



SUMMARY REPORT

on international public accreditation of the cluster of educational programmes in

```
«Chemistry» (04.03.01, 04.04.01),
«Chemical Technology» (18.03.01),
«Energy and Resource Saving Processes in Chemical Technology, Petrochemistry and Biotechnology»
(18.03.02),
«Pharmacy» (33.05.01)
```

Delivered by the Federal State Budgetary Educational Institution of Higher Education «Ulianov Chuvash State University»

While preparing this presentation we used information from the Self Evaluation Report and the Report of the External Review Panel of the cluster of educational programmes «Chemistry» (04.03.01, 04.04.01), «Chemical Engineering» (18.03.01), «Energy and Resource Saving Processes in Chemical Technology, Petrochemistry and Biotechnology» (18.03.02), «Pharmacy» (33.05.01), delivered by the Federal State Budgetary Educational Institution of Higher Education «Ulianov Chuvash State University».

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

CONTENTS

| General information on educational institution | 4 |
|--|----|
| Information on the educational programmes undergoing accreditation | 5 |
| Achievements of the educational programmes | |
| Good practice | 12 |
| Recommendations | 14 |
| Distribution digram of the external review outcomes | 16 |
| Conclusion of the external review panel | 17 |
| Schedule of the site visit of the external review panel | 18 |

GENERAL INFORMATION ON EDUCATIONAL INSTITUTION

Full name of the educational institution

Federal State Budgetary Educational Institution of Higher Education «Ulianov Chuvash State University»

Founders

Ministry of Education and Science of the Russian

Federation

Year of foundation

1967 – Ulianov Chuvash State University 2011 – Federal State Budgetary Educational

Institution of Higher Professional Education

«Ulianov Chuvash State University» 2016 – Federal State Budgetary Educational Institution of Higher Education «Ulianov

Chuvash State University»

Location

Moscovskiy Prospect 15, Cheboksary, Chuvash

Republic, 428015

Rector

Andrey Yurievich Aleksandrov, Candidate of Economic

Sciences, Associate Professor

License

Series 90Л01 №9318 reg. № 2276 dated 19.07.2016

permanent

State Accreditation Certificate of State Accreditation Series 90A01 № 355, reg. №352 dated 29.12.2012 valid till 29.12.2018

Number of students

17287 including:

> full-time 8948 on-site and off-site 2229 part-time 6110

INFORMATION ON THE EDUCATIONAL PROGRAMMES UNDERGOING ACCREDITATION

Educational programmes «Chemistry» (04.03.01), «Chemistry» (04.04.01),

«Chemical Technology» (18.03.01),

« Energy and Resource Saving Processes in Chemical Technology, Petrochemistry and

Biotechnology » (18.03.02), «Pharmacy» (33.05.01)

Level of training / Standard period of training

Bachelor's degree programme / 4 years Master's degree programme / 2 years Specialist's degree programme / 5 years

Structural subdivision (head) Chemical and Pharmaceutical Faculty (Doctor of Chemical Sciences, Professor Nasakin Oleg Evaenievich)

Major departments (heads)

Department of General, Inorganic and Analytical Chemistry (Doctor of Chemical Sciences,

Professor A. Lvschikov)

Department of Organic and Pharmaceutical Chemistry (Doctor of Chemical Sciences, Honoured Science Worker of the Russian

Federation, Professor O. Nasakin)

Department of Physical Chemistry and High-Molecular Compounds (Doctor of Chemical

Sciences, Professor N. Koltsov);

Department of Chemical Technology and Environment Protection (Candidate of Chemical Sciences, Associate Professor T. Konstantinova).

