



национальныи центр профессионально-общественной аккредитации

SUMMARY REPORT

on professional public accreditation of the cluster of educational programmes

- «Chemical technology» (18.03.01, 18.04.01)
- «Energy and resource-saving processes in chemical technology, petrochemistry and biotechnology» (18.03.02, 18.04.02)
- «Chemical technology of energy-saturated materials and products» (18.05.01),
- «Chemistry» (04.03.01, 04.04.01),
- «Fundamental and Applied Chemistry» (04.05.01),
- «Chemical technology of materials of modern power engineering»(18.05.02)

Delivered by D.I. Mendeleev Russian Chemical-Technological University

2021

While preparing this Summary Report we used information from the Self-Evaluation Report and the Report on the External Review of the cluster of educational programmes «Chemical technology» (18.03.01, 18.04.01), processes «Energy and resource-saving in chemical technology, petrochemistry biotechnology» (18.03.02, 18.04.02), **«Chemical** and technology of energy-saturated materials and products» (18.05.01), «Chemistry» (04.03.01, 04.04.01), «Fundamental and Applied Chemistry» (04.05.01), «Chemical technology of materials of modern power engineering» (18.05.02) delivered by D.I. Mendeleev Russian Chemical-Technological University.

The presentation document for the use by the National Accreditation Board.

 $\ensuremath{\textcircled{}}$ National Centre for Public Accreditation, 2021

СОДЕРЖАНИЕ

GENERAL INFORMATION ON THE EDUCATIONAL INSTITUTION	4
INFORMATION ON THE STUDY PROGRAMMES UNDERGOING ACCREDITATION	5
ACHIEVEMENTS OF THE EDUCATIONAL PROGRAMME	9
EXTERNAL REVIEW PANEL1	2
COMPLIANCE OF THE EXTERNAL REVIEW OUTCOMES WITH THE STANDARDS	3
DISTRIBUTION DIGRAM OF THE EXTERNAL REVIEW OUTCOMES	1
CONCLUSION OF THE EXTERNAL REVIEW PANEL	2

GENERAL INFORMATION ON THE EDUCATIONAL INSTITUTION

Full name of the educational institution	Federal State Budgetary Educational Institution of Higher Education « D.I. Mendeleev Russian Chemical-Technological University»
Founder	Ministry of Science and Higher Education of the Russian Federation
Year of foundation	1898 — Moscow Industrial College 1918 — Moscow Chemical Technical School 1922 —Moscow Chemical-Technological Institute 1992 — D.I. Mendeleev Russian Chemical- Technological University
Address	9, Miusskaya Squ. Moscow, 125047,
Rector	Alexander Mazhuga, Doctor of Chemistry, Professor
License	Series 90Л01 №8964 reg. № 1930 of 08.02.2016 permanent
State accreditation	Certificate of State Accreditation Series 90A01 № 3313, reg. №3153 from 19.06.2019 until 19.06.2025
State accreditation	6976 5495 Full time 6438 Part time 63 Off site 475

INFORMATION ON THE STUDY PROGRAMMES UNDERGOING ACCREDITATION

Educational programmes	«Chemical technology» (18.03.01), «Chemical technology» 18.04.01), «Energy and resource-saving processes in chemical technology, petrochemistry and biotechnology» (18.03.02), «Energy and resource-saving processes in chemical technology, petrochemistry and biotechnology» (18.04.02), «Chemical technology of energy-saturated materials and products» (18.05.01), «Chemistry» (04.03.01), «Chemistry» (04.04.01), «Fundamental and Applied Chemistry» (04.05.01), «Chemical technology of materials of modern power engineering» (18.05.02)
Level of training / Standard period of training	<i>Bachelor degree programme / 4 years Master degree programme / 2 years Specialist programme / 5yeras</i>
Structural subdivision (Head)	Institute of Chemistry and Sustainable Development (Natalia Tarasova, Dr. of Chemical Sciences, Professor); Institute of Modern Energy Materials and Nanotechnologies (Eldar Magomedbekov, Cand. of Chemical Sc.); Faculty of Chemical and Pharmaceutical Technologies and Biomedical Drugs (Roman Yakushin, Cand. of Chemical Sc., Associate Professor) The Faculty of Sciences (Fyodor Kolokolov, Dr. of Chemical Sciences, Associate Professor) The Higher Chemical College of the Russian Academy of Sciences (Alexander Terentyev, Dr. of Chemical Sciences, Professor) Faculty of Digital Technologies and Chemical Engineering (Sergey Dudarov, Cand. of Chemical Sc., Associate Professor) Faculty of Chemical Engineering (Valery Sinditsky, Dr. of Chemical Sciences, Professor) Faculty of Petrochemistry and Polymer Materials (Igor Sirotin, Cand. of Chemical Sc., Associate Professor)
Major Departments (Heads)	Department of Cybernetics of chemical technology processes (Mikhail Glebov, Dr. of Chemical Sciences, Professor) Department of Chemistry and Technology of Organic Synthesis (Sergey Popkov, Cand. of Chemical Sc., Associate Professor) Department of Chemistry and Technology of Organic Nitrogen Compounds (Valery Sinditskii, Dr. of Chemical Sciences, Professor)

