



## Tariffs

### For external customers and internal customers with commercial financing

No p/p	Equipment	Access type <sup>1</sup>	Price <sup>3</sup> , RUB without VAT
1	Transmission electron microscope with probecorrector <b>Titan Themis Z</b>	per hour with AICF operator	17 851
2	Scanning electron microscope with low-vacuum mode <b>Quattro S SEM</b>	per hour with AICF operator	6 933
		per hour without AICF operator <sup>2</sup>	4 633
		per day of training course	70 104
3	Dual beam scanning electron microscope <b>Helios G4 UXe PFIB/SEM</b>	per hour with AICF operator	13 548
4	Dual beam scanning electron microscope <b>Tescan Solaris</b>	per hour with AICF operator	13 548
5	Pump probe transient absorption/reflection spectroscopy setup	per hour with AICF operator	4 945
6	Time-Correlated single photon spectroscopy setup	per hour with AICF operator	3 795
7	Femtosecond double pulse microcavity dispersion imaging optical setup	per hour with AICF operator	9 545
8	Compact low-temperature electro-optical imaging setup	per hour with AICF operator	4 370

### Typical services provided by AICF

No p/p	Typical services	Used equipment	Unit of measurement, sample	Price <sup>4</sup> , RUB without VAT
1	Particle morphology investigation	Scanning electron microscope with low-vacuum mode <b>Quattro S SEM</b>	1 sample	9 233
2	Surface morphology investigation of the sample, if necessary, the use of a backscattered electron detector	Scanning electron microscope with low-vacuum	1 sample	12 699

		mode <b>Quattro S SEM</b>		
3	Investigation of the elemental composition of the sample (by 5 points)	Scanning electron microscope with low-vacuum mode <b>Quattro S SEM</b>	1 sample	9 233
4	Investigation of the elemental composition of the sample (mapping of 3 areas)	Scanning electron microscope with low-vacuum mode <b>Quattro S SEM</b>	1 sample	16 166
5	Particle morphology investigation	Dual beam scanning electron microscope <b>Helios G4 UXe PFIB/SEM/Tescan Solaris</b>	1 sample	15 963
6	Surface morphology investigation of the sample, if necessary, the use of a backscattered electron detector	Dual beam scanning electron microscope <b>Helios G4 UXe PFIB/SEM/Tescan Solaris</b>	1 sample	22 621
7	Investigation of the elemental composition of the sample (by 5 points)	Dual beam scanning electron microscope <b>Helios G4 UXe PFIB/SEM/Tescan Solaris</b>	1 sample	24 921
8	Investigation of the elemental composition of the sample (mapping of 3 areas)	Dual beam scanning electron microscope <b>Helios G4 UXe PFIB/SEM/Tescan Solaris</b>	1 sample	45 244
9	Investigation of the isotopic composition of the sample (mapping of 3 areas)	Dual beam scanning electron microscope <b>Tescan Solaris</b>	1 sample	40 644
10	Preparation and visualization of cross-section	Dual beam scanning electron microscope <b>Helios G4 UXe</b>	1 sample	24 921

		<b>PFIB/SEM/Tesca n Solaris</b>		
11	Preparation of lamella for TEM investigation	Dual beam scanning electron microscope <b>Helios G4 UXe</b> <b>PFIB/SEM/Tesca n Solaris</b>	1 sample	60 966
12	Preparation of lamella for TEM investigation at the given point in accordance with Customer request	Dual beam scanning electron microscope <b>Helios G4 UXe</b> <b>PFIB/SEM/Tesca n Solaris</b>	1 sample	74 514
13	Investigation of multilayer structures in the STEM mode, including investigation of the elemental composition of the sample (along the line)	Dual beam scanning electron microscope <b>Helios G4 UXe</b> <b>PFIB/SEM/Tesca n Solaris</b>	1 sample	45 244
14	Investigation of the crystallographic orientation of the grain structure (EBSD)	Dual beam scanning electron microscope <b>Helios G4 UXe</b> <b>PFIB/SEM/Tesca n Solaris</b>	1 sample	Договорная, зависит от ТЗ
15	Investigation of the morphology of nanoparticles in TEM or STEM modes	Transmission electron microscope with probecorrector <b>Titan Themis Z</b>	1 sample	22 451
16	Investigation of the grain structure of a sample including determination of dislocation density	Transmission electron microscope with probecorrector <b>Titan Themis Z</b>	1 sample	44 902
17	Investigation of the crystal structure of a sample using electron diffraction	Transmission electron microscope with probecorrector <b>Titan Themis Z</b>	1 sample	67 354
18	Visualization of the crystal structure of the sample in high resolution TEM or STEM	Transmission electron microscope with	1 sample	44 902