Date of the site visit

29 November - 01 December, 2016

Person responsible for public accreditation of the study programme

Nikolai Ivanovich Koltsov, Doctor of Chemical Sciences, Professor, Deputy Dean for Academic Affairs of the Chemical and Pharmaceutical

Faculty

SAMPLING RESULTS OF THE PROJECT «THE BEST EDUCATIONAL PROGRAMMES OF INNOVATIVE RUSSIA»

| Indicators | 2016 | | | |
|--|-----------------|--|--|--|
| Cluster of the educational programmes «Chemistry» (04.03.01, 04.04.01), «Chemical Technology» (18.03.01), « Energy and Resource Saving Processes in Chemical Technology, Petrochemistry and Biotechnology» (18.03.02), «Pharmacy» (33.05.01) | | | | |
| Number of the given programmes in the RF | 338 | | | |
| Number of higher educational institutions to offer the given programmes | 152 | | | |
| Number of programmes – winners of the project (% from total amount of these programmes offered in the RF) | 101 (29,88%) | | | |
| Chuvash Republic | | | | |
| Number of the given programmes offered in the region | 5 | | | |
| Number of programmes – winners of the project (% from total amount of these programmes offered in the region) | 5 (100,00%) | | | |
| Number of higher educational institutions and branches in the region | 21 | | | |
| Total number of programmes offered in the region | 135 | | | |
| Total number of programmes – winners of the project (% from total amount of these programmes offered in the region) | 16 (11,85%) | | | |

REFERENCE DATA ON STUDENT ENROLLEMENT FOR **EDUCATIOANL PROGRAMMES**



Энерго- и ресурсосберегающие процессы в химической технологии, нефтехимии и биотехнологии (18
 Фармация (33.05.01)

ACHIEVEMENTS OF THE EDUCATIONAL PROGRAMMES

Quality of the delivered educational programmes

Quality of the delivered educational programmes is ensured by the document «The strategy of inner quality assurance of the Federal State Budgetary Educational Institution of Higher Education «Ulianov Chuvash State University» that complies with the University development strategy. In 2011 Chuvash State University (CSU) underwent public accreditation and confirmed the status of the classical university.

Providing up-to-date contents of education

The up-to-date content of education is ensured by monitoring and review of the educational programmes, use of research results of the teaching staff in the educational process, extending the cluster of the master's programmes with the account of the offers from the teachers, students and main employers that allow to modernize the educational process.

Teaching staff

The educational process on the level of undergraduate studies involves 94% of teachers with academic degrees, 16% of them are Doctors of Sciences. On the level of specialist programme it involves 94% of teachers with academic degrees, 16% of them are Doctors of Sciences. On the level of the master's programme there are 94% of teachers with academic degrees, 27% of them are Doctors of Sciences. Leading practitioners from corresponding areas of activity are involved in the educational process under the terms of secondary employment.

Independent assessment of knowledge

Since 2012 the University carries out annual attestation of students in the form of Internet testing as part of the project «Internet Training Systems in the Sphere of Education» by the Scientific Research Institute of Education Quality Monitoring (there is a certificate of quality Nº 2016/1/151 dated 22.07.2016). Independent assessment of education quality in the field of study 04.03.01 (020100.62) «Chemistry» was carried out from 1 of March to 2 of June 2016 under the project «The Federal Internet Exam in the Sphere of Professional Education». Since 2016 initial certification of specialists of the field of study «Pharmacy» is carried out at the Chemical and Pharmaceutical Faculty.

Educational resources

There are special classrooms and laboratories at the Faculty that are provided with modern presentation equipment, research laboratories, the laboratory of objectively organized pharmaceutical exam, the common use centre, computer classrooms and laboratories provided with computers interconnected in the local network with a dedicated server, access to the Internet and licensed software. Such software programmes

as the reference system on chemical compounds and spectra «ISIS Base», «Ecologist 3», «ChemCAD», «Diamond» and application software packages for statistical data processing are established on the educational server and in a computer classroom. There is an access to the scientific e-library of RFBR, to the publishing companies The Royal Society of Chemistry, Springer, electronic and full-text databases Springer Materials, ZentralBlatt MATH (ZM) and others.