Department of Chemistry and Technology of Macromolecular Compounds (Anatoly Denisyuk, Dr. of Chemical Sciences, Professor)

Department of Technology of Rare Elements and Nanomaterials (Sergei Stepanov, Dr. of Chemical Sciences, Professor)

Department of Membrane Technology (George Kagramanov, Dr. of Chemical Sciences, Professor) Department of Chemical Technology of Plastics (Vyacheslav Kireev, Dr. of Chemical Sciences, Professor) Department of Technology of Chemical, Pharmaceutical and Cosmetic Products (Andrey Kuskov, Dr. of Chemical Sciences, Associate Professor)

Department of Chemical Technology of Polymer Composites, Paints and Coatings (Evgeniy Antipov, Dr. of Chemical Sciences, Professor)

Department of Technology of Plastics Processing (Irina Gorbunova, Dr. of Chemical Sciences, Professor) Department of Chemistry and Technology of Biomedical Drugs (Leonid Kovalenko, Dr. of Chemical Sciences, Professor)

Department of Technology of Organic Synthesis and Chemistry of Dyes (Valery Perevalov, Dr. of Chemical Sciences, Professor)

Department of Chemical Technology of Carbon Materials (Tatiana Bukharkina, Dr. of Chemical Sciences, Professor) Department of General and Inorganic Chemistry (Natalia Sviridenkova, Cand. of Chemical Sc., Associate Professor) Department of Biomaterials (Yaroslav Mezhuev, Cand. of Chemical Sc., Associate Professor)

Department of Chemical Technology of Basic Organic and Petrochemical Synthesis (Roman Kozlowski, Dr. of Chemical Sciences, Professor)

Department of Innovative Materials and Corrosion Protection (Tigran Vagramyan, Dr. of Chemical Sciences, Professor)

Date of site visit April, 20-22, 2021

Persons responsible for accreditation Dmitry Lopatkin, Candidate of Economics, Head of the Department for Qualit, Licensing and Accreditation Fyodor Kolokolov, Dr. of Chemical Sciences, Dean of the Faculty of Sciences

NUMBER OF APPLICANTS ENTERING THE EDUCATIONAL PROGRAMMES



«Химическая технология» (18.03.01),

«Энерго- и ресурсосберегающие процессы в химической технологии, нефтехимии и биотехнологии» (18.03.02),

«Химическая технология энергонасыщенных материалов и изделий» (18.05.01),

«Химическая технология» (18.04.01), «Энерго- и ресурсосберегающие процессы в химической технологии, нефтехимии и биотехнологии» (18.04.02), «Химия» (04.03.01),

«Химия» (04.04.01), «Фундаментальная и прикладная химия» (04.05.01),

«Химическая технология материалов современной энергетики» (18.05.02)