		probecorrector <b>Titan Themis Z</b>		
19	Solution of the crystal structure of a sample using electron diffraction tomography	Transmission electron microscope with probecorrector <b>Titan Themis Z</b>	1 sample	177 311
20	Investigation of the elemental composition of the sample using energy dispersive X-ray spectroscopy (EDX) (mapping of 3 areas)	Transmission electron microscope with probecorrector <b>Titan Themis Z</b>	1 sample	40 302
21	Mapping of the elemental composition of the sample using energy dispersive x-ray spectroscopy (EDX) with atomic resolution (mapping of 3 areas)	Transmission electron microscope with probecorrector <b>Titan Themis Z</b>	1 sample	58 154
22	Investigation of the elemental composition of the sample, including light elements, using electron energy loss spectroscopy (EELS) (spectra acquisition at 5 points)	Transmission electron microscope with probecorrector <b>Titan Themis Z</b>	1 sample	44 902
23	Mapping of the elemental composition of the sample, including light elements, using electron energy loss spectroscopy (EELS) in the STEM mode (mapping of 3 areas)	Transmission electron microscope with probecorrector <b>Titan Themis Z</b>	1 sample	62 754
24	Visualization of nanoparticles using electron tomography	Transmission electron microscope with probecorrector <b>Titan Themis Z</b>	1 sample	177 311
25	Visualization of multilayer structures (heterostructures) with atomic resolution	Transmission electron microscope with probecorrector <b>Titan Themis Z</b>	1 sample	62 754
25	IR spectrum measurement spectra acquisition at 5 points	IR microscope <b>Bruker Lumos</b>	1 sample	6 785

**For internal customers<sup>5</sup>**

<b>No p/p</b>	<b>Equipment</b>	<b>Access type<sup>1</sup></b>	<b>Price, RUB without VAT</b>
1	Transmission electron microscope with probecorrector	per hour with AICF operator	4 103

	<b>Titan Themis Z</b>	per hour without AICF operator <sup>2</sup>	4 718
2	Scanning electron microscope with low-vacuum mode <b>Quattro S SEM</b>	per hour with AICF operator	3 568
		per hour without AICF operator <sup>2</sup>	1 836
		per day of training course	686
3	Dual beam scanning electron microscope <b>Helios G4 UXe PFIB/SEM</b>	per hour with AICF operator	5 493
		per hour without AICF operator <sup>2</sup>	3 416
4	Dual beam scanning electron microscope <b>Tescan Solaris</b>	per hour with AICF operator	2 266
		per hour without AICF operator <sup>2</sup>	3 416
5	Pump probe transient absorption/reflection spectroscopy setup	per hour with AICF operator	2 266
6	Time-Correlated single photon spectroscopy setup	per hour with AICF operator	2 645
7	Femtosecond double pulse microcavity dispersion imaging optical setup	per hour with AICF operator	1 495
8	Compact low-temperature electro-optical imaging setup	per hour with AICF operator	7 245
9	IR microscope <b>Bruker Lumos</b>	per hour with AICF operator	2 070

Prices are indicated for equipment rent only; interpretation of results and preparation of reports are charged separately.

Duration and contents of the training are determined based on the trainee's level.

<sup>1</sup> Access to sample preparation equipment (except listed above) is not charged (free). However, in case operator assistance is required, a rate of 2 645 RUB / hour will be applied

<sup>2</sup> Access granted only after completing a corresponding training course

<sup>3</sup> Internal customers with external (commercial financing), as well as participants of the Skolkovo project, are provided with an additional discount of 20% of the specified tariff. Services rendered with the help of Titan Themis Z equipment to the Skolkovo project participants are calculated at an individual rate (upon request)

\*\*\* The cost is indicated without taking into account the sample preparation

\*\*\*\* Including research projects of Skoltech employees, which are funded from a grant from the Skolkovo Foundation, grants from the Russian Science Foundation, RFBR, Ministry of Education and Science, Skoltech startups. The tariff is applied subject to the provision of supporting documents, otherwise the tariff "For external clients and internal clients with commercial financing" is applied