



Action Plan for the Implementation of the Program

for Enhancing the Competitiveness of the NRU ITMO among the Leading World Research and Educational Centres

25th October 2013

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- 2** _____ Strategic Initiatives and Practical Solutions
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1

Target Model of NRU ITMO



Diversification in the direction of R&D



Organising
Interdisciplinary
Research



Developing
NRU ITMO's existing
competences into new
academic areas

University operating as
a business in its own right



Focus on financial
sustainability and
economic efficiency



Introducing Key
performance indicators
for departments
and for staff

Optimizing the
internationalization of
all areas of university
activity



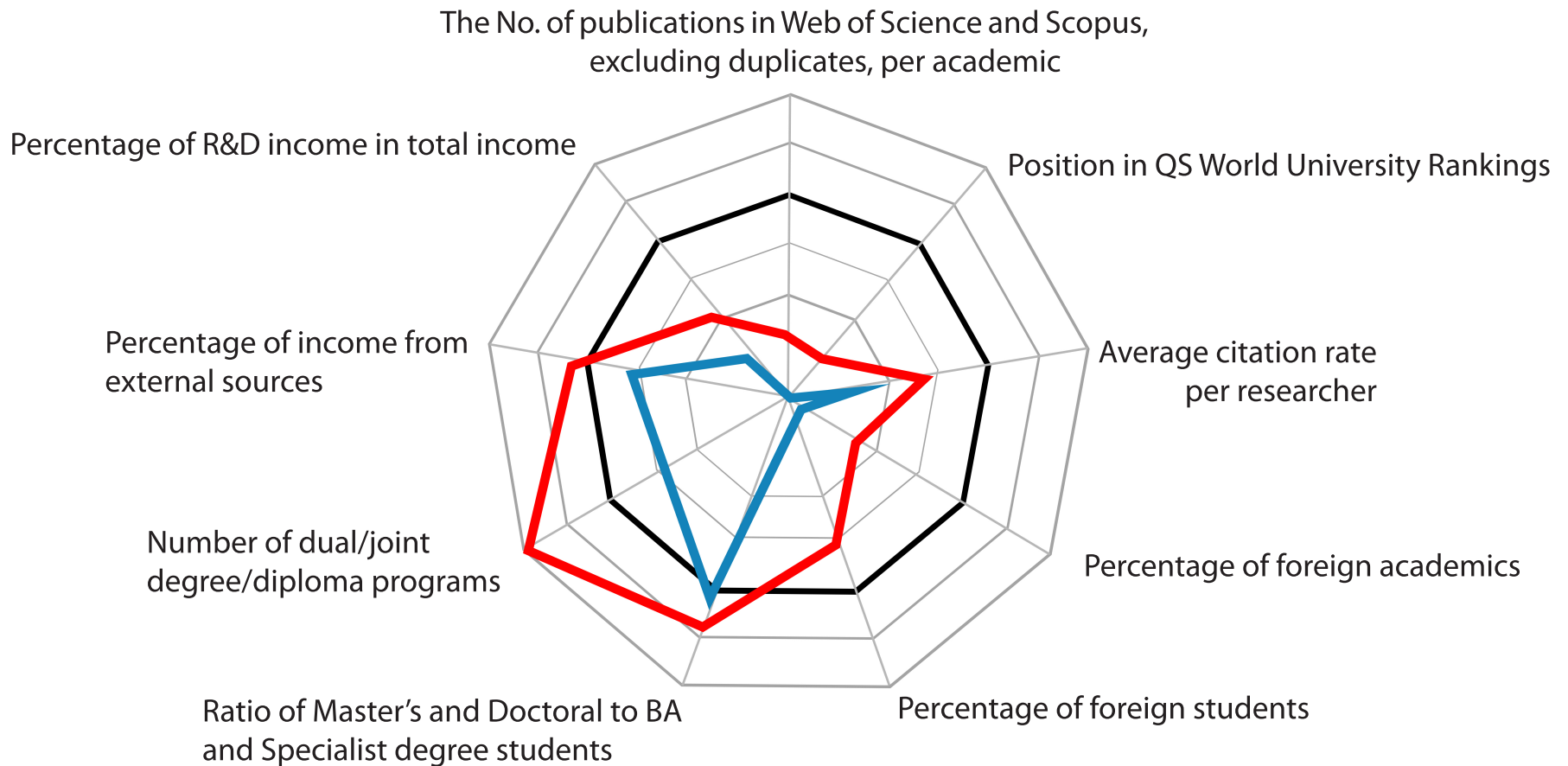
Successful positioning
of the University on
the global market

