SUSTAINABLE **DEVELOPMENT**























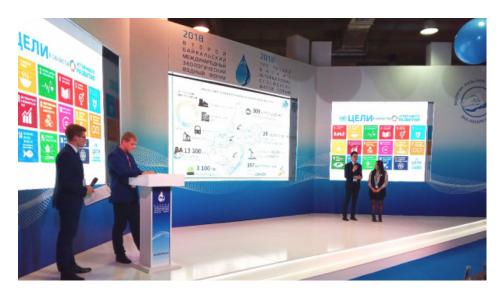




INTRODUCTION

The report provides a detailed overview and analysis of key indicators of sustainable development goals, which INRTU takes into account when conducting activities. The report is devoted to assessing the impact of universities on the implementation of the sustainable development goals formulated by the United Nations for the period up to 2030. Sustainable development is defined as development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

The Sustainable Development Goals 2015-2030, formulated by the UN, are comprehensive and indivisible, they ensure the balance of all three components of sustainable development: economic, social and environmental in 17 points. The goals are focused on 5 main aspects: people, planet, peace, prosperity and cooperation (5Ps concept).





INRTU programs against poverty

The report mirrors the INRTU approach across the themes of knowledge and standards of living. INRTU is the largest university in the Irkutsk region focused on the issues of poverty and equality. The University is taking part in global developement helping to influence policy and practices and improve people's

Student financial support

INRTU is committed to ensure that financial issues do not present an obstacle for learners. Our University generously supports students from low-income households and countries providing free education, grants, tuition discounts and portfolio contests.

2 920 students

Budget-Funded Admission

1539 students

Employer-Sponsored Admission

349 students

were transferred to **Budget-Funded Education**

5 279 students are

provided with financial

support at the sum of

353 890 800 rubles.

342 ones among them

are on complete state

21

grantees

Scholarship programs

In 2020, Russian Government allocated 5 President and

- 11 Government Scolarships to INRTU students.
- 27 INRTU students have received British Petroleum Scholarship.

Information about admission, special rights and benefits granted to applicants is availiable at

http://www.istu.edu/abiturientu/pravila priema,

http://www.istu.edu/abiturientu/osobye prava

10 scholarship programs

160 scholarship holders

5 620 000

rubles

spent on grants and awards

The INRTU Students Trade **Union** is a student representative body uniting 87% of university ungraduate and graduate students.

Legal Clinic is a scientific and creative association of INRTU students and young scientists obtaining practical skills and consolidating theoretical knowledge in the professional field by providing free legal assistance to people in need. Students have the opportunity to gain experience in counseling while studying.

> 1584 applications

967 advisory services

Social programs against poverty

Some events against poverty (and others) are held at INRTU venues (coworking center, Tochka Kipeniya, Technopark).

INRTU Tochka Kipeniya

300 sg.m convertible space for team project work

Opportunities: carrying out events and meetings, group project work, space for individual work

AeroNet unmanned aerial vehicle distributive system

MariNet maritime transport intelligent control system and the World Ocean development technology

EnergyNet distributed power generation (from personal power to smart grid and smart city)

АТЕЛЬСКИЙ

TechNet

cross-market and industry direction providing technological support of NTI market and high-technology industry

INRTU Technopark







- Entry point for technology projects
- 300 companies in the Irkutsk region received administraive and consulting support on technology commercialization
- 100 enterprises of the Irkutsk region were supported by the Technopark INRTU scientific and technical laboratories' services and received technological support
- 2 950 000 rubles were raised under the programs of the Fund for the Promotion of Innovations

INRTU provides financial aid to the local community, training for free, helping to launch a sustainable business http://www.istu.edu/deyatelnost/nauka/

- 46 research laboratories
- 24 student associations
- INRTU spends 270 000 000 rubles on research and advanced development
- 7 equiped engineering classrooms

INRTU organizes training and performs programs for everyone to improve access to basic services. INRTU participates in the development of policies at the local, regional, national and / or global levels for the implementation of programs and policies against poverty in all its aspects.