SAMPLING RESULTS OF THE NATIONAL AGGREGATED RANKING **BY SUBJECT**

HET

04.00.00 Chen	nistry		
04.03.01 «Che	mistry»,		Premier
04.04.01 «Che	mistry»,		League
04.05.01 «Fund	amental and Applie	ed Chemistry»	
19.02.01 «Cho			
18.03.01 «Che 18.04.01 «Che	mical Technology»,		
18.03.02 «Ene	rgy- and resource-sa	aving processes in chemical	
tech	nology, petrochemis	stry and biotechnology»,	Premier
18.04.02 «Ene	rgy- and resource-sa	aving processes in chemical	League
18 05 01 «Che	mical technology of	energy-saturated materials and	
prod	ucts»,	energy saturated materials and	
18.05.02 «Che	mical technology of	materials of modern power	
engi	neering»		
National Aggreg	ated Ranking of HEI	ls	1 League
Total number of	Integrated Groups	of Training Areas (IGTA) delivered	13
in the HEI			
Distribution of I	GTA according to the	e Leagues	
League	Number of IGTA	1 4	• Премьер-
Premier	4	8% 31%	лига
League		2	- I Лина
League 1	6	15%	• 2 лига
League 2	2		• 3 лига
League 3	0	6	• 4 лига
League 4	1		



04.0	0.00	0 Ch	emistry
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League	Number of HEIs
Premier League	19
League 1	11
League 2	24
League 3	21
League 4	19

18.00.00 Chemical Technologies

League	Number of HEIs
Premier League	16
League 1	7
League 2	30
League 3	14
League 4	21

ACHIEVEMENTS OF THE EDUCATIONAL PROGRAMME

Quality of implementing the educational programmes

The main quality control processes are surveys of students, teaching staff and employers.

The quality control of education at the university level is carried out by the Educational Department together with the Quality Management Department, as well as with the International Academy of Business "Mendeleev".

Issues related to educational activities and the organization of the educational process, including its methodological support, are considered at meetings of the Methodological Commission of the D.I. Mendeleev Russian State Technical University.

Provision of up-to-date education

In order to improve the basic study programmes of bachelor's degree, master's degree, specialist degree of the D.I. Mendeleev RTU the University involves employers to design the content of the programmes.

An unscheduled adjustment of training goals and results is provided in the event of a change (alteration) of the Federal State Educational Standard, the introduction of new professional standards, based on the results of internal monitoring.

Teaching staff

The percentage of the teaching staff having academic degrees and titles is 77.49% (04.03.01 Chemistry (bachelor's degree)); 72.27% (04.05.01 Fundamental and Applied Chemistry (specialty)); 98.87% (04.04.01 Chemistry (Master's degree)); 84.14% (18.03.01 Chemical Technology (bachelor's degree)); 76.71% (18.03.02 Energy and resourceprocesses chemical technology, petrochemistry saving in and biotechnoloav (bachelor's dearee)); 68.05% (18.05.01 Chemical technology of energy-saturated materials and products (specialist programme)); 90.73% (18.05.02 Chemical technology of modern energy (specialist programme)); 93.53% (18.04.01 materials Chemical technology (master's degree)); 92.61% (18.04.02 Energy and resourcesaving processes in chemical technology, petrochemistry and biotechnology (master's degree)).

Independent assessment of student learning outcomes

In 2020/2021, students of the following training areas: "Chemistry" (04.03.01), "Chemical Technology" (18.03.01), "Energy and resourcesaving processes in chemical technology, petrochemistry and Biotechnology" (18.03.02), "Biotechnology" (19.03.01), "Management" (38.03.02) – in total, more than 150 students participated in the FEPO project and, having successfully fulfilled all criteria, received a quality certificate.

Independence and objectivity of evaluation of learning outcomes in educational programmes in the cluster is also achieved by students' participation in national and international Olympiads (Olympiad "I am a professional", Olympiad in the Russian Language and Literature of D.I. Mendeleev Russian State Technical University, Olympiad in Mathematics of D.I. Mendeleev Russian State Technical University). Mendeleev national Student Pharmaceutical Olympiad, national Student Olympiad "Chemical Technology of energy-saturated materials and products", national Student Olympiad in the discipline "Chemistry and Physics of Polymers", Gazprom Student Olympiad in Chemical Technology, International Olympiad on Processes and Devices of Chemical Technology), in prestigious conferences/seminars/competitions (International Congress of Young Scientists in Chemistry and Chemical Technology "MKHT", International Scientific Conference of Students, graduate students and young scientists "Lomonosov", All-Russian Scientific Conference "Morkovnikovskive Readings" WSOC, IOH RAS Youth Conference, World Congress on Advanced Pharmacy and Clinical Research, etc.)