TARGET KPIs

№	Indicators	Measurement Unit	Pattern of Expected Growth	
	Main Indicators		2013	2020
1.	Position (accuracy up to 50 places) in major world rankings (overall ranking and ranking for individual subjects)			
	QS World University Ranking	Position	500+	171
	Times Higher Education Ranking	Position	n/a	257
	QS Computer Science & Information Systems	Position	500+	91
	QS Materials Science	Position	500+	201
2.	The number of research papers referred in the Web of Science and Scopus per academic, repetitions excluded	No.	0.3	2
3.	Average citation rate per researcher calculated for the aggregate of research papers in the Web of Science and Scopus databases, repetitions excluded	No.	0.65	3
4.	The percentage of foreign professors, teachers and researchers on ITMO's staff, including Russian citizens with a PhD from a foreign university	%	0.2	5
5.	The percentage of foreign students on mainstream educational programs (students from CIS countries included)	%	7.5	21.9
6.	The ratio of the average Uniform State Exam entry grade of new full-time Bachelor's degree students, whose study is financed by the federal budget, relative to the average Uniform State Exam entry grade in Russia	by number	75.7	76.4
7.	The percentage of income from external sources in total income	%	62	79.6
	Additional Indicators		2013	2020
1	The number of Master's dual and/or joint degree/diploma programs operating in collaboration with foreign partners	No.	7	100
2	The ratio of number of Master's and Doctoral degree graduates to the number of Bachelor's and Specialist degree graduates (ie face-to-face tuition)	%	50	105
3	The percentage of income from R&D in total income	%	30	48

Comparison of NRU ITMO with a Top 100 University by Key Indicators 6

 Hong Kong University of Science and Technology (2013)  NRU ITMO (2013)  NRU ITMO (2020)



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Strategic Initiatives and Practical Solutions

Strategic Initiatives (SI) within the Program

SI 1

Achievement of a world-leading position for research in a number of areas of the Sixth Cycle of Economic Development

SI 2

Integration of the University into the international community of HE on the basis of cutting-edge research activity, IT and learning technology

SI 3

A system of staff management at international standard and staff development leading to a highly-qualified professional staff team

SI 4

The development of a communications strategy that propels NRU ITMO into the domestic and international market

SI 5

The development of an innovation ecosystem which enables the University to grow to its full potential in knowledge exchange and technology transfer

SI 6

The transformation and development of the management system into the model of an Entrepreneurial University