1	12						
INRTU	Rector						
Schola	arships						

Irkutsk Mayor **Scholarships**

Academic Staff Salaries twice as high comparing to the regional average

International **Academic Mobility** 26 students and academic staff



Scholarships

INRTU actively supports tallented students, orphan students and students from low-income households.



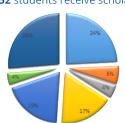


4 630 people is an average monthly number of scholarship holders

750 000 rubles were allocated from extra-budgetary funds for payment of the INRTU Academic Council Scholarships

4 456 373 rubles were received for targeted scholarships by entities

52 students receive scholarship of the Governor of the Irkutsk Region for academic success



Financial support

Amount of funds for financial support

44 140 711 rubles were spent for financial support in 2019

Health-care

Medical posts were opened and equipped at INRTU Geological Survey College and INRTU Mechanical Engineering College 2 273 325 rubles were spent for it.

Vaccination

4 100 staff and students were vaccinated against

influenza

Medical **Examination**

of 92 % of first-year students

122 staff

were vaccinated against diphtheria

Electronic system for issuing referrals

has been organized

Activities on labour safety

Education on labour safety

520 000 rubles were spent for education of **263** persons

Personal Protective equipment purchasing

2019

Production

2 400 000 rubles

2018

3 500 000 rubles

control 178 500 rubles

Additional leave for 37 persons **374 000** rubles

Sanatorium and spa treatment

560 students

were vaccinated

against tick-borne

encephalitis

1 300 000 rubles

were spent for required

medical examinations

for 6 persons **291 300** rubles

Purchase of medical kits, washing supplies and disinfectants **120 000** rubles





Measures to reduce workplace hazards **87 769 000** rubles

Sports at INRTU





2500 participants of the events

Introduction of 1C

system on Labour

protection

INRTU Patriotic education









Culture and creativity









Volunteering



organization





Socially negative phenomena prevention



partners on prevention activities







Work with persons with disabilities



31 students with disabilities total







Rehabilitation









Grant support for student initiatives



1 100 000 rubles All-Russian

competition of youth projects among the HEIs



3 000 000 rubles

All-Russian Youth Forum TerraScientia



2 650 000 rubles International

Youth Forum "Baikal"



1 500 000 rubles Youth Forum of culture and arts "Tavrida'

at INRTU

sanatorium

2 000 000 rubles All-Russian Youth Forum of small indigenous peoples

of the North, Siberia and Far East

"Russian North"



150 000 rubles Irkutsk citv

youth forum



Student body structure

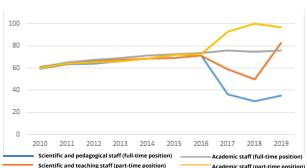
Level of education	Full-time education		Part-	Part-time education			Extramural education		
		including			including			including	
	total	Gover nment- financed	Self- funded	total	Gover nment- financed	Self- funded	total	Gover nment- financed	Self- funded
Bachelor educational programs	6142	4019	2123	106	39	67	3954	952	3002
Specialist educational programs	1622	1478	144	0	0	0	1107	250	857
Master educational programs	1787	1516	271	19	19	0	319	166	153
Postgraduate educational programs	248	200	48	0	0	0	48	0	48
Total	9799	7213	2586	125	58	67	5428	1368	4060

Quantity of realized educational programs



The number of staffJob / persons





Picture 1 - Dynamics of changes in the number of PhD employees over the years of development program implementation



E-learning. INRTU is actively working on development of the electronic educational resources and embedding them into the educational process; great attention is paid to digital educational technologies.

The number of students using these courses is 12359 people. In total, the university has developed about 1500 courses.



The "Library" section of the INRTU website contains information on book availability, including the electronic library, and on the access to various databases.



The **Engineering Holidays project** is an opportunity to dive into a university life for a week and deal with the Olympiad tasks. The event brought together about 160 high school students from Irkutsk region and Buryatia.



Center of Robotics was created on the basis of the INRTU Center of Youth Innovative Creativity "Baikal", that is a unique platform for the development of innovative creativity of the youth. Classes at the Center are conducted by students, postgraduates and teachers of various departments of INRTU. Under their supervision children learn to design, build 3D models, make prototypes of robots, learn the basics of electronics, and the basics of milling, turning and laser processing of materials.



