3.6. Information security methods and systems, information security	77.992
3418	Year2014 Numb01 Art55.txt	281	CLASS-5.1.1. Theoretical and historical legal sciences	77.795
514	Year2006 Numb08 Art31.txt	74	CLASS-1.5.21. Plant Physiology and Biochemistry	77.751
5892	Year2016 Numb05 Art14.txt	286	CLASS-5.10.1. Theory and history of culture, art	77.685
4489	Year2015 Numb01 Art57.txt	74	CLASS-1.5.21. Plant Physiology and Biochemistry	77.509
590	Year2007 Numb03 Art08.txt	74	CLASS-1.5.21. Plant Physiology and Biochemistry	77.379
7098	Year2017 Numb07 Art46.txt	106	CLASS-2.1.16. Labor protection in construction	77.307
3417	Year2014 Numb01 Art54.txt	281	CLASS-5.1.1. Theoretical and historical legal sciences	77.132
1929	Year2012 Numb02 Art80.txt	74	CLASS-1.5.21. Plant Physiology and Biochemistry	77.107
1865	Year2012 Numb02 Art16.txt	272	CLASS-4.2.3. Infectious Diseases and Animal Immunology	76.968
1118	Year2010 Numb06 Art09.txt	300	CLASS-5.2.1. Economic theory	76.191
8368	Year2022 Numb10 Art18.txt	266	CLASS-4.1.3. Agrochemistry, agrosoil science	75.547
2424	Year2012 Numb09 Art31.txt	272	CLASS-4.2.3. Infectious Diseases and Animal Immunology	75.402
6343	Year2016 Numb09 Art120.txt	74	CLASS-1.5.21. Plant Physiology and Biochemistry	75.002
2667	Year2013 Numb03 Art25.txt	74	CLASS-1.5.21. Plant Physiology and Biochemistry	74.846
944	Year2009 Numb06 Art09.txt	74	CLASS-1.5.21. Plant Physiology and Biochemistry	74.779
327	Year2006 Numb03 Art02.txt	12	CLASS-1.2.2. Mathematical modeling, numerical methods and software packages	74.617
776	Year2008 Numb04 Art01.txt	135	CLASS-2.3.6. Information security methods and systems, information security	74.438
2697	Year2013 Numb03 Art55.txt	74	CLASS-1.5.21. Plant Physiology and Biochemistry	74.398
6178	Year2016 Numb07 Art50.txt	74	CLASS-1.5.21. Plant Physiology and Biochemistry	74.144
7892	Year2020 Numb08 Art16.txt	267	CLASS-4.1.4. Horticulture, vegetable growing, viticulture and medicinal crops	74.041
6653	Year2017 Numb02 Art46.txt	338	CLASS-5.7.2. History of philosophy	72.714
2031	Year2012 Numb03 Art89.txt	305	CLASS-5.2.6. Management	72.387
3098	Year2013 Numb08 Art10.txt	305	CLASS-5.2.6. Management	72.387
3273	Year2013 Numb09 Art74.txt	74	CLASS-1.5.21. Plant Physiology and Biochemistry	72.335
2037	Year2012 Numb03 Art95.txt	281	CLASS-5.1.1. Theoretical and historical legal sciences	72.083
3759	Year2014 Numb05 Art28.txt	74	CLASS-1.5.21. Plant Physiology and Biochemistry	71.877
120	Year2004 Numb05 Art03.txt	137	CLASS-2.3.8. Informatics and information processes	71.803
7327	Year2017 Numb09 Art61.txt	286	CLASS-5.10.1. Theory and history of culture, art	71.515
5117	Year2015 Numb08 Art100.txt	110	CLASS-2.1.5. Building materials and products	71.301
4475	Year2015 Numb01 Art43.txt	74	CLASS-1.5.21. Plant Physiology and Biochemistry	71.238
5021	Year2015 Numb07 Art13.txt	326	CLASS-5.5.4. International relationships	5.546
6072	Year2016 Numb06 Art84.txt	326	CLASS-5.5.4. International relationships	5.536
4801	Year2015 Numb05 Art21.txt	326	CLASS-5.5.4. International relationships	5.530
4755	Year2015 Numb04 Art72.txt	326	CLASS-5.5.4. International relationships	5.525
4547	Year2015 Numb02 Art52.txt	265	CLASS-4.1.2. Breeding, seed production and plant biotechnology	5.513
4819	Year2015 Numb05 Art39.txt	326	CLASS-5.5.4. International relationships	5.512
5443	Year2015 Numb10 Art51.txt	326	CLASS-5.5.4. International relationships	5.501
5316	Year2015 Numb09 Art36.txt	326	CLASS-5.5.4. International relationships	5.480
4839	Year2015 Numb05 Art63.txt	326	CLASS-5.5.4. International relationships	5.468
5305	Year2015 Numb09 Art25.txt	326	CLASS-5.5.4. International relationships	5.351
5388	Year2015 Numb10 Art102.txt	265	CLASS-4.1.2. Breeding, seed production and plant biotechnology	5.307
2822	Year2013 Numb05 Art33.txt	141	CLASS-2.4.2. Electrotechnical complexes and systems	5.296
6246	Year2016 Numb08 Art21.txt	306	CLASS-5.2.7. State and municipal administration	5.293
5562	Year2016 Numb01 Art76.txt	326	CLASS-5.5.4. International relationships	5.282
4928	Year2015 Numb06 Art38.txt	326	CLASS-5.5.4. International relationships	5.279