The Impact on target KPIs

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2013 / 2020

SI1

Research

SI2

Education

SI3

Personnel

SI4

Communications

SI5

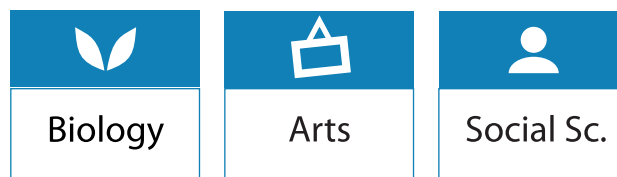
Innovations

SI6

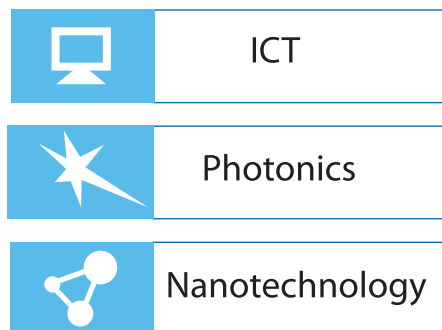
Management

Placing in QS World University rankings (by position)	- / 171			- / 171	- / 171	- / 171
The number of publications in WoS and Scopus per academic (No.)	0.3 / 2.0		0.3 / 2.0			
Average citation rate per researcher	0.65 / 3.0		0.65 / 3.0			
The percentage of foreign academics (%)	0.2 / 5.0		0.2 / 5.0			0.2 / 5.0
The percentage of foreign students (%)		7.5 / 21.9		7.5 / 21.9		7.5 / 21.9
The ratio of the average Uniform State Exam entry grade (by number)		75.7 / 76.4		75.7 / 76.4		
The percentage of income from external sources (%)	62 / 79.6				62 / 79.6	62 / 79.6
The number of Master's dual / joint degree/diploma programs (No.)	7 / 100	7 / 100				
Ratio of MA's & Doctoral degree to BA & Specialist degree students (%)	50 / 105	50 / 105				
The percentage of income from R&D in total income (%)	30 / 48				30 / 48	30 / 48

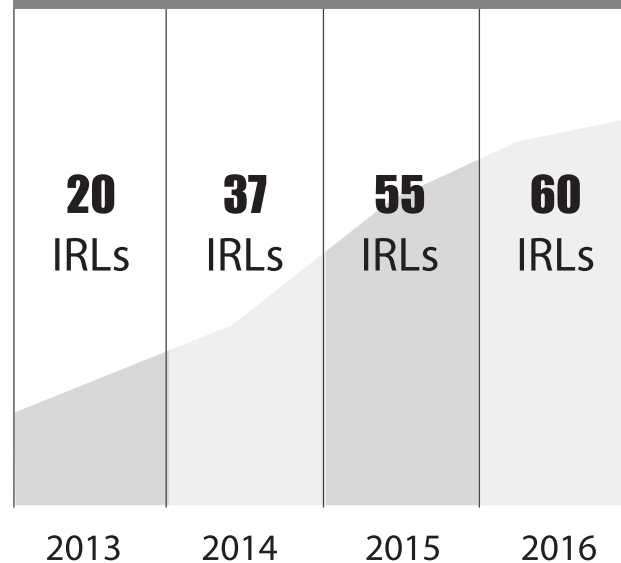
Partners' Competences



NRU ITMO Competences



International Research Labs



Centres of Excellence

- Photonics and Natural Sciences
- Smart Materials
- ICT in Economics, Social Sciences and Art
- Life Science and Health
- Advanced Manufacturing and Robotics

2017 2018 2019 2020

International Research Lab (IRL):



IRL Director - NRU ITMO leading researcher



Co-Director – researcher from the leading international research and education centre (Hirsch Index > 20)



Russian and foreign researchers, including Post-Docs



Doctoral and Master's research students

Expected outputs per year:

15- 20 publications

2-3 doctorate assessments

1-2 joint educational programs with foreign universities

1-2 appointments of foreign researchers



'Quick Wins' 2013-2014

- Creation of 20 International Research Labs (IRLs) in 2013, 17 IRLs - in 2014.
- 'ITMO Fellowships'
- 'ITMO Portfolio'
- Application for inclusion of 2 of ITMO journals in the Scopus database
- Setting up of a self-access publications database and an electronic library
- Establishment of a Center for international IP protection
- Applications for international patents starting from 2014

International Partners for the IRLs : 28 countries , 101 universities and research centers