Research activity

In 2016 total scope of works on 21 topics was 21 million rubles that is 5 times higher than in 2014. The number of published articles in the leading journals of Scopus and Web of Science is increasing steadily. In 2011-2016 90 works were published. In 2016 the percentage of articles in the journals with the impact factor of more than 2 surpassed 30%. In 2015 9 youth grants UMNIK were won.

Academic mobility of students

Work on students' involvement in research and academic activities on national and international levels is carried out at the Departments. The students actively participate in different national and international conferences. Due to the programmes of academic mobility the students go abroad to study (for example, in the University of Erzurum in Turkey, in Henan University in China). 43 foreign students from Syria, Algeria, Morocco, Congo, Namibia, Saudi Arabia, Iraq, Tunisia, Egypt, Lebanon, Turkmenistan, Kirgizstan and Uzbekistan study on the programme «Pharmacy».

Employability of graduates

In 2015 and 2016 employability of graduates was 100%. 68% of 2015 graduates and 57% of 2016 graduates continue their education on the master's degree programme «Chemistry»; 40% and 28% respectively continue their education on the programme «Chemical Technology»; 20% и 27% respectively continue their education on the programme «Energy and Resource Saving Processes in Chemical Technology, Petrochemistry and Biotechnology».

International projects

In 2013-2016 39 contracts and agreements on cooperation with foreign universities were signed.

The educational programme «Chemistry» (04.03.01) successfully underwent independent assessment of education quality on certified accreditation pedagogic assessment tools as part of the project «The Federal Internet Exam in the sphere of Professional Education» (Certificate of quality N° 2016/1/151 dated 22.07.2016 r.).



9

В.Г. Наводнов

EXTERNAL REVIEW PANEL



Nataliya Gurina (Belarus)

Review Chair, foreign expert

Doctor of Biological Sciences, Professor, Dean of the Pharmaceutical Faculty of «Belarusian State Medical University»

A nominee of the Department of Higher Education of the Ministry of Education in the Republic of Belarus



Vitaliy Garkin (Russia)

Deputy Review Chair, Russian expert

Candidate of Chemical Sciences, Associate Professor, Deputy Director of the Institute of Natural Sciences in the FSAEI HE «Samara National Research University»

A nominee of the Guild of Experts in Higher Education



Maris Klavins (Latvia)

Panel member, foreign expert

Doctor of Chemical Sciences, Professor, Dr. Habil. Of Chemistry, Head of Environmental Science Department at the Faculty of Geographical and Earth Sciences in the University of Latvia, member of Academy of Sciences of Latvia

A nominee of the Quality Assurance Agency in Higher Education HEQEC



Yana Lyapina (Russia)

Panel member, representative of professional community

Head of the Quality Office of the Public Joint Stock Company «Khimprom» in Novocheboksarsk

A nominee of the Public Joint Stock Company «Khimprom» in Novocheboksarsk



Nataliya Maslova (Russia)

Panel member, representative of professional community

Head of the Department of Material and Resource Support of the Ministry of Healthcare in the Chuvash Republic

A nominee of the Ministry of Healthcare in the Chuvash Republic



Inessa Yakovleva (Россия)

Panel member, representative of students

5th year student of the Faculty of Natural Science, the programme 44.03.05 «Pedagogic Education», two educational programme specializations (Chemistry and Biology) FSBEI HE «Ulianov Chuvash State University»

A nominee of FSBEI HE «Ulianov Chuvash State University»

INFORMATION ON THE LEADING TEACHERS OF THE EDUCATIONAL PROGRAMMES

Mikhail Belikov

Candidate of Chemical Sciences, Associate Professor of the Department of Organic and Pharmaceutical Chemistry

Oleg Ershov

Candidate of Chemical Sciences, Associate Professor of the Department of Organic and Pharmaceutical Chemistry