5203	Year2015	Numb08	Art46.txt	239	CLASS-3.1.5. Ophthalmology	5.278
5406	Year2015	Numb10	Art14.txt	326	CLASS-5.5.4. International relationships	5.240
4699	Year2015	Numb04	Art10.txt	253	CLASS-3.3.2. pathological anatomy	5.221
6858	Year2017	Numb05	Art16.txt	326	CLASS-5.5.4. International relationships	5.215
5884	Year2016	Numb06	Art06.txt	326	CLASS-5.5.4. International relationships	5.205
7414	Year2017	Numb10	Art44.txt	141	CLASS-2.4.2. Electrotechnical complexes and systems	5.203
1077	Year2010	Numb04	Art23.txt	103	CLASS-2.1.13. Urban planning, planning of rural settlements	5.196
8048	Year2021	Numb06	Art02.txt	353	CLASS-5.9.1. Russian literature and literature of the peoples of the Russian Federation	5.140
6602	Year2017	Numb01	Art53.txt	353	CLASS-5.9.1. Russian literature and literature of the peoples of the Russian Federation	5.106
4971	Year2015	Numb06	Art81.txt	326	CLASS-5.5.4. International relationships	5.079
4466	Year2015	Numb01	Art34.txt	141	CLASS-2.4.2. Electrotechnical complexes and systems	5.057
6512	Year2016	Numb10	Art60.txt	281	CLASS-5.1.1. Theoretical and historical legal sciences	5.013
6172	Year2016	Numb07	Art44.txt	285	CLASS-5.1.5. International legal sciences	4.979
7387	Year2017	Numb10	Art17.txt	80	CLASS-1.5.6. Biotechnology (branch of science - chemical, technical)	4.933
4512	Year2015	Numb02	Art16.txt	326	CLASS-5.5.4. International relationships	4.821
5602	Year2016	Numb02	Art22.txt	326	CLASS-5.5.4. International relationships	4.791
7006	Year2017	Numb06	Art71.txt	353	CLASS-5.9.1. Russian literature and literature of the peoples of the Russian Federation	4.774
5433	Year2015	Numb10	Art41.txt	203	CLASS-2.9.4. Transportation process management	4.615
4773	Year2015	Numb04	Art92.txt	326	CLASS-5.5.4. International relationships	4.341
7315	Year2017	Numb09	Art49.txt	326	CLASS-5.5.4. International relationships	4.312
5404	Year2015	Numb10	Art12.txt	299	CLASS-5.12.4. Cognitive modeling	4.302
6293	Year2016	Numb08	Art68.txt	320	CLASS-5.4.5. Political sociology	4.229
5758	Year2016	Numb03	Art80.txt	103	CLASS-2.1.13. Urban planning, planning of rural settlements	4.197
3617	Year2014	Numb04	Art05.txt	327	CLASS-5.6.1. National history	4.058
4205	Year2014	Numb09	Art09.txt	327	CLASS-5.6.1. National history	4.058
7086	Year2017	Numb07	Art30.txt	327	CLASS-5.6.1. National history	4.058
5633	Year2016	Numb02	Art53.txt	353	CLASS-5.9.1. Russian literature and literature of the peoples of the Russian Federation	3.855
7077	Year2017	Numb07	Art20.txt	326	CLASS-5.5.4. International relationships	3.117
3533	Year2014	Numb03	Art15.txt	281	CLASS-5.1.1. Theoretical and historical legal sciences	3.040
4108	Year2014	Numb07	Art94.txt	281	CLASS-5.1.1. Theoretical and historical legal sciences	3.031
3709	Year2014	Numb04	Art84.txt	327	CLASS-5.6.1. National history	2.993
5931	Year2016	Numb05	Art53.txt	281	CLASS-5.1.1. Theoretical and historical legal sciences	2.852
3714	Year2014	Numb04	Art89.txt	306	CLASS-5.2.7. State and municipal administration	2.473

Author's development

Table 2 contains information about which scientific specialty each article belongs to. Based on this information, using MS Excel, the number of articles published in each scientific specialty was calculated. For the calculation, the method described on the page was used: <https://exceltip.ru/296/>.

As a result of the calculation, Table 3 is obtained. Table 3 is created by adding three columns to Table 1 (class directory), in which the number of articles for each specialty is counted in different units of measurement: pieces,% of the total and in% cumulatively (cumulatively).

The essence of this method of calculating Table 3 is as follows:

- in the column: "Number of articles in this specialty, pcs." the formula is written: =COUNTIF('1'!\$C\$2:'1'!\$C\$8406;A2), which counts the number of rows in table 2 with a specialty code that matches the specialty code in table 4, i.e. since the rows correspond to articles, it essentially sums up the number of articles published in each specialty;

- in the column: "Name of specialty" the formula is written: =IF(C2>0;INDEX('1'!\$A\$2:'1'!\$D\$8406;MATCH(A2;'1'!\$C\$2:'1'!\$C\$8406;0);4);INDEX('2'!\$A\$2:'2'!\$B\$362;MATCH(A2;'2'!\$A\$2:'2'!\$A\$362;0);2))

If the number of articles in the specialty is greater than zero, then the MATCH() command searches table 2 for rows in which the class code corresponding to the scientific specialty matches the class code in table 3. If the number of articles in the specialty is zero, then the MATCH() command searches in table 1 for rows in which the code of the class corresponding to the scientific specialty matches the class code in table 3. Handling the situation

when the number of articles in the specialty is zero is necessary because table 2 is the output form of the Eidos system, generated by results of classification of articles by specialties. Therefore, in the case when no article corresponds to the class, its name is not displayed at all. For us, in this work, it is also of interest that for which specialties in the Scientific Journal of KubGAU not a single article has been published at all for 20 years of the journal's operation. These are the specialties listed at the end of Table 4 and highlighted with a light yellow background.