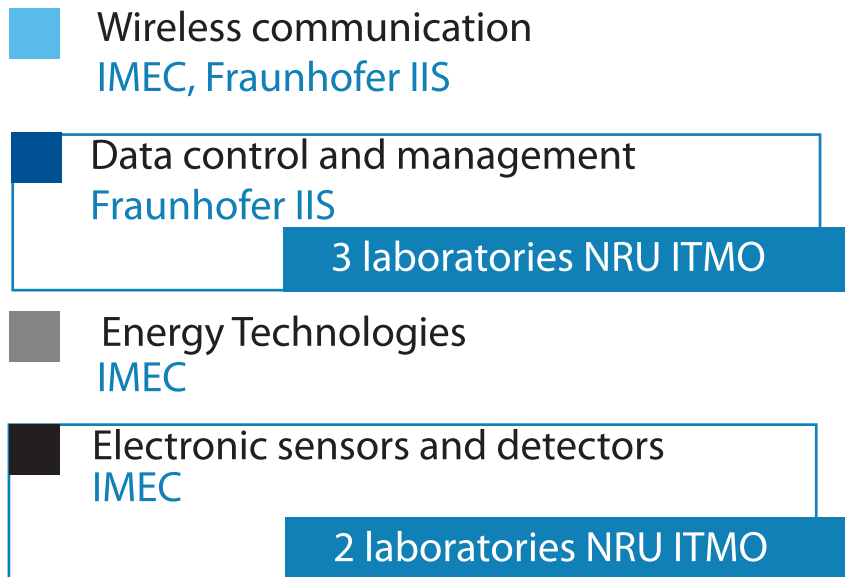
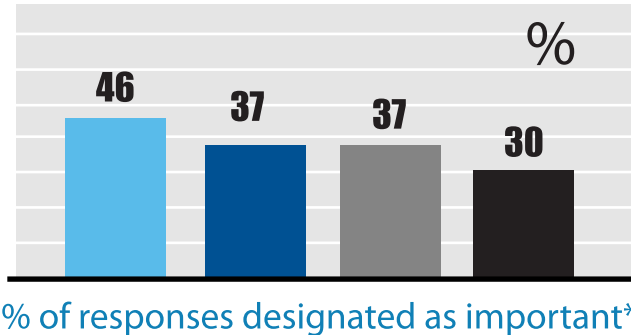


SI1 Achievement of a world-leading position for research in a number of areas of the Sixth Cycle of Economic Development

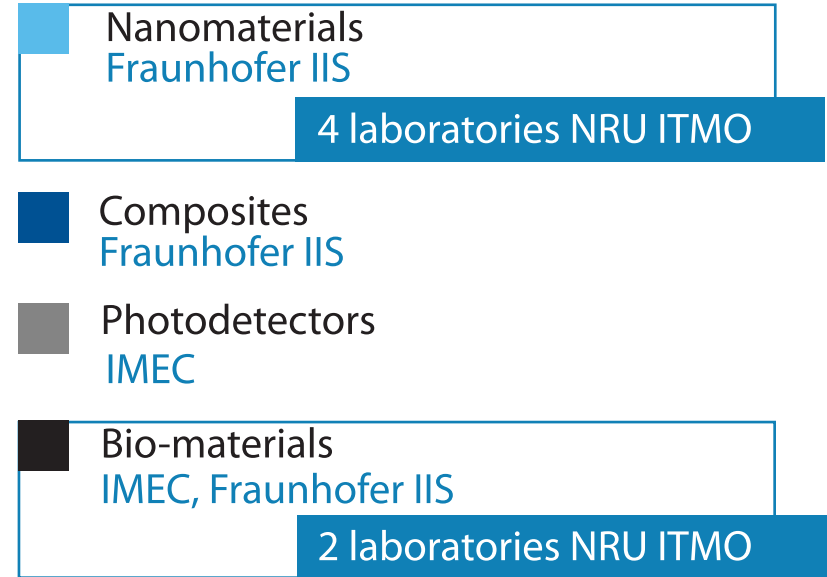
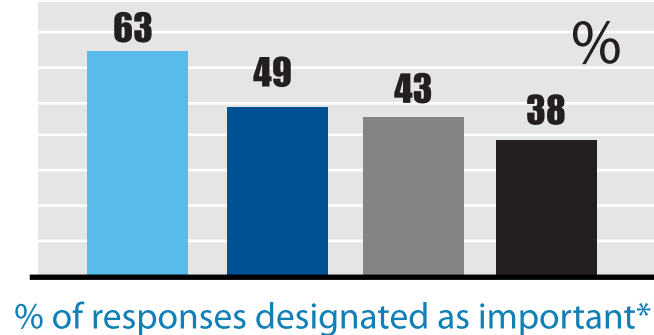
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The selection of research priorities