Learning Resources

Students' access to modern library and information resources is provided by the Information and Library Center (IBC).

Formation of electronic portfolios of students, recording and analysis of the results of the current certification pedagogical interaction in the "teacher - student" system, interaction with deans in the "online" mode, access to curricula and RAP - are carried out in the electronic information and educational environment of the university.

The EIOS 2.0 project is being implemented, the purpose of which is to develop an updated system that represents a single educational space.

Research

According to the decision of the state examination board, the results of at least 30% of the bachelor's degree program, 80% of theses of the specialist training program and up to 90% of master's theses are recommended for publication annually. The share of WRC, the results of which have found practical application in enterprises and organizations, is at least 50%.

Teachers are engaged in research activities within the framework of various programs initiated by the state and various non-governmental foundations and companies, in which funding is provided not only for the salaries of performers, but also for the purchase of equipment, consumables, participating in conferences, etc.

Academic mobility of students

D.I. Mendeleev RCTU has more than 120 agreements with universities and organizations from 35 foreign countries: France, Germany, Great Britain, Ireland, Switzerland, Finland, Italy, Japan, USA, Czech Republic, Poland, Hungary, Serbia, Chile, Egypt, Tunisia, Syria, Libya, China, South 10

Korea, Vietnam, Norway, Guinea, Bulgaria, Singapore, Greece, Iran, Netherlands, Mexico, Spain, Austria, Ecuador, Mongolia, Myanmar and 7 CIS countries: Ukraine, Kazakhstan, Kyrgyzstan, Belarus, Uzbekistan, Tajikistan, Azerbaijan.

Employability of graduates

83% of the graduates in 2020, got a job in the field of their training

International projects

The main partners of the University, with whom there is close continuous cooperation, are: the State Company of the Socialist Republic of Vietnam HighTechnologyApplicationCompany (HITACO) and the Ministry of Science and Technology of the Republic of the Union of Myanmar. The main points of bilateral cooperation are contract training of citizens of the above countries.

The University also successfully works with:

- International Laboratory of Functional Materials Based on Glass named after Academician P.D. Sarkisov. Foreign specialists from Japan, Italy, Germany, USA, France, Belarus are involved in the work of the laboratory;

- International Educational and Research Center for the Transfer of Pharmaceutical and Bio-technologies.

- The UNESCO Department "Green Chemistry for Sustainable Development" continues work on the TEMPUS 530620 project "Lifelong Learning and Master's degree in innovative technologies in the field of energy conservation and environmental control at Russian universities with the participation of employers" GREENMASTER.

The main international projects of the D.I. Mendeleev Russian Chemical-Technological University:

1. Establishment of a branch of the D.I. Mendeleev Russian Chemical-Technological University in Tashkent (Republic of Uzbekistan). The project will be completed in May 2021 with the opening of a new university campus of the Branch.

2. Placement of information on the educational rograms of the D.I. Mendeleev Russian Chemical-Technological University in the journal in Chinese "Education in Russia".

EXTERNAL REVIEW PANEL



Nikolay Prokopov (Moscow)

Review Chair, Russian expert

Doctor of Chemical Sciences, Professor, First Vice-Rector, Professor of the Department of Chemistry and Technology of High Molecular Compounds, MIREA - Russian Technological University, member of the Guild of Experts in Higher Education

Nominated by the Guild of Experts in Higher Education



Sergey Lanovetsky (Berezniki)

Deputy Review Chair, Russian expert

Doctor of Technical Sciences, Associate Professor, Dean of the Faculty of Engineering, Technology and Management of the Berezniki Branch of the Perm National Research Polytechnic University, member of the Guild of Experts in Higher Education

Nominated by the Guild of Experts in Higher Education



Vasily Semenov (Moscow)

Panel Member, representative of employers

Candidate of Economic Sciences, Vice-President of the Russian Union of Chemists, Chairman of the Council of Chemical Industry Veterans

Nominated by the Russian Union of Chemists Panel

Marina Grigorieva (Moscow)

Panel Member, student representative

5th year student of the A.P. Nelyubin Institute of Pharmacy of the I.M. Sechenov First Moscow State Medical University of the Ministry of Health of the Russian Federation

Nominated by the I.M. Sechenov First Moscow State Medical University of the Ministry of Health of the Russian Federation



COMPLIANCE OF THE EXTERNAL REVIEW OUTCOMES WITH THE STANDARDS

STANDARD 1. Policy (goals, development strategy) and quality assurance procedures of the educational programme

Compliance with the standard: **full compliance**

Good practice:

The University has a stable reputation in the academic community and among employers; the staff and administration of the University are interested in forming a positive image of the University, all their actions are aimed at maintaining a mechanism for continuous improvement of the quality of the educational process.