According to table 4, a pie chart is built, shown in Figure 13.

**Table4– The results of the classification of texts of articles on scientific specialties of the Higher Attestation Commission of the Russian Federation in the Inf3 SC model (the number of articles on specialties, in full)**

No	Specialty code	Name of specialty	Number of articles in this specialty, pcs.	Number of articles in this specialty, %	Number of articles in this specialty, % cumulatively
1.	302	CLASS-5.2.3. Regional and sectoral economy	490	5.830	5.830
2.	264	CLASS-4.1.1. General farming and crop production	429	5.104	10.934
3.	74	CLASS-1.5.21. Plant Physiology and Biochemistry	328	3.902	14.836
4.	162	CLASS-2.5.22. Product quality management. Standardization. Organization of production	324	3.855	18.691
5.	267	CLASS-4.1.4. Horticulture, vegetable growing, viticulture and medicinal crops	299	3.557	22.249
6.	273	CLASS-4.2.4. Private animal husbandry, feeding, feed preparation and livestock production technologies	231	2.748	24.997
7.	137	CLASS-2.3.8. Informatics and information processes	228	2.713	27.710
8.	353	CLASS-5.9.1. Russian literature and literature of the peoples of the Russian Federation	201	2.391	30.101
9.	130	CLASS-2.3.1. System analysis, information management and processing, statistics	199	2.368	32.469
10.	326	CLASS-5.5.4. International relationships	162	1.927	34.396
11.	305	CLASS-5.2.6. Management	146	1.737	36.133
12.	327	CLASS-5.6.1. National history	138	1.642	37.775
13.	266	CLASS-4.1.3. Agrochemistry, agrosol science	131	1.559	39.334
14.	281	CLASS-5.1.1. Theoretical and historical legal sciences	128	1.523	40.857
15.	265	CLASS-4.1.2. Breeding, seed production and plant biotechnology	126	1.499	42.356
16.	313	CLASS-5.3.7. Age-related psychology	125	1.487	43.843
17.	144	CLASS-2.4.5. Energy systems and complexes	119	1.416	45.259
18.	270	CLASS-4.2.1. Animal pathology, morphology, physiology, pharmacology and toxicology	94	1.118	46.377
19.	276	CLASS-4.3.1. Technologies, machines and equipment for the agro-industrial complex	94	1.118	47.496
20.	135	CLASS-2.3.6. Information security methods and systems, information security	90	1.071	48.566
21.	3	CLASS-1.1.2. Differential Equations and Mathematical Physics	89	1.059	49.625
22.	165	CLASS-2.5.5. Technology and equipment for mechanical and physical-technical processing	88	1.047	50.672
23.	301	CLASS-5.2.2. Mathematical, statistical and instrumental methods in economics	84	0.999	51.672
24.	278	CLASS-4.3.3. food systems	80	0.952	52.623
25.	346	CLASS-5.8.1. General pedagogy, history of pedagogy and education	80	0.952	53.575
26.	280	CLASS-4.3.5. Biotechnology of food products and biologically active substances	74	0.880	54.456
27.	203	CLASS-2.9.4. Transportation process management	74	0.880	55.336
28.	357	CLASS-5.9.5. Russian language. Languages of the peoples of Russia	73	0.869	56.205
29.	284	CLASS-5.1.4. Criminal Law Sciences	73	0.869	57.073
30.	59	CLASS-1.4.2. Analytical chemistry	72	0.857	57.930
31.	134	CLASS-2.3.5. Mathematical and software support for computing systems, complexes and computer networks	70	0.833	58.763
32.	286	CLASS-5.10.1. Theory and history of culture, art	65	0.773	59.536
33.	269	CLASS-4.1.6. Silviculture, forestry, forest plantations, agroforestry, landscaping, forest pyrology and taxation	62	0.738	60.274
34.	71	CLASS-1.5.19. soil science	59	0.702	60.976
35.	308	CLASS-5.3.3. Labor psychology, engineering psychology, cognitive ergonomics	58	0.690	61.666
36.	260	CLASS-3.3.9. Medical Informatics	57	0.678	62.344
37.	352	CLASS-5.8.7. Methodology and technology of vocational education	56	0.666	63.010
38.	257	CLASS-3.3.6. Pharmacology, clinical pharmacology	56	0.666	63.676
39.	eleven	CLASS-1.2.1. Artificial intelligence and machine learning	54	0.642	64.319
40.	229	CLASS-3.1.28. Hematology and blood transfusion	52	0.619	64.938
41.	171	CLASS-2.6.10. Technology of organic substances	51	0.607	65.544
42.	274	CLASS-4.2.5. Breeding, selection, genetics and biotechnology of animals	49	0.583	66.127
43.	24	CLASS-1.3.14. Thermal physics and theoretical heat engineering (branch of science - technical)	49	0.583	66.710
44.	204	CLASS-2.9.5. Operation of road transport	49	0.583	67.293
45.	322	CLASS-5.4.7. Sociology of management	49	0.583	67.876
46.	109	CLASS-2.1.4. Water supply, sewerage, building systems for the protection of water resources	49	0.583	68.459
47.	307	CLASS-5.3.1. General psychology, personality psychology, history of psychology	48	0.571	69.030
48.	279	CLASS-4.3.4. Technologies, machines and equipment for forestry and wood processing	46	0.547	69.578
49.	118	CLASS-2.2.12. Devices, systems and products for medical purposes	46	0.547	70.125
50.	108	CLASS-2.1.3. Heating, ventilation, air conditioning, gas supply and lighting	45	0.535	70.660
51.	41	CLASS-1.3.3. Theoretical physics	44	0.523	71.184
52.	247	CLASS-3.2.3. Public health, organization and sociology of health	40	0.476	71.660
53.	15	CLASS-1.3.1. Space physics, astronomy (branch of science - technical)	38	0.452	72.112
54.	253	CLASS-3.3.2. pathological anatomy	38	0.452	72.564
55.	303	CLASS-5.2.4. Finance	38	0.452	73.016
56.	5	CLASS-1.1.4. Theory of Probability and Mathematical Statistics	35	0.416	73.432
57.	283	CLASS-5.1.3. Private law (civilistic) sciences	35	0.416	73.849