ICT

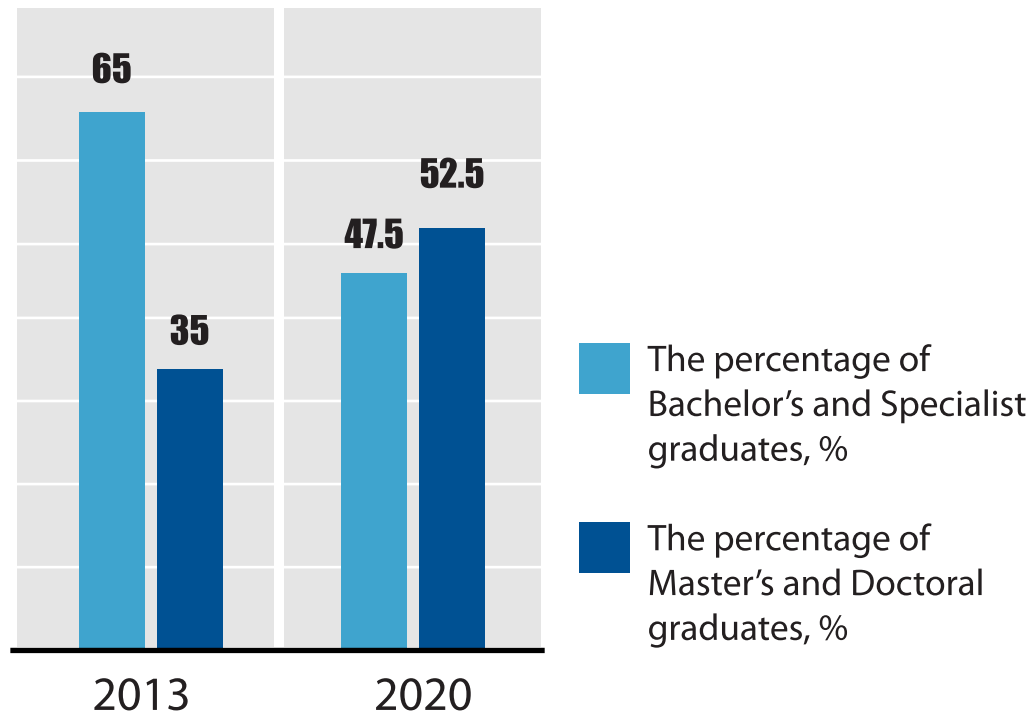


New Materials



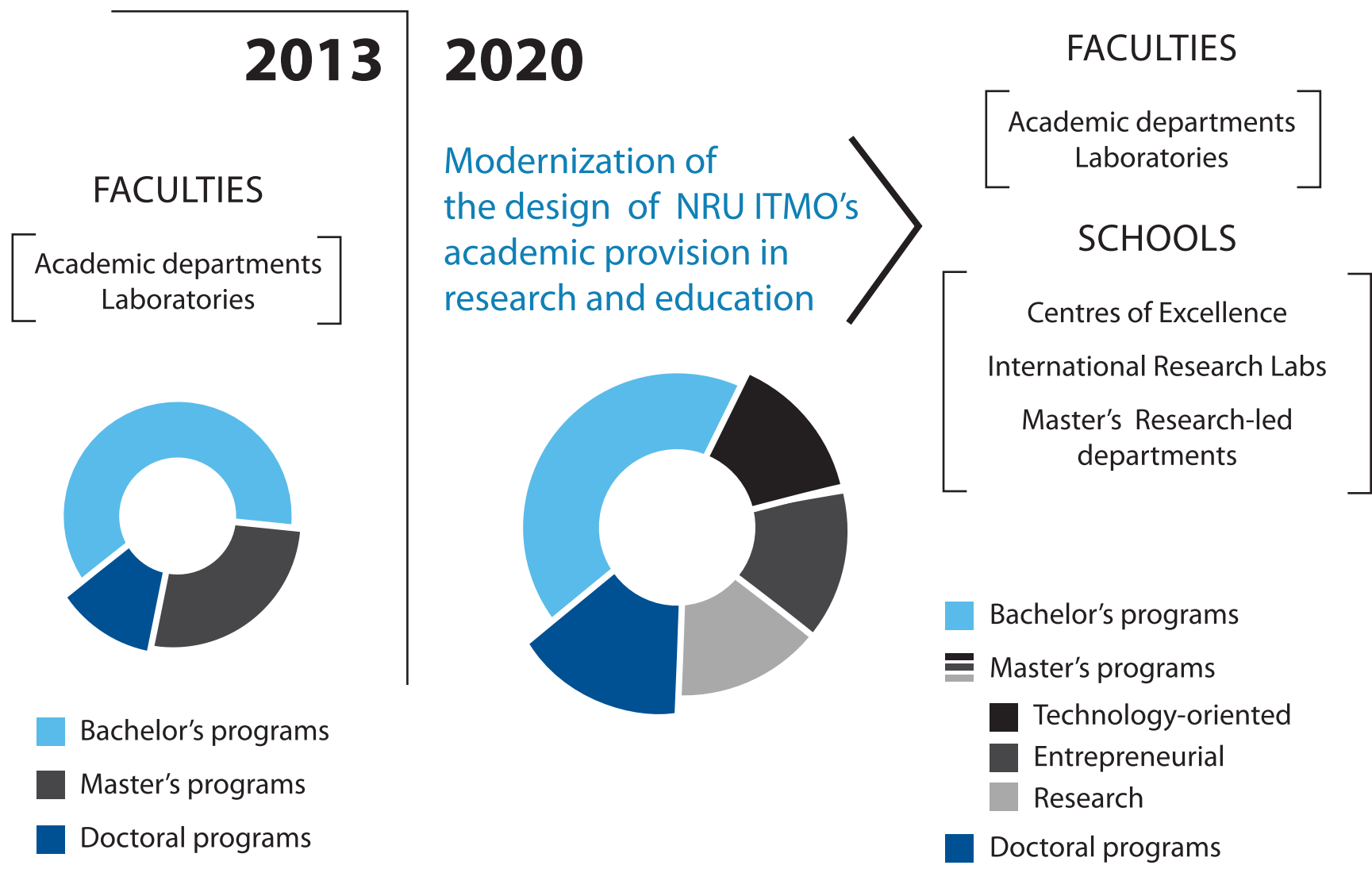
SI 2 Integration of the University into the international community of HE on the basis of cutting-edge research activity, IT and learning technology 14

- Admission of international students and the appointment of international staff to joint study programs, including English-medium
- Introduction of POL, PBL, individual study mode, and distance and e-learning technologies
- Introduction of three types of Master's programs : technological, entrepreneurial, research
- Involvement of students in evaluating the program quality