The University has formed an integral education quality management system, which includes both the maintenance and development of the current quality management system of the educational organization, and a mechanism for the use of tools for internal and external independent assessment of the quality of education.

Availability of resources (human, logistical and other) to ensure an internal quality assurance system.

Areas for improvement:

It is recommended to develop tools for rapid response to the changing conditions of the modern labor market through effective communication with employers in Moscow and the Central Federal District.

When conducting internal monitoring of the assessment of the quality of education, it is recommended to include information related to the development of the University in the questionnaire for students.

In order to attract students to the issues of improving the quality of education, it is recommended to create a student council on the quality of education.

STANDARD 2. Design and approval of programmes

Compliance with the standard: **full compliance**

Good practice:

The presence of a transparent and clear mechanism for the development, updating and adjustment of educational programs.

Participation in the development and formation of the content of the educational programmes of significant employers and representatives of specialized organizations.

Annual review and clarification of educational programmes with general coordination by the Chairman of the Educational and Methodological Committee.

Information on all educational programmes of the cluster is open and freely available on the university's website.

Areas for improvement:

It is recommended to introduce the practice of joint development, approval and adjustment of the cluster of educational programmes with foreign partners.

It is recommended to introduce in the variable part of the curriculum a block of disciplines that form professional competencies, delivered in English.

It is recommended to include representatives of the student council in the committees for the development of educational programmes/

STANDARD 3. Student-centered learning and assessment Compliance with the standard: **full compliance**

Good practice:

The possibility of students' participation in the formation of an educational path.

Active participation in the procedures of external independent assessment of the quality of education (assessment of the quality of the conditions for the implementation of educational activities, FEPO, etc.).

Students and teachers were able to adapt to the situation of transition to distance learning in the shortest possible time without compromising the quality of education, which indicates not only personal adaptability, but also a high level of their technological competencies.

A programme for the development of students' language competencies has been implemented through the programme "Translator in the field of professional communications", which can be mastered in parallel with the main educational programme.

Areas for improvement:

It is recommended to continue work on the adaptation of some RCTU buildings for persons with disabilities.

It is recommended to develop a programme for students' participation in events for an independent external assessment of the quality of training of students (FEPO, FIEB, etc.).

It is recommended to introduce additional professional programmes for working professions (for example, a chemical analysis laboratory assistant) when forming individual educational path.

STANDARD 4. Student admission, support of academic achievements and graduation

Compliance with the standard: **full compliance**

Good practice:

The systematic nature of career guidance work. Career guidance events are held within the framework of Chemistry Olympiads, open door days, research competitions, preparatory courses, "University Saturdays", etc.

Systematic work to monitor the academic performance of students.

The availability of an effective system of motivation of academic performance of students based on the ranking of students in the semester.

Availability of information about the rules of admission to the University, about the requirements for entrance examinations, procedures for admission (transfer) of students from other educational organizations, recognition of qualifications, periods of study and previous education.

Students have the opportunity to conduct research and project work on the basis of leading research institutes.

Flexible mechanism of financial incentives for research activities.

Availability of conditions for the implementation of academic mobility.

Areas for improvement:

By the end of 2021, it is necessary to develop local regulations regarding the procedure for issuing the European Diploma Supplement to all students and the technology for issuing the application, as well as to ensure that students are informed about this possibility.

It is recommended to provide students with the opportunity to study English for free.

It is recommended to ensure an annual increase in funding for projects aimed at students' participation in international and national academic mobility programmes.

STANDARD 5. Teaching staff

Compliance with the standard: full compliance

Good practice:

The qualifications of all teachers involved in the implementation of the educational programmes under accreditation meet the requirements of the Federal State Educational Standard.

The teachers of the departments implementing the educational programmes have extensive practical experience in research organizations and industrial enterprises.