58.	142	CLASS-2.4.3. Power industry	34	0.405	74.253
59.	300	CLASS-5.2.1. Economic theory	33	0.393	74.646
60.	34	CLASS-1.3.18. Physics of beams of charged particles and accelerator technology (branch of science - physical and mathematical)	31	0.369	75.015
61.	355	CLASS-5.9.3. Literary theory	31	0.369	75.384
62.	320	CLASS-5.4.5. Political sociology	thirty	0.357	75.741
63.	86	CLASS-1.6.16. Land hydrology, water resources, hydrochemistry	thirty	0.357	76.098
64.	98	CLASS-1.6.9. Geophysics (physics and mathematics)	29	0.345	76.443
65.	325	CLASS-5.5.3. Public administration and sectoral policies	28	0.333	76.776
66.	111	CLASS-2.1.6. Hydrotechnical construction, hydraulics and engineering hydrology	27	0.321	77.097
67.	343	CLASS-5.7.7. Social and political philosophy	27	0.321	77.418
68.	306	CLASS-5.2.7. State and municipal administration	26	0.309	77.728
69.	173	CLASS-2.6.12. Chemical technology of fuel and high-energy substances	26	0.309	78.037
70.	344	CLASS-5.7.8. Philosophical anthropology, philosophy of culture	25	0.297	78.334
71.	186	CLASS-2.6.7. Technology of inorganic substances	24	0.286	78.620
72.	336	CLASS-5.6.8. Documentary, documentation science, archiving	24	0.286	78.905
73.	358	CLASS-5.9.6. Languages of the peoples of foreign countries (indicating a specific language or group of languages)	24	0.286	79.191
74.	128	CLASS-2.2.8. Methods and devices for monitoring and diagnosing materials, products, substances and the natural environment	24	0.286	79.477
75.	195	CLASS-2.8.6. Geomechanics, rock destruction, mine aerogas dynamics and mining thermal physics	24	0.286	79.762
76.	199	CLASS-2.9.1. Transport and transport-technological systems of the country, its regions and cities, organization of production in transport	24	0.286	80.048
77.	183	CLASS-2.6.5. Powder metallurgy and composite materials	23	0.274	80.321
78.	200	CLASS-2.9.10. Technosphere safety of transport systems	23	0.274	80.595
79.	182	CLASS-2.6.4. Metal forming	22	0.262	80.857
80.	65	CLASS-1.4.8. Chemistry of organoelement compounds	21	0.250	81.106
81.	161	CLASS-2.5.20. Ship power plants and their elements (main and auxiliary)	21	0.250	81.356
82.	342	CLASS-5.7.6. Philosophy of science and technology	21	0.250	81.606
83.	163	CLASS-2.5.3. Friction and wear in machines	20	0.238	81.844
84.	106	CLASS-2.1.16. Labor protection in construction	20	0.238	82.082
85.	16	CLASS-1.3.1. Space physics, astronomy (branch of science - physical and mathematical)	20	0.238	82.320
86.	315	CLASS-5.3.9. Legal Psychology and Security Psychology	20	0.238	82.558
87.	1	CLASS-1.1.1. Real, complex and functional analysis	19	0.226	82.784
88.	54	CLASS-1.4.12. Petrochemistry	19	0.226	83.010
89.	141	CLASS-2.4.2. Electrotechnical complexes and systems	18	0.214	83.224
90.	350	CLASS-5.8.5. Theory and methodology of sports	18	0.214	83.438
91.	319	CLASS-5.4.4. Social structure, social institutions and processes	18	0.214	83.653
92.	112	CLASS-2.1.7. Technology and organization of construction	17	0.202	83.855
93.	160	CLASS-2.5.2. Machine learning	17	0.202	84.057
94.	6	CLASS-1.1.5. Mathematical logic, algebra, number theory and discrete mathematics	17	0.202	84.259
95.	100	CLASS-2.1.10. Environmental safety of construction and urban economy	17	0.202	84.462
96.	114	CLASS-2.1.9. Structural mechanics	17	0.202	84.664
97.	288	CLASS-5.10.3. Types of art (indicating specific art)	17	0.202	84.866
98.	14	CLASS-1.2.4. cyber security	16	0.190	85.057
99.	110	CLASS-2.1.5. Building materials and products	16	0.190	85.247
100	169	CLASS-2.5.9. Methods and control devices	16	0.190	85.437
101	333	CLASS-5.6.6. History of science and technology (branch of science - physical and mathematical)	16	0.190	85.628
102	177	CLASS-2.6.16. Technology for the production of textile and light industry products	16	0.190	85.818
103	252	CLASS-3.3.1. human anatomy	16	0.190	86.008
104	12	CLASS-1.2.2. Mathematical modeling, numerical methods and software packages	15	0.178	86.187
105	354	CLASS-5.9.2. Literature of the peoples of the world	15	0.178	86.365
106	166	CLASS-2.5.6. Engineering technology	15	0.178	86.544
107	262	CLASS-3.4.2. Pharmaceutical chemistry, pharmacognosy	14	0.167	86.710
108	309	CLASS-5.3.4. Pedagogical psychology, psychodiagnosics of digital educational environments	14	0.167	86.877
109	328	CLASS-5.6.2. General history	14	0.167	87.043
110	133	CLASS-2.3.4. Management in organizational systems	14	0.167	87.210
111	184	CLASS-2.6.6. Nanotechnologies and nanomaterials	13	0.155	87.365
112	304	CLASS-5.2.5. World economy	13	0.155	87.519
113	174	CLASS-2.6.13. Processes and apparatuses of chemical technologies	13	0.155	87.674
114	178	CLASS-2.6.17. Materials Science	13	0.155	87.829
115	298	CLASS-5.12.3. Interdisciplinary Language Studies	13	0.155	87.983
116	208	CLASS-2.9.9. Logistic transport systems	13	0.155	88.138
117	20	CLASS-1.3.12. Physics of magnetic phenomena (branch of science - technical)	12	0.143	88.281
118	119	CLASS-2.2.13. Radio engineering, including television systems and devices	12	0.143	88.424
119	148	CLASS-2.4.9. Nuclear power plants, fuel cycle, radiation safety	12	0.143	88.566
120	155	CLASS-2.5.15. Thermal, electric rocket engines and power plants of aircraft	12	0.143	88.709
121	176	CLASS-2.6.15. Membranes and membrane technology	12	0.143	88.852
122	202	CLASS-2.9.3. Railway rolling stock, train traction and electrification	12	0.143	88.995
123	259	CLASS-3.3.8. Clinical laboratory diagnostics	12	0.143	89.137
124	258	CLASS-3.3.7. Aviation, space and marine medicine	12	0.143	89.280
125	157	CLASS-2.5.17. Ship theory and structural mechanics	12	0.143	89.423
126	235	CLASS-3.1.32. Nephrology	12	0.143	89.566
127	268	CLASS-4.1.5. Land reclamation, water management and agrophysics	12	0.143	89.709
128	49	CLASS-1.3.9. Plasma Physics (branch of science - technical)	eleven	0.131	89.839
129	99	CLASS-2.1.1. Building structures, buildings and structures	eleven	0.131	89.970
130	201	CLASS-2.9.2. Railway track, survey and design of railways	eleven	0.131	90.101
131	225	CLASS-3.1.24. Neurology	eleven	0.131	90.232
132	232	CLASS-3.1.30. Gastroenterology and Diagnostics	eleven	0.131	90.363
133	95	CLASS-1.6.7. Engineering geology, permafrost and soil science	eleven	0.131	90.494
134	205	CLASS-2.9.6. Air navigation and operation of aviation equipment	eleven	0.131	90.625
135	90	CLASS-1.6.21. Geoecology	10	0.119	90.744
136	140	CLASS-2.4.11. lighting technology	10	0.119	90.863
137	337	CLASS-5.7.1. Ontology and theory of knowledge	10	0.119	90.982
138	347	CLASS-5.8.2. Theory and methodology of training and education (by areas and levels of education)	10	0.119	91.101
139	272	CLASS-4.2.3. Infectious Diseases and Animal Immunology	10	0.119	91.220
140	310	CLASS-5.3.5. Social psychology, political and economic psychology	10	0.119	91.338
141	53	CLASS-1.4.11. Bioinorganic chemistry	9	0.107	91.446
142	104	CLASS-2.1.14. Life cycle management of construction objects	9	0.107	91.553
143	107	CLASS-2.1.2. Bases and foundations, underground structures	9	0.107	91.660
144	121	CLASS-2.2.15. Telecommunication systems, networks and devices	9	0.107	91.767
145	239	CLASS-3.1.5. Ophthalmology	9	0.107	91.874
146	334	CLASS-5.6.6. History of science and technology (branch of science - chemical, technical)	9	0.107	91.981
147	58	CLASS-1.4.16 Medical chemistry	9	0.107	92.088
148	125	CLASS-2.2.4. Instruments and methods of measurement (by type of measurement)	9	0.107	92.195

