

Advanced Imaging Core Facility (AICF) Skolkovo Institute of Science and Technology (Skoltech)

APPROVED: Head of AICF

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Tariffs

For external customers and internal customers with commercial financing

Nº p/p	Equipment	Access type ¹	Price ³ , RUB without VAT
1	Transmission electron microscope with probecorrector Titan Themis Z	per hour with AICF operator	17 851
2	Scanning electron microscope with low-vaccuum mode	per hour with AICF operator	6 933
	Quattro S SEM	per hour without AICF operator ²	4 633
		per day of training course	70 104
3	Dual beam scanning electron microscope	per hour with AICF operator	13 548
	Helios G4 UXe PFIB/SEM	per fied with 7 for operator	13 346
4	Dual beam scanning electron microscope	per hour with AICF operator	13 548
	Tescan Solaris	por nodi with 7 not operator	10 040
5	Pump probe transient absorption/reflection spectroscopy	per hour with AICF operator	4 945
	setup	por modi with 7 non operator	4 545
6	Time-Correlated single photon spectroscopy setup	per hour with AICF operator	3 795
7	Femtosecond double pulse microcavity dispersion imaging	per hour with AICF operator	9 545
	optical setup	por nour with rivor operator	9 343
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	Price⁴, RUB without VAT
1		Scanning electron	1 sample	
		microscope with		
	Particle morphology investigation	low-vaccuum		9 233
		mode Quattro S		
		SEM		
2	Surface morphology investigation of the sample, if	Scanning electron	1 sample	
	necessary, the use of a backscattered electron	microscope with		12 699
	detector	low-vaccuum		

		mode Quattro S		
		SEM		
3		Scanning electron	1 sample	
	Investigation of the elemental composition of the sample (by 5 points)	microscope with		
,		low-vaccuum		9 233
		mode Quattro S		
		SEM		
4		Scanning electron	1 sample	
	Investigation of the elemental composition of the	microscope with		
	sample (mapping of 3 areas)	low-vaccuum		16 166
	compression of a disast)	mode Quattro S		
		SEM		
5		Dual beam	1 sample	
		scanning electron		
	Particle morphology investigation	microscope		15 963
	. a.a.o merphology investigation	Helios G4 UXe		15 905
		PFIB/SEM/Tesca		
		n Solaris		
6		Dual beam	1 sample	
	Surface morphology investigation of the sample, if	scanning electron		
	necessary, the use of a backscattered electron detector	microscope		22.624
		Helios G4 UXe		22 621
		PFIB/SEM/Tesca		
		n Solaris		
7		Dual beam	1 sample	
		scanning electron		
	Investigation of the elemental composition of the	microscope		04.004
	sample (by 5 points)	Helios G4 UXe		24 921
		PFIB/SEM/Tesca		
		n Solaris		
8		Dual beam	1 sample	
		scanning electron		
	Investigation of the elemental composition of the	microscope		
	sample (mapping of 3 areas)	Helios G4 UXe		45 244
		PFIB/SEM/Tesca		
		n Solaris		
9		Dual beam	1 sample	
	Investigation of the isotopic composition of the	scanning electron		
	sample (mapping of 3 areas)	microscope		40 644
		Tescan Solaris		
10		Dual beam	1 sample	
	Dronoration and viewalization of account of	scanning electron		
	Preparation and visualization of cross-section	microscope		24 921
		Helios G4 UXe		