Implementation of the results of research and practical activities in the educational process in the development of work programmes of disciplines for bachelor's, specialty and master's degree programs.

Availability of an effective professional development system at the D.I. Mendeleev Russian Chemical-Technological University.

A variety of forms of financial support and non-financial motivation of the teaching staff, especially in terms of support for the development of educational, teaching and methodological publications, monographs, electronic educational resources; a variety of criteria for evaluating research, teaching and methodological activities.

Active research work: supervision of graduate students, membership in dissertation councils, defense of dissertations, publications in journals with a high impact factor, high citation indexes in Web of Science, Scopus and RSCI, participation in prestigious conferences.

Areas for improvement:

It is recommended to create conditions for teachers' internships at advanced enterprises in the areas of training.

It is recommended to develop a medium-term program of language training of the teaching staff for the preparation and implementation of educational programmes in a foreign language.

It is recommended to conduct a survey of employers corresponding to the profile of accredited areas and specialties to assess the possibility of their involvement in educational activities (reading review and problem lectures, conducting master classes, research and practical seminars, etc.).

It is recommended to develop a programme of advanced training and professional retraining of the teaching staff in leading universities of Russia and foreign countries.

It is necessary to ensure an increase in the number of invited foreign teachers up to 10% of the teaching staff implementing the educational programmes under accreditation, for lecturing in the latest areas of modern Chemistry.

STANDARD 6. Learning resources and student support Compliance with the standard: **full compliance**

Good practice:

The developed material and technical basis, including the availability of expensive and unique equipment, makes it possible to effectively organize not only educational, but also research work at a high level.

Licensed access to a large number of domestic and foreign databases obtained within the framework of the National Library competition has been provided. High quality of information and library services.

The social infrastructure of the University ensures the availability of quality education for students of different abilities and age groups. The development of educational process support services and student associations contributes to effective training, professional and cultural development of students.

The necessary conditions have been created for students to study, including for people with disabilities.

Areas for improvement:

It is recommended to systematically update the software in accordance with current trends in education.

It is recommended to develop a programme for the creation of specialized laboratories with the involvement of funds from partner enterprises.

It is recommended to increase the efficiency and competitiveness of students through academic mobility within the framework of international programmes that are implemented jointly with foreign strategic partners of the University.

STANDARD 7. Collection, analysis and use of information for managing the educational institution

Compliance with the standard: **full compliance**

Good practice:

The University has in place an electronic information and educational environment. The educational process is managed using the 1C: Student system.

Conducting annual monitoring to assess students' satisfaction with the quality of the organization of the educational process.

Complete and reliable information about the educational programmes is available to applicants and students.

Effective interaction of the teaching staff with students through SDO "Moodle" has been implemented.

Areas for improvement:

It is recommended to automate the procedure of conducting sociological surveys of various participants in the educational process in order to increase the proportion of respondents and increase the reliability of the information received.

It is recommended to ensure the full functioning of the electronic information and educational environment by the end of 2021, as the main unified space for interaction of all participants in the educational process.

It is recommended to create an objective mechanism for collecting information about the employment of university graduates.

STANDARD 8. Public information

Compliance with the standard: **full compliance**

Good practice:

The information content of the official website of the University is at a fairly high level and is available to various groups of interested persons (including foreign citizens and persons with disabilities).

The interaction of the teachers of the departments with various state corporations, foundations, research organizations, professional communities increases public awareness about the educational programmes.

The press service of the University is actively and comprehensively working to increase the awareness of the D.I. Mendeleev Russian State Technical University and to form a positive perception of the image of the higher educational institution among the public.

Areas for improvement:

It is recommended to develop a full-fledged English version of the University's website by 2022 to increase its competitiveness in the global market of educational products and services.

It is recommended to develop an information section "Our Graduates" by the end of 2021, which will allow employers to post feedback on the practical activities and success stories of graduates.

It is recommended to update information on the employment of graduates for the last 2 years on the official website.

STANDARD 9. On-going monitoring and periodicssessment of the educational programmes

Compliance with the standard: full compliance

Good practice:

Constant updating of the programmes, educational and methodological, organizational documentation in accordance with internal regulations.