149	13	CLASS-1.2.3. Theoretical computer science, cybernetics	8	0.095	92.290
150	21	CLASS-1.3.12. Physics of magnetic phenomena (branch of science - physical and mathematical)	8	0.095	92.385
151	94	CLASS-1.6.6. hydrogeology	8	0.095	92.481
152	113	CLASS-2.1.8. Design and construction of roads, subways, airfields, bridges and transport tunnels	8	0.095	92.576
153	131	CLASS-2.3.2. Computing systems and their elements	8	0.095	92.671
154	136	CLASS-2.3.7. Computer modeling and design automation	8	0.095	92.766
155	150	CLASS-2.5.10. Hydraulic machines, vacuum, compressor technology, hydraulic and pneumatic systems	8	0.095	92.861
156	159	CLASS-2.5.19. Technology of shipbuilding, ship repair and organization of shipbuilding production	8	0.095	92.957
157	256	CLASS-3.3.5. Forensic Medicine	8	0.095	93.052
158	356	CLASS-5.9.4. Folklore	8	0.095	93.147
159	191	CLASS-2.8.2. Drilling and well completion technology	8	0.095	93.242
160	263	CLASS-3.4.3. Organization of the pharmaceutical business	8	0.095	93.337
161	311	CLASS-5.3.6. Clinical psychology (branch of science - medical)	8	0.095	93.432
162	10	CLASS-1.1.9. Mechanics of liquid, gas and plasma	7	0.083	93.516
163	48	CLASS-1.3.8. Condensed state physics (branch of science - physical and mathematical)	7	0.083	93.599
164	69	CLASS-1.5.14. Entomology	7	0.083	93.682
165	72	CLASS-1.5.2. Biophysics (tech.)	7	0.083	93.766
166	103	CLASS-2.1.13. Urban planning, planning of rural settlements	7	0.083	93.849
167	124	CLASS-2.2.3. Technology and equipment for the production of materials and electronic devices	7	0.083	93.932
168	196	CLASS-2.8.7. Theoretical foundations for the design of mining systems	7	0.083	94.015
169	198	CLASS-2.8.9. Mineral enrichment	7	0.083	94.099
170	220	CLASS-3.1.2. Maxillofacial Surgery	7	0.083	94.182
171	222	CLASS-3.1.21. Pediatrics	7	0.083	94.265
172	285	CLASS-5.1.5. International legal sciences	7	0.083	94.349
173	299	CLASS-5.12.4. Cognitive modeling	7	0.083	94.432
174	314	CLASS-5.3.8. Correctional psychology and defectology	7	0.083	94.515
175	331	CLASS-5.6.5. Historiography, source studies, methods of historical research	7	0.083	94.598
176	345	CLASS-5.7.9. Philosophy of Religion and Religious Studies	7	0.083	94.682
177	8	CLASS-1.1.7. Theoretical mechanics, machine dynamics	7	0.083	94.765
178	170	CLASS-2.6.1. Metal science and heat treatment of metals and alloys	7	0.083	94.848
179	179	CLASS-2.6.18. Labor protection, fire and industrial safety	7	0.083	94.932
180	214	CLASS-3.1.14. Transplantology and artificial organs	7	0.083	95.015
181	316	CLASS-5.4.1. Theory, methodology and history of sociology	7	0.083	95.098
182	360	CLASS-5.9.8. Theoretical, Applied and Comparative Linguistics	7	0.083	95.181
183	7	CLASS-1.1.6. Computational Mathematics	6	0.071	95.253
184	29	CLASS-1.3.16. Atomic and molecular physics (branch of science - physical and mathematical)	6	0.071	95.324
185	67	CLASS-1.5.12. Zoology	6	0.071	95.396
186	129	CLASS-2.2.9. Design and technology of instrumentation and radio electronic equipment	6	0.071	95.467
187	152	CLASS-2.5.12. Aerodynamics and heat transfer processes of aircraft	6	0.071	95.538
188	156	CLASS-2.5.16. Dynamics, ballistics and motion control of aircraft	6	0.071	95.610
189	167	CLASS-2.5.7. Forming technologies and machines	6	0.071	95.681
190	189	CLASS-2.8.1. Technology and technique of geological exploration	6	0.071	95.753
191	332	CLASS-5.6.6. History of science and technology (branch of science - historical)	6	0.071	95.824
192	2	CLASS-1.1.10. Biomechanics and bioengineering	6	0.071	95.895
193	254	CLASS-3.3.3. pathological physiology	6	0.071	95.967
194	261	CLASS-3.4.1. Industrial Pharmacy and Drug Technology	6	0.071	96.038
195	317	CLASS-5.4.2. economic sociology	6	0.071	96.109
196	39	CLASS-1.3.20. Crystallography, crystal physics (branch of science - physical and mathematical)	5	0.059	96.169
197	55	CLASS-1.4.13. Radiochemistry	5	0.059	96.228
198	66	CLASS-1.4.9. Bioorganic chemistry	5	0.059	96.288
199	75	CLASS-1.5.3. Molecular biology (branch of science - biological, medical)	5	0.059	96.347
200	80	CLASS-1.5.6. Biotechnology (branch of science - chemical, technical)	5	0.059	96.407
201	116	CLASS-2.2.10. Metrology and metrological support	5	0.059	96.466
202	139	CLASS-2.4.10. Technosphere safety (in energy)	5	0.059	96.526
203	151	CLASS-2.5.11. Ground transport and technological means and complexes	5	0.059	96.585
204	234	CLASS-3.1.31. Gerontology and geriatrics (branch of science - medical)	5	0.059	96.645
205	246	CLASS-3.2.3. Public health and healthcare organization, sociology and history of medicine	5	0.059	96.704
206	338	CLASS-5.7.2. History of philosophy	5	0.059	96.764
207	238	CLASS-3.1.4. obstetrics and gynecology	5	0.059	96.823
208	296	CLASS-5.12.1. Interdisciplinary research on cognitive processes	5	0.059	96.883
209	324	CLASS-5.5.2. Political institutions, processes, technologies	5	0.059	96.942
210	17	CLASS-1.3.10. Physics of low temperatures (branch of science - technical)	5	0.059	97.002
211	18	CLASS-1.3.10. Physics of low temperatures (branch of science - physical and mathematical)	4	0.048	97.049
212	23	CLASS-1.3.13. Electrophysics, electrophysical installations (branch of science - physical and mathematical)	4	0.048	97.097
213	61	CLASS-1.4.4. Physical chemistry	4	0.048	97.145
214	62	CLASS-1.4.5. Chemoinformatics (branch of science - technical)	4	0.048	97.192
215	63	CLASS-1.4.6. Electrochemistry	4	0.048	97.240
216	79	CLASS-1.5.4. Biochemistry (branch of science - chemical)	4	0.048	97.287
217	88	CLASS-1.6.18. Atmospheric and climate sciences	4	0.048	97.335
218	102	CLASS-2.1.12. Architecture of buildings and structures. Creative concepts of architectural activity	4	0.048	97.383
219	117	CLASS-2.2.11. Information-measuring and control systems	4	0.048	97.430
220	132	CLASS-2.3.3. Automation and control of technological processes and production	4	0.048	97.478
221	145	CLASS-2.4.6. Theoretical and applied heat engineering	4	0.048	97.525
222	168	CLASS-2.5.8. Welding, related processes and technologies	4	0.048	97.573
223	233	CLASS-3.1.31. Gerontology and geriatrics (branch of science - biological)	4	0.048	97.620
224	271	CLASS-4.2.2. Sanitation, hygiene, ecology, veterinary and sanitary examination and biosafety	4	0.048	97.668
225	282	CLASS-5.1.2. Public Law (State Law) Sciences	4	0.048	97.716
226	297	CLASS-5.12.2. Interdisciplinary Brain Research	4	0.048	97.763
227	335	CLASS-5.6.7. History of international relations and foreign policy	4	0.048	97.811
228	349	CLASS-5.8.4. Physical culture and professional physical training	4	0.048	97.858
229	244	CLASS-3.2.1. Hygiene	4	0.048	97.906
230	248	CLASS-3.2.4. Occupational medicine	4	0.048	97.954
231	thirty	CLASS-1.3.17. Chemical physics, combustion and explosion, physics of extreme states of matter (branch of science - technical)	4	0.048	98.001
232	46	CLASS-1.3.7. Acoustics (branch of science - physical and mathematical)	3	0.036	98.037
233	51	CLASS-1.4.1. Inorganic chemistry	3	0.036	98.073
234	60	CLASS-1.4.3. Organic chemistry	3	0.036	98.108
235	64	CLASS-1.4.7. Macromolecular compounds	3	0.036	98.144
236	70	CLASS-1.5.16. Hydrobiology	3	0.036	98.180
237	82	CLASS-1.6.10. Geology, prospecting and exploration of solid minerals, minerageny	3	0.036	98.215
238	87	CLASS-1.6.17. Oceanology	3	0.036	98.251
239	96	CLASS-1.6.8. Glaciology and cryology of the Earth	3	0.036	98.287
240	149	CLASS-2.5.1. Engineering geometry and computer graphics. Digital Product Lifecycle Support	3	0.036	98.322
241	172	CLASS-2.6.11. Technology and processing of synthetic and natural polymers and composites	3	0.036	98.358