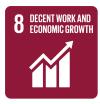
International festival of intelligent competitions for high school students "Future leaders of Eurasia" was organized by INRTU. About 100 children from Russia, China, Vietnam and Mongolia took part in the competitions on hard sciences and foreign languages.



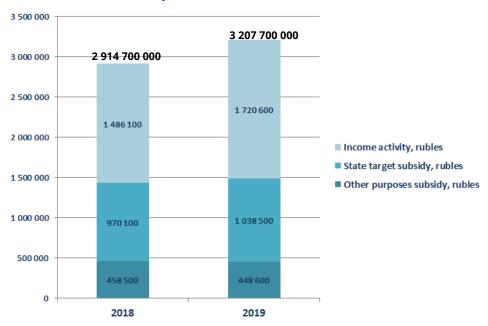
INRTU **contributed to equipping** the Ivano-Matreninskaya Children's Clinical Hospital. The endosurgical system was purchased with the proceeds, including from the sale of jewelry and art works of INRTU students at the auction of the Yuri Ten Foundation. The unique equipment allows performing minimally invasive operations with 3D visualization. The equipment transfer ceremony took place at the Center for Surgery and Reanimation of Newborns.



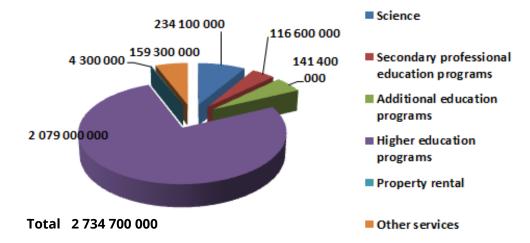
INRTU scientists have returned from an **archaeological expedition** in the northern Khuvsgul region (Mongolia). The work was carried out on July 8-27. Researchers have discovered six burials, including five female, dating of the X-XV centuries.



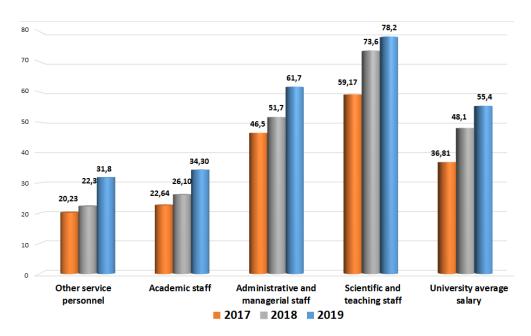
INRTU Financial Sustainability



All Sourses Revenues by business lines in 2019, rubles



Average salary by staff category in 2017 - 2019, thousand rubles



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

Scope of Research and Advanced Development Activity





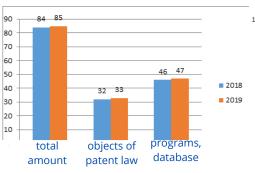




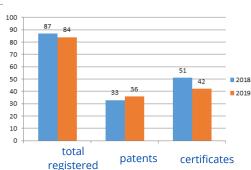
- Defence of PhD theses in INRTU Dissertation Defence Board
- Defence of PhD theses in outside Dissertation Defence Boards
- Defence of doctoral theses in INRTU Dissertation Defence Board

Intellectual Property 2019

Created Results of Intellectual Activity



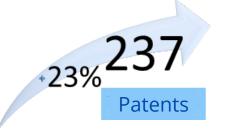
Registered Intellectual Activity Results



Number of authors of Intellectual Activity Results



Patent portfolio of INRTU



Scientific activities carried out at INRTU

10 International scientific conferences

24 All-Russian scientific conferences

20 Regional and university scientific conferences. seminars

1400 Number of reports at the conferences

522 Number of winners of scientific contests

International Forum "Baikal" is a platform for **Science and Technology**

20 scientific exhibits at the fair, federal experts' lectures, teamwork, projects defence

23 Student research projects

winners

Summer **Science School**

50 students. lectures, master classes, engineering competitions, business games, and contest of scientific projects

Avanguard of Science 3.0

The project aimed at engaging students in research and development activities for encouraging and motivation