The annual review of educational programmes, taking into account the feedback on the satisfaction of students, employers and representatives of the key specialized organizations, makes it possible to adjust educational programmes to improve their content

The curriculum, calendar training schedule, work programmes of the disciplines are formed in a specialized package of programs "PLANS".

The availability of a monitoring system and conducting regular surveys of all stakeholders of the educational process.

Areas for improvement:

It is recommended to carry out work to involve professional communities, associations and strategic partners of the University in the development and implementation of educational programmes.

It is necessary to promptly amend the Regulation "On the procedure for organizing and implementing educational activities for educational programmes of higher education - bachelor's degree programs, specialty programs, master's degree programs at the D.I. Mendeleev Russian Chemical-Technological University", in terms of involving employers and students in the design of educational programmes, as well as their participation in the examination of intermediate learning outcomes for these programmes, at least once a semester.

It is recommended that during the annual updating of educational programmes to take into account the requests of enterprises in terms of specifying the topics of final qualification works.

It is recommended, starting from 01.09.2021, to involve employers in conducting intermediate attestations (under contract) in special disciplines of the curriculum.

STANDARD 10. Cyclical external quality assurance of the educational programmes

Compliance with the standard: **full compliance**

Good practice:

D.I. Mendeleev Russian Chemical-Technological University confirmed the high level of quality of training of students on the basis of passing an external examination of educational activities during the state accreditation procedure of the educational programmes. Constant participation of the University in highly rated assessment systems with the achievement of high positions. In the ranking of universities located in Eastern Europe and Central Asia, QS World University Rankings, RCTU ranks 36th out of 87 among Russian universities according to the data for 2020.

External evaluation of the quality of educational programmes is carried out on a regular basis with the involvement of representatives of the professional community and key employment partners in these procedures.

Areas for improvement:

Continue working to improve the University's position in Russian and international subject rankings (QS, ARWU, ARES, RAEX, Forbes) and participate in independent procedures for evaluating the quality of educational programmes.

It is recommended to prepare and take part in the international assessment of the quality of the accredited educational programmes in the 2021/2022 academic year.

It is recommended, starting from 01.09.2021, to conduct mandatory review of all educational programmes by employers and /or their associations, informing all stakeholders about the results of the review.

DISTRIBUTION DIGRAM OF THE EXTERNAL REVIEW OUTCOMES



- Standard 1. Policy (goals, development strategy) and quality assurance procedures of the educational programmes
- Standard 2. Design and approval of programmes
- Standard 3. Student-centered learning, teaching and assessment
- Standard 4. Student admission, support of academic achievements and graduation
- Standard 5. Teaching staff
- Standard 6. Learning resources and student support
- Standard 7. Collection, analysis and use of information for managing the educational institution
- Standard 8. Public information
- Standard 9. On-going monitoring and periodic assessment of the educational programmes
- Standard 10. Cyclical external quality assurance of the educational Programmes

CONCLUSION OF THE EXTERNAL REVIEW PANEL

Based on the self-evaluation report analysis, documents and data submitted the External Review Panel has come to the conclusion that the cluster of educational programmes the cluster of educational programmes «Chemical technology» (18.03.01, 18.04.01), «Energy and resourcechemical technology, processes in petrochemistry and saving biotechnology» (18.03.02, 18.04.02), «Chemical technology of energysaturated materials and products» (18.05.01), «Chemistry» (04.03.01, 04.04.01), «Fundamental and Applied Chemistry» (04.05.01), «Chemical technology of materials of modern power engineering» (18.05.02) delivered by D.I. Mendeleev Russian Chemical-Technological University fully comply with the standards and criteria of public accreditation of the National Centre for Public Accreditation.

The Panel recommends that the National Accreditation Board accredit the cluster of educational programmes the cluster of educational programmes «Chemical technology» (18.03.01, 18.04.01),

«Energy and resource-saving processes in chemical technology, petrochemistry and biotechnology» (18.03.02, 18.04.02), «Chemical technology of energy-saturated materials and products» (18.05.01), «Chemistry» (04.03.01, 04.04.01), «Fundamental and Applied Chemistry» (04.05.01), «Chemical technology of materials of modern power engineering» (18.05.02) delivered by D.I. Mendeleev Russian Chemical-Technological University for the period of 6 years.