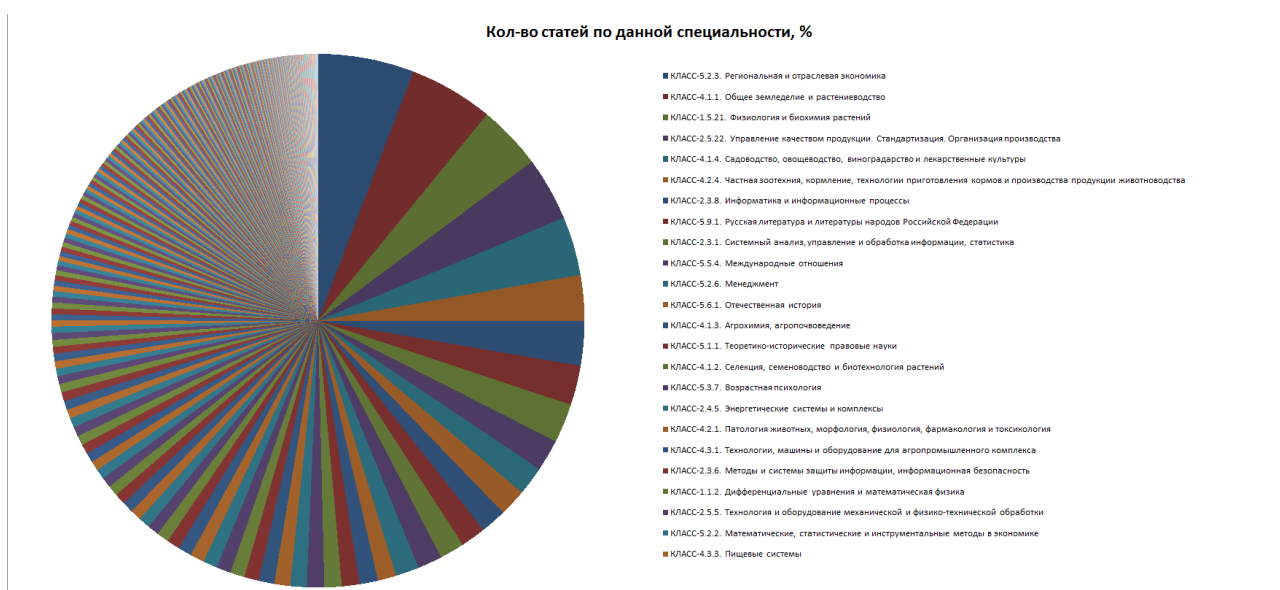
242	209	CLASS-3.1.1. X-ray endovascular surgery	3	0.036	98.394
243	215	CLASS-3.1.15. Cardiovascular Surgery	3	0.036	98.430
244	218	CLASS-3.1.18. Internal illnesses	3	0.036	98.465
245	221	CLASS-3.1.20. Cardiology	3	0.036	98.501
246	223	CLASS-3.1.22. infectious diseases	3	0.036	98.537
247	226	CLASS-3.1.25. Radiation diagnostics	3	0.036	98.572
248	230	CLASS-3.1.29. Pulmonology	3	0.036	98.608
249	250	CLASS-3.2.6. Emergency Safety	3	0.036	98.644
250	312	CLASS-5.3.6. Clinical psychology (branch of science - psychological)	3	0.036	98.679
251	348	CLASS-5.8.3. Correctional pedagogy (deaf pedagogy and typhlopedagogy, oligophrenopedagogy and speech therapy)	3	0.036	98.715
252	351	CLASS-5.8.6. Improving and adaptive physical culture	3	0.036	98.751
253	361	CLASS-5.9.9. Media communications and journalism	3	0.036	98.786
254	27	CLASS-1.3.15. Physics of atomic nuclei and elementary particles, high energy physics (branch of science - physical and mathematical)	3	0.036	98.822
255	197	CLASS-2.8.8. Geotechnology, mining machines	3	0.036	98.858
256	287	CLASS-5.10.2. Museum studies, conservation and restoration of historical and cultural objects	3	0.036	98.894
257	28	CLASS-1.3.16. Atomic and molecular physics (branch of science - technical)	2	0.024	98.917
258	32	CLASS-1.3.17. Chemical physics, combustion and explosion, physics of extreme states of matter (branch of science - chemical)	2	0.024	98.941
259	35	CLASS-1.3.19. Laser physics (branch of science - technical)	2	0.024	98.965
260	42	CLASS-1.3.4. Radiophysics (branch of science - physical and mathematical)	2	0.024	98.989
261	50	CLASS-1.3.9. Plasma Physics (branch of science - physical and mathematical)	2	0.024	99.012
262	52	CLASS-1.4.10. colloid chemistry	2	0.024	99.036
263	68	CLASS-1.5.13. Ichthyology	2	0.024	99.060
264	76	CLASS-1.5.3. Molecular biology (branch of science - physical and mathematical)	2	0.024	99.084
265	84	CLASS-1.6.13. Economic, social, political and recreational geography	2	0.024	99.108
266	89	CLASS-1.6.2. Paleontology and stratigraphy	2	0.024	99.131
267	91	CLASS-1.6.3. Petrology, volcanology	2	0.024	99.155
268	101	CLASS-2.1.11. Theory and history of architecture, restoration and reconstruction of historical and architectural heritage	2	0.024	99.179
269	115	CLASS-2.2.1. Vacuum and Plasma Electronics	2	0.024	99.203
270	122	CLASS-2.2.16. Radar and radio navigation	2	0.024	99.227
271	138	CLASS-2.4.1. Theoretical and Applied Electrical Engineering	2	0.024	99.250
272	146	CLASS-2.4.7. Turbomachines and piston engines	2	0.024	99.274
273	147	CLASS-2.4.8. Machines and apparatuses, processes of refrigeration and cryogenic engineering	2	0.024	99.298
274	153	CLASS-2.5.13. Design, construction and production of aircraft	2	0.024	99.322
275	158	CLASS-2.5.18. Ship design and construction	2	0.024	99.346
276	164	CLASS-2.5.4. Robots, mechatronics and robotic systems	2	0.024	99.369
277	175	CLASS-2.6.14. Technology of silicate and refractory non-metallic materials	2	0.024	99.393
278	181	CLASS-2.6.3. Foundry	2	0.024	99.417
279	190	CLASS-2.8.10. labor protection, industrial safety	2	0.024	99.441
280	212	CLASS-3.1.12. Anesthesiology and resuscitation	2	0.024	99.465
281	219	CLASS-3.1.19. Endocrinology	2	0.024	99.488
282	224	CLASS-3.1.23. Dermatovenereology	2	0.024	99.512
283	240	CLASS-3.1.6. Oncology, radiation therapy	2	0.024	99.536
284	275	CLASS-4.2.6. Fisheries, aquaculture and industrial fisheries	2	0.024	99.560
285	321	CLASS-5.4.6. Sociology of culture	2	0.024	99.584
286	323	CLASS-5.5.1. History and theory of politics	2	0.024	99.607
287	38	CLASS-1.3.2. Instruments and methods of experimental physics (branch of science - physical and mathematical)	2	0.024	99.631
288	47	CLASS-1.3.8. Condensed state physics (branch of science - technical)	2	0.024	99.655
289	9	CLASS-1.1.8. Solid Mechanics	1	0.012	99.667
290	19	CLASS-1.3.11. Physics of semiconductors (branch of science - physical and mathematical)	1	0.012	99.679
291	25	CLASS-1.3.14. Thermal physics and theoretical heat engineering (branch of science - physical and mathematical)	1	0.012	99.691
292	26	CLASS-1.3.15. Physics of atomic nuclei and elementary particles, high energy physics (branch of science - technical)	1	0.012	99.703
293	31	CLASS-1.3.17. Chemical physics, combustion and explosion, physics of extreme states of matter (branch of science - physical and mathematical)	1	0.012	99.714
294	37	CLASS-1.3.2. Instruments and methods of experimental physics (branch of science - technical)	1	0.012	99.726
295	40	CLASS-1.3.21. medical physics	1	0.012	99.738
296	73	CLASS-1.5.2. Biophysics (physics and mathematics)	1	0.012	99.750
297	77	CLASS-1.5.3. Molecular biology (branch of science - chemical)	1	0.012	99.762
298	123	CLASS-2.2.2. Electronic component base of micro- and nanoelectronics, quantum devices	1	0.012	99.774
299	126	CLASS-2.2.5. Navigation devices	1	0.012	99.786
300	180	CLASS-2.6.2. Metallurgy of ferrous, non-ferrous and rare metals	1	0.012	99.798
301	193	CLASS-2.8.4. Development and operation of oil and gas fields	1	0.012	99.810
302	207	CLASS-2.9.8. Intelligent Transport Systems	1	0.012	99.822
303	216	CLASS-3.1.16. Plastic surgery	1	0.012	99.833
304	227	CLASS-3.1.26. Phthisiology	1	0.012	99.845
305	236	CLASS-3.1.33. Rehabilitation medicine, sports medicine, exercise therapy, balneology and physiotherapy (field of science - biological)	1	0.012	99.857
306	237	CLASS-3.1.33. Rehabilitation medicine, sports medicine, exercise therapy, balneology and physiotherapy (branch of science - medical)	1	0.012	99.869
307	241	CLASS-3.1.7. Dentistry	1	0.012	99.881
308	242	CLASS-3.1.8. Traumatology and Orthopedics	1	0.012	99.893
309	243	CLASS-3.1.9. Surgery	1	0.012	99.905
310	245	CLASS-3.2.2. Epidemiology	1	0.012	99.917
311	289	CLASS-5.10.4. Library science, bibliography and book science	1	0.012	99.929
312	290	CLASS-5.11.1. Theoretical theology (in research areas)	1	0.012	99.941
313	318	CLASS-5.4.3. Demography	1	0.012	99.952
314	339	CLASS-5.7.3. Aesthetics	1	0.012	99.964
315	341	CLASS-5.7.5. Logics	1	0.012	99.976
316	56	CLASS-1.4.14. Kinetics and catalysis	1	0.012	99.988
317	210	CLASS-3.1.10. Neurosurgery	1	0.012	100.000
318	4	CLASS-1.1.3. Geometry and topology	0	0.000	100.000
319	22	CLASS-1.3.13. Electrophysics, electrophysical installations (branch of science - technical)	0	0.000	100.000
320	33	CLASS-1.3.18. Physics of beams of charged particles and accelerator technology (branch of science - technical)	0	0.000	100.000
321	36	CLASS-1.3.19. Laser physics (branch of science - physical and mathematical)	0	0.000	100.000
322	43	CLASS-1.3.5. Physical electronics (branch of science - technical)	0	0.000	100.000
323	44	CLASS-1.3.5. Physical electronics (branch of science - physical and mathematical)	0	0.000	100.000
324	45	CLASS-1.3.6. Optics (branch of science - physical and mathematical)	0	0.000	100.000
325	57	CLASS-1.4.15. Solid State Chemistry	0	0.000	100.000
326	78	CLASS-1.5.4. Biochemistry (branch of science - biological)	0	0.000	100.000
327	81	CLASS-1.6.1. General and regional geology. Geotectonics and geodynamics	0	0.000	100.000
328	83	CLASS-1.6.12. Physical geography and biogeography, soil geography and landscape geochemistry	0	0.000	100.000
329	85	CLASS-1.6.14. Geomorphology and paleogeography	0	0.000	100.000