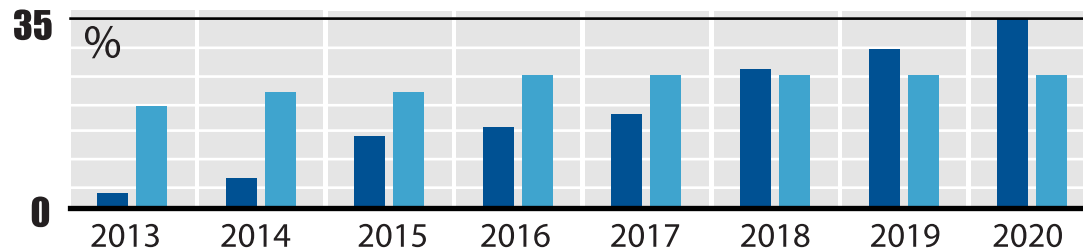


'Quick Wins' 2013-2014

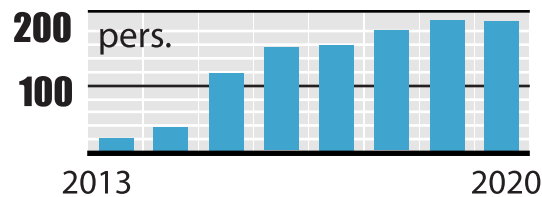
- 7 joint or dual degree/diploma programs in 2013, 20 joint or dual degree/diploma programs in 2014.
- 3 sponsored academic departments in 2013, 15 – in 2014.
- Designing and testing a new technology platform for distance-based and e-learning systems (e.g. CourseraRUS)
- International accreditation of six study programs



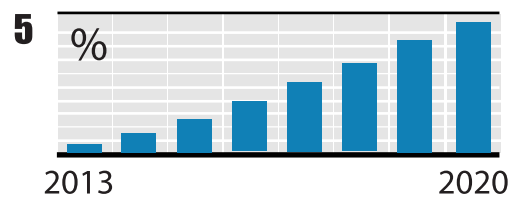
From personnel accounting to HR management and international recruitment



- The percentage of academics and managers having completed foreign language courses with international certification (cumulative total)
- The percentage of academics and managers completing their advanced training in World-leading Research and Education centers



- The number of job-seekers (under the age of 35) on the staff reserve list for employment



- The percentage of foreign professors, teachers and researchers on ITMO's staff

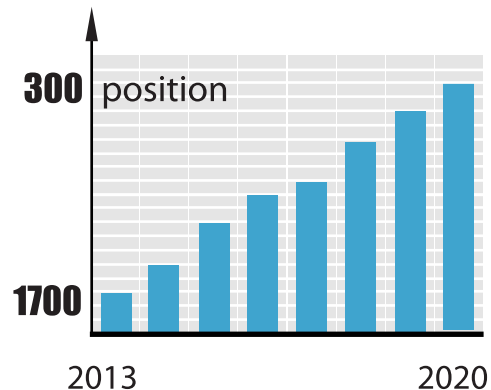


'Quick Wins' 2013-2014

- Creation of HR and staff recruitment division with introduction of performance-related 'efficient' contract
- Creation of staff reserve list for manager and administrator posts (2014 = 20 young specialists under 35 years old)
- Selection of 10 leading foreign experts appointed to university management

SI 4 The development of a communications strategy that propels NRU ITMO 17 on the domestic and international market

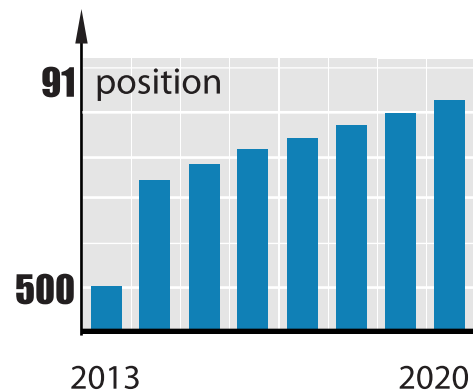
International recognition and global positioning



■ The position of NRU ITMO's website rating in Webometrics



Implementation of international marketing strategy
NRU ITMO is an internationally recognized brand



■ The position of NRU ITMO for Computer Science & Information Systems in the QS ratings