Nikolai Koltsov

Doctor of Chemical Sciences, Professor, Deputy Dean for Academic Affairs of the Chemical and Pharmaceutical Faculty, Head of the Department of Physical Chemistry and High-Molecular Compounds, full member of the Russian Academy of Natural History (1997), Honored Scientist of the Chuvash Republic (1999), Honorary Worker of Russian Higher Education (2007, 2012)

Tatyana Konstantinova

Candidate of Chemical Sciences, Associate Professor, Head of the Department of Chemical Technology and Environment Protection

Anatoly Lyschikov

Doctor of Chemical Sciences, Professor, Head of the Department of General, Inorganic and Analytical Chemistry

Lubov Mukhortova

Candidate of technical Sciences, Associate Professor of the Department of Chemical Technology and Environment Protection

Svetlana Pavlova

Doctor of Medical Sciences, Professor, Head of the Department of Pharmacology, Clinical Pharmacology and Biochemistry; editorial board member of the journal (RSCI) «Acta Medica Eurasica (Medical News of Eurasia)»

Oleg Nasakin

Doctor of Chemical Sciences, Professor, Dean, Honored Scientist of the Chuvash Republic and Russia, Director of the master's programme «Organic Chemistry», bachelor's degree programme «Organic and Bioorganic Chemistry» and specialist's degree programme «Pharmacy»

Vladimir Sheverdov

Doctor of Pharmaceutical Sciences, Professor of the Department of Organic and Pharmaceutical Chemistry

Ivan Bardasov

Candidate of Chemical Sciences, Associate Professor of Department of General, Inorganic and Analytical Chemistry

Valery Endyuskin

Candidate of Technical Sciences, Associate Professor of the Department of Chemical Technology and Environment Protection

GOOD PRACTICE

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

Inner system of quality assurance is a hierarchically subordinate complex of documented processes providing continuous improvement of the educational institution in accordance with the mission, purposes and objectives of its development.

The Programme of the University Development for 2016-2020 was made with the account of expectations of the main stake holders.

Standard 2. Design and approval of programmes

Objectives and expected learning outcomes represented in the main educational programmes correspond to the mission, purposes and objectives of the University.

The educational programmes are oriented at regional requirements of the labour market.

The educational programmes are developed in accordance with the accepted procedures of Ulianov Chuvash State University.

Correction of the educational programmes is carried out within a strict time limit (by the beginning of an academic year).

Requirements of professional practice revealed during various independent assessments are represented in the cluster of the educational programmes «Chemistry» and «Chemical Technology».

Standard 3. Student-centered learning, teaching and assessment

Students' achievements are estimated with the help of a rating system.

Employers are involved in assessment of graduation works.

There is a Student Commission on Training Quality.

External independent assessment of education quality is in place.

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

Work on career guidance with involvement of employers is carried out.

Practice is organized with the account of further employment of students.

Meetings of the State Examination Board are organized in specialized enterprises and organizations.

Joint project activities of the University and the authorities of the Chuvash Republic on talented youth involvement are carried out.

Standard 5. Teaching staff

The teaching staff does active research in the sphere of Chemistry and Chemical Technology. The teachers are oriented at publication of research results in top-rated scientific journals.

There is a system of financial and nonfinancial support of teachers.

Applied research of Chemistry teachers is productive. The patents based on the results of it are protected.

Standard 6. Learning resources and student support

There is a simulation centre for successful attestation examination of the programme «Pharmacy».

There is a model of pharmacy for skill training of storage and retail trade of medicaments.

The University's infrastructure is good and promotes development of social and educational component of the educational process.

The feedback system is well developed.

There is a programme of the first-year students' adaptation.

Available resources are used effectively.

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

The teachers and students have an access to the educational resources in the academic building of the Chemical and Pharmaceutical Faculty with the help of Wi-Fi.

There is a system of the University e-governance that is renewed regularly and considers the interests of all participants of the educational process.

Standard 8. Public information

Integration with the environment, cooperation of the educational institution with different professional associations are in place.

Standard 9. On-going monitoring and periodic assessment of the educational programmes

There are regulated procedures of monitoring, periodic assessment and review of the educational programmes.