		PFIB/SEM/Tesca		
		n Solaris		
11		Dual beam	1 sample	
		scanning electron		
	Preparation of lamella for TEM investigation	microscope		20.000
	Preparation of famelia for TENI Investigation	Helios G4 UXe		60 966
		PFIB/SEM/Tesca		
		n Solaris		
12		Dual beam	1 sample	
		scanning electron		
	Preparation of lamella for TEM investigation at the	microscope		
	given point in accordance with Customer request	Helios G4 UXe	/	74 514
		PFIB/SEM/Tesca		
		n Solaris		
13		Dual beam	1 sample	
	Investigation of multilever structures in the CTERA	scanning electron		
	Investigation of multilayer structures in the STEM	microscope		
	mode, including investigation of the elemental	Helios G4 UXe		45 244
	composition of the sample (along the line)	PFIB/SEM/Tesca		
		n Solaris		
14		Dual beam	1 sample	
*		scanning electron		
	Investigation of the crystallographic orientation of the	microscope		Договорная,
	grain structure (EBSD)	Helios G4 UXe		зависит от ТЗ
		PFIB/SEM/Tesca		
		n Solaris		
15		Transmission	1 sample	
	Investigation of the morphology of nanoparticles in	electron		
	TEM or STEM modes	microscope with		22 451
	TEM OF STEM Modes	probecorrector		
		Titan Themis Z		
16		Transmission	1 sample	
	Investigation of the grain structure of a sample	electron		
	including determination of dislocation density	microscope with		44 902
	including determination of dislocation density	probecorrector		
		Titan Themis Z		
17		Transmission	1 sample	
	Investigation of the crystal structure of a sample	electron		
	using electron diffraction	microscope with		67 354
		ı		
. 1	using electron dimaction	probecorrector		
	using electron dimaction	probecorrector Titan Themis Z		
18			1 sample	
18	Visualization of the crystal structure of the sample in high resolution TEM or STEM	Titan Themis Z	1 sample	44 902

		probecorrector		
		Titan Themis Z		
19		Transmission	1 sample	
		electron	1 dample	
	Solution of the crystal structure of a sample using	microscope with		177 311
	electron diffraction tomography	probecorrector		177 311
		Titan Themis Z		
20		Transmission	1 sample	
	Investigation of the elemental composition of the	electron	Sample	
	sample using energy dispersive X-ray spectroscopy	microscope with		40 302
	(EDX) (mapping of 3 areas)	probecorrector		40 302
	(Titan Themis Z		γ.
21	Mapping of the elemental composition of the sample	Transmission	1 sample	
	using energy dispersive x-ray spectroscopy (EDX)	electron	r sample	
	with atomic resolution (mapping of 3 areas)	microscope with		58 154
	man atomic resolution (mapping of 6 areas)	probecorrector		56 154
		Titan Themis Z		
22	Investigation of the elemental composition of the	Transmission	1 nomple	
	sample, including light elements, using electron	electron	1 sample	
	energy loss spectroscopy (EELS) (spectra			44,000
	acquisition at 5 points)	microscope with		44 902
	acquisition at 5 points)	probecorrector		
23	Mapping of the elemental composition of the sample.	Titan Themis Z		
25	,	Transmission	1 sample	
	including light elements, using electron energy loss	electron		
	spectroscopy (EELS) in the STEM mode (mapping of	microscope with		62 754
	3 areas)	probecorrector		
24	Viewelinetian of annual Vieweline in the	Titan Themis Z		
24	Visualization of nanoparticles using electron	Transmission	1 sample	
	tomography	electron		
		microscope with		177 311
	·	probecorrector		
		Titan Themis Z		
25	Visualization of multilayer structures	Transmission	1 sample	
	(heterostructures) with atomic resolution	electron		
		microscope with		62 754
		probecorrector		
		Titan Themis Z		
25	IR spectrum measurement spectra acquisition at 5	IR microscope	1 sample	6 785
	points	Bruker Lumos		0 705

For internal customers⁵

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

	Titan Themis Z	per hour without AICF operator ²	4 718
2	Scanning electron microscope with low-vaccuum mode	per hour with AICF operator	3 568
	Quattro S SEM	per hour without AICF operator ²	1 836
	Quality of SEIN	per day of training course	686
3	Dual beam scanning electron microscope	per hour with AICF operator	5 493
	Helios G4 UXe PFIB/SEM	per hour without AICF operator ²	3 416
4	Dual beam scanning electron microscope	per hour with AICF operator	2 266
	Tescan Solaris	per hour without AICF operator ²	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 Bruker Lumos	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.

¹ 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

² Access granted only after completing a corresponding training course

³ 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