Science Festival at INRTU

3.5 thousand students 500 schoolchildren 200 adults 3 exhibitions. 10 contests

92

Students' participation in external events



First place in the competition of UAC "Future of Aviation" and All-Russian engineering competition "Dronojabl" project



Student scientific association "Breeze" is a winner of All-Russian competitions "AQUAROBOTECH" in Vladivostok and "Solar regatta" in Kazan



The team of "Baikal Energy" is a leader of the All-Russian competition of Fuel and **Energy Sector Development Forecasts**



"Carbon", "Aviator" and "Transport Manager" are leaders of the All-Russian contest of scientific and design societies



The team of INRTU students is a bronze prizewinner of the International Championship for Young Engineers "CASE-IN"



INRTU students, who were creating bionic hand prosthesis, won the forum "Science of the Future - Science of the Young" in Sochi city

INRTU Technopark

Entrance point for technological projects

300

Enterprises of Irkutsk region received organizational and consulting support in the field of commercialization

100

Enterprises of Irkutsk region used and received technological services of INRTU Technopark research laboratories

29 500 000 rubles

attracted under the programs of Innovation **Promotion Fund**

Corporate Business Accelerators 7 directions



Mineral Resources



Fuel and Energy





Technologies for life



Metallurgy



Mechanical engineering



Wood and Paper



Urban economy

Corporate Business Accelerators 2019

28

Number of organizations participants of the corporate accelerator

Business requests

70 Number of formed project teams

Energy Lab



project teams

projects received funding from En+



The first Russian final of the global startup contest "God's Battle" ALIBABA was held in INRTU on November 7, 2019



In 2019, INRTU became the only representative of ALIBABA Global Corporation venture fund in Russia











INRTU's **base of practices in Chernorud** is a testing ground for International Geological Congress excursions, as well as a reference point for INRTU undergraduate, graduate and postgraduate students in the course of field practices and scientific research.

A.V.Sidorov Mineralogical Museum of INRTU

The total number of storage units is over 27,000 samples. The collection of the museum is being actively replenished in our time.





Health and sport camp "Polytechnik" 300 places



155 events
20 creative associations





Pedestrian policy

Development
of bicycle traffic





16 dorms for students and staff 3980 places

Saturday Voluntary Work days





Training and research laboratory for mud flush and well lining



Scholarship and grant support for students

10
scholarship programs
160
people on scholarship



grantees

5,62

million
is a total amount of grants and prizes

























INRTU is working to introduce separate collection of waste.





The university regularly collects clothes for recycling or reuse, waste paper, old batteries, holds Saturday voluntary work days, lectures, and meetings with eco-activists.





Food (organic waste) is transferred for feeding domestic animals.

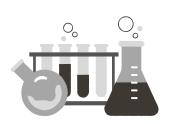








Students of INRTU suggest using plastic trash and warm asphalt in road construction.





Laboratory of Ecological Monitoring of Natural and Technogenic Environment is engaged in complex research of environmental objects and industrial waste with the use of modern analytical equipment.



INRTU Trade Union

The trade union unites scientific and teaching staff and other categories of INRTU employees - the members of the trade union. 15 people from all categories of employees were elected to become the trade union committee.

The main goal of the trade union is to implement the statutory goals and objectives for the action and protection of individual and group social, labor, professional rights and interests of the members of the trade union in interaction with the employer, public or other INRTU organizations.



INRTU Students Trade Union

The student primary trade union (SPTU) is a representative body of students, uniting 87% of undergraduate and graduate students of the university, which has been conducting activities since 1930.

Today, SPTU represents the socio-economic interests of students and protects their rights. SPTU is the body of student self-government of the university, actively develops existing student associations, and also creates new ones.







INRTU fights against organized crime, corruption and bribery

INRTU close interaction with the Irkutsk region law enforcement agencies helps to suppress corruption in the university. For this purpose, INRTU carries out anti-corruption measures. Modern Mechanism of Counteracting Corruption in the Education Sphere advanced training courses were organized as part of the anti-corruption education program for university employees.

INRTU Directors of institutes, deans of faculties and heads of departments became the first students of the courses.