Stable and long-term relations with the leading employers of the chemical cluster of the Chuvash Republic are established.

Standard 10. Cyclical external quality assurance of the educational programmes

The Faculty regularly participates in the procedures of external assessment.

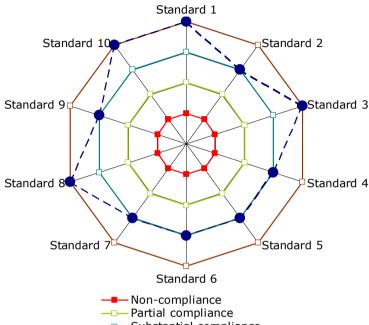
The graduates of the programme «Pharmacy» are accredited.

RECOMMENDATIONS

- It is recommended to take into account experience of leading Russian and foreign universities, current trends in the labour market development, appearance of new industrial technologies when developing new educational programmes of the Chemical and Pharmaceutical Faculty.
- 2. It is necessary to correct the main educational programme «Pharmacy» with regard to:
 - review of the bases of manufacturing practice for future pharmacists with the account of the pharmacies' production function and skill training on control over quality of medicaments and its industrial production;
 - implementation of the WHO recommendations on training of specialists with higher pharmaceutical education able to provide pharmaceutical care for the patients. This activity involves trial of necessary medical treatment with the account of pharmacoeconomics and the patient's clinical state;
 - involvement of the representatives of the republican pharmacy chain, external pharmaceutical enterprises, related faculties of Russia and neighboring countries in development and correction of the educational programme.
- It is advisable to take into account changes in environmental legislation when correcting the programme « Energy and Resource Saving Processes in Chemical Technology, Petrochemistry and Biotechnology».
- 4. It is recommended to take into account requirements of the summary document of the pan-European project TUNING «European Bachelor of Chemistry» when developing the bachelor's educational programme «Chemistry».
- 5. It is necessary to develop the format of the documents reflecting consideration of employers' recommendations and students' opinions when developing and correcting the educational programmes.
- 7. It is advisable to complete work on creation of the students' personal accounts containing information about their current and interim achievements as well as electronic versions of the course and graduation works.
- 8. It is recommended to expand the range of the elective and additional courses with the account of the students' requirements including demands of the special needs students.
- 9. It is advisable to use electronic resources for assessment of knowledge and competences more actively.
- 10. It is necessary to develop module curricula of the educational programmes with the aim of academic mobility development.

- 11. It is recommended to expand list of academic and scientific literature available for the students via the Internet.
- 12. It is advisable to publish information about achievements of the educational programmes of the Chemical and Pharmaceutical Faculty in comparison with the achievements of related faculties of Russian and foreign universities.

DISTRIBUTION DIGRAM OF THE EXTERNAL REVIEW OUTCOMES



- Substantial compliance
- -----Full compliance
- Conclusion of the ERP
- Standard 1. Policy (goals, development startegy) 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 the educational programmes «Chemistry» (04.03.01, 04.04.01), «Chemical Technology» (18.03.01), «Energy and Resource Saving Processes in Chemical Technology, Petrochemistry and Biotechnology» (18.03.02), «Pharmacy» (33.05.01), **substantially** comply with the standards and criteria of accreditation of the National Centre for Public Accreditation.

The Panel recommends that the National Accreditation Board accredit the educational programmes «Chemistry» (04.03.01, 04.04.01), «Chemical Technology» (18.03.01), «Energy and Resource Saving Processes in Chemical Technology, Petrochemistry and Biotechnology» (18.03.02), «Pharmacy» (33.05.01) delivered by the Federal State Budgetary Educational Institution of Higher Education «Ulianov Chuvash State University» **for the period of 6 years.**