330	92	CLASS-1.6.4. Mineralogy, crystallography. Geochemistry, geochemical methods of prospecting for minerals	0	0.000	100,000
331	93	CLASS-1.6.5. Lithology	0	0.000	100,000
332	97	CLASS-1.6.9. Geophysics (technical, geol.-min.)	0	0.000	100,000
333	105	CLASS-2.1.15. Safety of construction objects	0	0.000	100,000
334	120	CLASS-2.2.14. Antennas, microwave devices and their technologies	0	0.000	100,000
335	127	CLASS-2.2.6. Optical and Optoelectronic Devices and Complexes	0	0.000	100,000
336	143	CLASS-2.4.4. Electrotechnology and electrophysics	0	0.000	100,000
337	154	CLASS-2.5.14. Strength and thermal conditions of aircraft	0	0.000	100,000
338	185	CLASS-2.6.6. Nanotechnologies and nanomaterials (branch of science - physical and mathematical)	0	0.000	100,000
339	187	CLASS-2.6.8. Technology of rare, trace and radioactive elements	0	0.000	100,000
340	188	CLASS-2.6.9. Electrochemical process technology and corrosion protection	0	0.000	100,000
341	192	CLASS-2.8.3. Mining and oil and gas geology, geophysics, mine surveying and subsoil geometry	0	0.000	100,000
342	194	CLASS-2.8.5. Construction and operation of oil and gas pipelines, bases and storage facilities	0	0.000	100,000
343	206	CLASS-2.9.7. Operation of water transport, waterways of communication and hydrography	0	0.000	100,000
344	211	CLASS-3.1.11. Pediatric surgery	0	0.000	100,000
345	213	CLASS-3.1.13. Urology, Andrology	0	0.000	100,000
346	217	CLASS-3.1.17. Psychiatry and Narcology	0	0.000	100,000
347	228	CLASS-3.1.27. Rheumatology	0	0.000	100,000
348	231	CLASS-3.1.3. Otorhinolaryngology	0	0.000	100,000
349	249	CLASS-3.2.5. medical psychology	0	0.000	100,000
350	251	CLASS-3.2.7. Allergology and Immunology	0	0.000	100,000
351	255	CLASS-3.3.4. Toxicology	0	0.000	100,000
352	277	CLASS-4.3.2. Electrical technologies, electrical equipment and power supply of the agro-industrial complex	0	0.000	100,000
353	291	CLASS-5.11.1. Theoretical theology (in the research direction - Orthodoxy, Islam, Judaism)	0	0.000	100,000
354	292	CLASS-5.11.2. Historical theology (in research areas)	0	0.000	100,000
355	293	CLASS-5.11.2. Historical theology (in the research direction - Orthodoxy, Islam, Judaism)	0	0.000	100,000
356	294	CLASS-5.11.3. Practical Theology (in research areas)	0	0.000	100,000
357	295	CLASS-5.11.3. Practical theology (in the research direction - Orthodoxy, Islam, Judaism)	0	0.000	100,000
358	329	CLASS-5.6.3. Archeology	0	0.000	100,000
359	330	CLASS-5.6.4. Ethnology, anthropology and ethnography	0	0.000	100,000
360	340	CLASS-5.7.4. Ethics	0	0.000	100,000
361	359	CLASS-5.9.7. Classical, Byzantine and Modern Greek Philology	0	0.000	100,000
			<b>Total:</b>	<b>8405</b>	