Social networking, Alumni, Community
Social programs and social responsibility



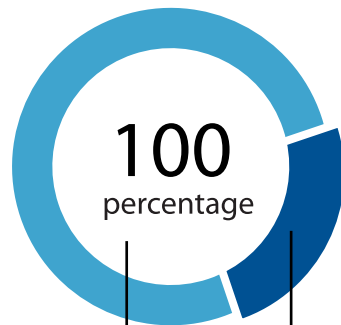
'Quick Wins' 2013-2014

- Re-branding, implementation of a major media strategy
- Establishment of NRU ITMO's representation in Europe (UK) and Asia (Japan)
- PR launch with Russian Information Agency "Novosti"
- Launch of multi-lingual website (Russian, English, Chinese)
- Organization of ITMO International Alumni Association

The development of an innovation ecosystem which enables the University to grow to its full potential in knowledge exchange and technology transfer

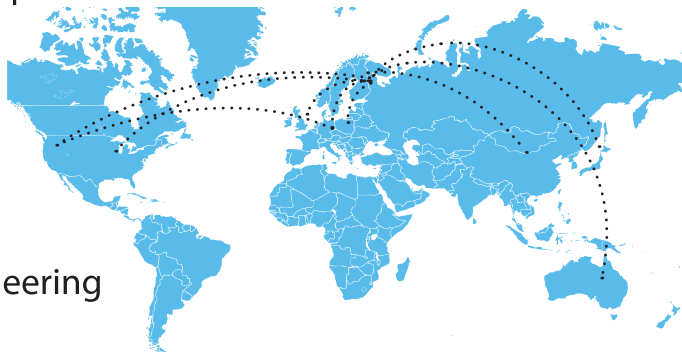
A leader within a socially responsible, innovation-focused economy

Participation of students on educational and training programs in innovation and entrepreneurship



25% students and staff members involved in innovation-oriented activities and entrepreneurship

Networks of partnerships



Development of engineering services, localization of foreign technologies in Russian Federation (Fraunhofer Institute)

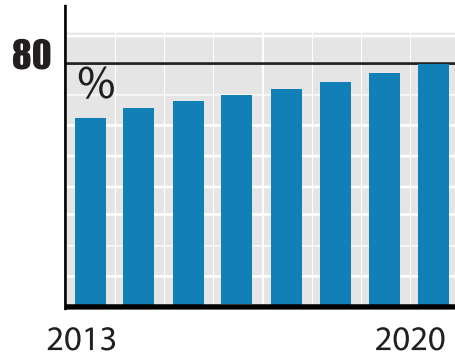
>70 active small innovative companies
>10 licensing agreements



'Quick Wins' 2013-2014

- Organization of the 'FabLab' Projects Factory (for university and high school students) and of the Engineering Center
- Creation of technology company in cooperation with "ROSNANO"
- Creation of technology transfer center
- Increasing reputation as an advanced, dynamic university

A Change in the Structure and Paradigm of the University's Management



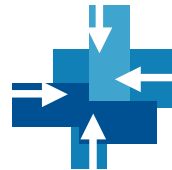
■ Percentage of income from external sources in the total income



Auditing of the main research and education departments



Creation of the 'electronic campus'



Decentralization, including the participation of staff members and students in the process of university decision-making



'Quick Wins' 2013-2014

- Introduction of position of Vice-Rector for Change Management (i.e. Appointment of Professor Stephen Hagen)
- Creation of service units: a service for selection, reception and support of foreign professors and academics ; strategic communications and marketing; research support unit ; legal affairs; language support unit; etc.
- Contract with IIE (USA) for the English language training of the staff
- Creation of Public Assemblies as Ideas Forums
- Implementation of an electronic document management subsystem
- Creation of endowment fund

3 Conclusions

Key Steps in the Comprehensive Transformation of NRU ITMO

- The development of leading-edge (primarily, interdisciplinary) R&D
- The creation of a new generation of Bachelor's, Master's and Doctoral degree programs
- Comprehensive internationalization of all areas of University activity
- Reform of the paradigm and structure of University's management
- Introducing a business-like approach to managing human resources
- Globalizing the marketing strategy
- Developing an entrepreneurial, corporate culture

Thank you for your kind attention!