SCHEDULE OF THE SITE VISIT OF THE EXTERNAL REVIEW PANEL

| Time | Activity | Participants | Venue | | | |
|----------------------|--|---|---|--|--|--|
| November 29, Tuesday | | | | | | |
| 8.20 | Arrival of the ERP at the Univers | sity | Academic Building «Γ» | | | |
| 08.30 — 10.00 | The first meeting of the external review panel. Internal meeting of the ERP | | Academic Building «Γ», Room Γ-205 | | | |
| 10.00 — 11.00 | Meeting of the ERP with the University administration and people responsible for accreditation | Rector, Vice-Rectors, Director and experts of Academic Department, people responsible for accreditation, ERP | Academic Building «A», hall of the Academic Council | | | |
| 11.00 — 12.00 | Visiting classrooms (Information Administration, display rooms, museum, classrooms, Accreditation Centre on the field of study «Pharmacy») | ERP | Academic Building «Ж», display rooms; Academic Building «Γ», Room Γ- 203; Academic Building «O», classrooms | | | |
| 12.00 — 12.15 | Transfer to the Academic Buildi | | | | | |
| 12.15 — 13.15 | Visiting classrooms (sport centre, cultural centre, library) | ERP | Academic Building I, Academic Building II | | | |
| 13.15 — 13.30 | Transfer to the University Cafe | | | | | |
| 13.30 — 14.30 | Lunch | | University Cafe | | | |
| 14.30 — 15.30 | Meeting with the Directors of the Institutes/Deans, Heads of the Graduate Departments | Dean the Chemical and Pharmaceutical Faculty, Deputy Deans, Heads of the Graduate Departments, ERP | Academic Building «O», Room O-316 | | | |
| 15.30 — 16.30 | Work with documents | ERP | Academic Building «O», Room O-312 | | | |
| 16.30 — 17.30 | Meeting with graduates | Graduates, ERP | Academic Building «O», Room O-316 | | | |
| 17.30 — 18.00 | Internal meeting of the ERP | ERP | Academic Building «O», Room O-312 | | | |
| | November 30, Wednesday | | | | | |
| 9.30 | Arrival at CSU | | Academic Building «O» | | | |
| 09.30 — 10.00 | Internal meeting of the ERP | ERP | Academic Building «O», Room O-312 | | | |
| 10.00 — 11.00 | Visiting classes at the choice of the ERP (Chemistry, Pharmacy) | ERP | Academic Building «O» | | | |
| 11.00 — | Meeting with teachers | Teachers, ERP | Academic Building «O», | | | |

| Time | Activity | Participants | Venue | | |
|----------------------|---|---|--------------------------------------|--|--|
| 12.00 | | | Room O-316 | | |
| 12.00 — 12.30 | Internal meeting of the ERP | ERP | Academic Building «O», Room O-312 | | |
| 12.30 — 13.30 | Meeting with students | Students, ERP | Academic Building «O», Room O-316 | | |
| 13.30 — 14.30 | Lunch | | University Cafe | | |
| 14.30 — 15.00 | Meeting with doctoral students, students of FVE | Doctoral students, students of FVE, ERP | Academic Building «O», Room O-316 | | |
| 15.00 — 16.30 | Work with documents | ERP | Academic Building «O», Room O-312 | | |
| 16.30 — 17.30 | Meeting with representatives of professional community | Employers, ERP | Academic Building «O», Room O-316 | | |
| 17.30 — 18.00 | Internal meeting of the ERP | ERP | Academic Building «O», Room O-312 | | |
| December 1, Thursday | | | | | |
| 9.45 | Arrival at CSU | | Academic Building «O» | | |
| 10.00 — 13.00 | Internal meeting of the ERP: discussion of preliminary results of the site visit, preparation of the oral report of the panel | ERP | Academic Building «O», Room O-312 | | |
| 13.00 — 14.00 | Closing meeting of the External Review Panel with the representatives of the University | ERP, University administration, Heads of the Graduate Departments, teachers, students | Academic Building «O», Room O-222 | | |
| 14.00 — 15.00 | Lunch | | University Cafe | | |
| | Departure | | | | |