From Figure 13 and Table 4 we see that:

- about a quarter of all articles published in the journal refer to only 6 specialties (they are highlighted in the beginning of table 4 with a light green background), and half are in 22 specialties (at the beginning of table 4 they are highlighted in blue).

– for the remaining 339 specialties, all taken together, about half the number of articles was published (in table 4 without a background), and for 43 specialties not a single article was published at all (at the end of table 4 are highlighted with a light yellow background).



**Drawing13– Frequency distribution of articles published in the Scientific Journal of KubSAU for 20 years of its work in the scientific specialties of the Higher Attestation Commission of the Russian Federation in the Inf3 SC model**



Such a distribution of articles by scientific specialties has developed because all articles published in issues from 58 to 134 are "Wakov" in all specialties of scientists. During this period, the journal was multidisciplinary.

But since February 12, 2019 (from issue 146), our journal is no longer multidisciplinary, because. entered the List of the Higher Attestation Commission of the Russian Federation only in the following 5 specialties: 05.20.01, 06.01.01, 06.01.05, 06.02.02, 06.02.10.

Since February 15, 2023 (from issue 186), the journal is included in the List of the Higher Attestation Commission of the Russian Federation in the following specialties:

- 4.1.1. General farming and crop production;
- 4.1.2. Breeding, seed production and biotechnology;
- 4.1.3. Agrochemistry,  
agrosoil science, plant protection and quarantine;
- 4.1.4. Horticulture, vegetable growing, viticulture and medicinal culture;
- 4.3.1. Technologies, machines and equipment for the agro-industrial complex;
- 5.2.2. Mathematical, statistical and instrumental methods in economics.

The lists of the Higher Attestation Commission of the Russian Federation valid for various periods of the journal are located at:<https://phdru.com/publications/perechenvak/#section1>.

## 4. Discussion

*Goal of the work* consists in the development of an intelligent system for the automated classification of publications according to the scientific specialties of the Higher Attestation Commission of the Russian Federation of the new nomenclature. To achieve this goal, the well-known method of artificial intelligence was applied: automated system-cognitive analysis and its software tools - the intellectual system "Eidos".

*As a result of work* an intelligent cloud-based Eidos application has been created, placed in full open free access, which can be successfully used by everyone to achieve the goal with their texts. The paper provides a detailed numerical example of achieving the set goal, based on real publications in the Scientific Journal of KubSAU for 20 years of its work: from 2003 to 2023. The results obtained are in good agreement with those previously obtained by the author [1-11] and the works of other authors.

*The relevance of the work* is due to the fact that for the new nomenclature of scientific specialties of the Higher Attestation Commission of the Russian Federation, the intellectual system for classifying publications, which is in full open free access, was created for the first time.

## 5. Conclusion, conclusions and recommendations

Thus, based on the results of the research, we can make a reasonable conclusion that the created intelligent cloud-based Eidos application provides the classification of texts of scientific articles, as well as monographs, manuals, dissertations, etc. in scientific specialties of the Higher Attestation Commission of the Russian Federation.

*Practical significance* of the conducted research and development is that everyone can use it to solve the problem formulated in the work, achieve the goal and objectives.

This is facilitated by the fact that any Internet user can download from the author's website at the link: <http://lc.kubagro.ru/Aidos-X.exe> installation of the Eidos system, and then in the 1.3 mode download and install this intelligent cloud Eidos application (it has No.388) and study it according to this publication or simply use it to classify your texts according to the scientific specialties of the Higher Attestation Commission of the Russian Federation of the new nomenclature.

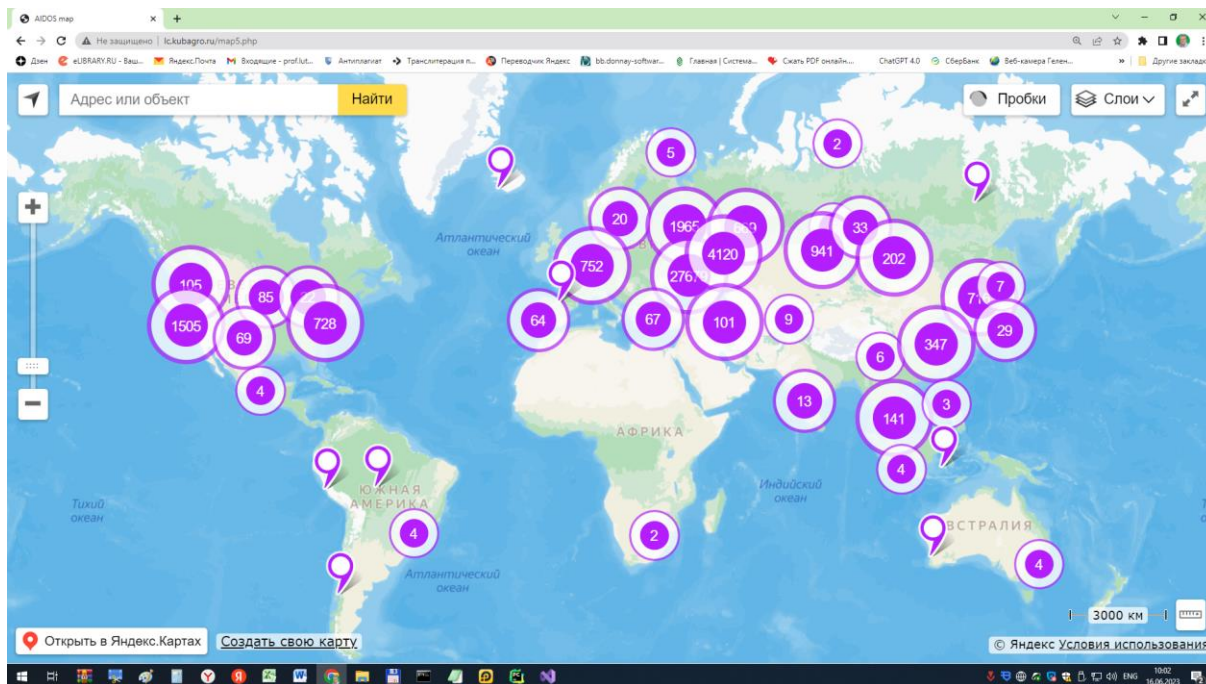
After installing this application in the folder: c:\Aidos-X\AID\_DATA\Inp\_data there will be an archive: c:\Aidos-X\AID\_DATA\Inp\_rasp.rar with article files. These files must be unzipped to the folder: c:\Aidos-X\AID\_DATA\Inp\_rasp.

*prospects* We see the continuation of this work in the application of the intelligent cloud Eidos application No.388, described in this work and in [1], for the classification of articles in forthcoming issues of various scientific journals, and not just the Scientific Journal of KubSAU, as well as for its application for the classification of texts of monographs, textbooks, dissertations, etc. on scientific specialties of the Higher Attestation Commission of the Russian Federation of the new nomenclature.

It is also planned to analyze the publication activity of the author using the intellectual cloud Eidos application described in this paper No.388. It is clear that this can be done in any and by other authors.

The author also plans to develop a new version of the Eidos system in a modern programming language and a wider use of the Eidos system and intelligent applications developed with its use, although there are still a lot of them now: the Eidos system is quite widely used all over the world (Figure 14):

Those interested can get acquainted with this work in Russian [12].  
Желающие могут ознакомиться с данной работой на русском языке [12].



**Drawing14– – Screen form with cartographic visualization of Eidos system launches in the world for the period from 12/09/2016 to 16/06/2023.**

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