The aim of the program is to improve legal literacy, systematize knowledge on legal regulation in the field of combating corruption and the formation of an anti-corruption worldview.







Constitutionalism and Power in Russia: History, Contemporary Problems and Prospects Conference

Draft Law Discussion

INRTU Tochka Kipeniya is a space for teamwork

INRTU Tochka Kipeniya - is a space for teamwork created for educational and project activities, designed for the work of students and student communities, teachers, scientists, entrepreneurs, representatives of public organizations and professional communities, which makes it possible to implement modern formats of extracurricular work for the development of over-professional and professional competencies of students.







The INRTU Rector made proposals on federal measures to support Scientific Educational Centers.



Sustainable Development Goals

INRTU is actively involved in development of national government policy on sustainable development goals, including key problems and challenges, developing policies and strategies, modeling the likely future with and without intervention, and monitoring and reporting on interventions to ensure flexible management.

Legislative drafts were proposed to the Federation Council of the Federal Assembly of the Russian Federation. The State Duma of the Russian Federation considered a bill initiated by INRTU, the federal law "on Amendments to Article 103 of the Federal Law" on Education in the Russian Federation " and Article 5 of the Federal Law " on Science and Scientific and Technical Policy". The INRTU Rector made proposals on federal measures to support Scientific and Educational Centers.

Cross-Sectoral Partnership

- INRTU initiates and participates in a cross-sectoral dialogue on the SDGs, takes part in competitions and conferences with government / NGO participation.
- INRTU employees discussed the prospects for cooperation in the digitalization of the mining industry with colleagues at MINEX RUSSIA 2019.
- International Scientific Conference on "70th Anniversary of Russian-Chinese Relations in the Context of Global Governance". Bilateral cooperation in education and science. INRTU became the only partner university of Alibaba (阿里 爸爸) in Russia.







INRTU takes part in international ratings, carries out collection work, analysis, data measurement for the SDGs, and develops measures to improve positions in the ratings and achieve the SDGs.

251-300 EECA 201-300 th THE 2020 Impact Rankings: Industry, Innovation, and Infrastructure

540 Green Metric 495
Top World leading
Universities
Academic
Rankings
Rank Pro
2018/2019

INRTU considers comparative approaches through international cooperation and research and develops international best practices for achieving the SDGs, and also willingly shares this experience.



Baikal International Education Salon. INRTU Vice-Rector for International Affairs Dmitry SAVKIN told about the experience of INRTU in the field of internationalization,

held a discussion on the development of technology education in the Russian Federation.



INRTU hosted a forum on green engineering of the Association of Sino-Russian Technical Universities (ASRTU). 15 Chinese and 9 Russian universities took part in the event



International Scientific Conference on Sustainable and Efficient Use of Energy, Water and Natural Resources/SEWAN-2019

International Cooperation

INRTU took part in 4 forums in Japan, India, Poland, Romania, where he presented reports on modern problems of energy supply, on isolated power systems, on the identification of short circuit locations on power lines, and also oversaw the work of the meeting on the development of multi-energy systems

Volunteering & Environment

INRTU collaborates with non-governmental organizations through student volunteer programs, research programs, and by developing educational resources to achieve the SDGs.

- Volunteer corps of the Irkutsk regional branch of the Russian Student Teams Youth All-Russian Public Organization
- Save the Forest regional eco-marathon
- Ecology in my future occupation project
- 360 Minutes annual volunteer action
- INRTU students and alumni are volunteers at the Worldskills Kazan 2019 World Championship in Professional Skills
- A Tree for Waste Paper. Siberia is an ecological movement with the aim to improve the environment
- INRTU project on Environmentally Friendly Technology for Processing Accumulated Colloidal Sediments of Sludge-lignin of JSC Baikalsk Pulp and Paper Mill (BPPM) won the XVI National Environmental Prize named after V.I. Vernadsky
- National Seminar on the Hague System for the International Registration of Industrial Designs and the Madrid System for the International Registration of Trademarks
- Energetics Laboratory Acceleration Program
- Meeting of representatives of the Union of Road Workers of the Irkutsk Region.
- More than 400 professionals were united by the XVII World Congress of the International Society of Mine Surveying (ISM).