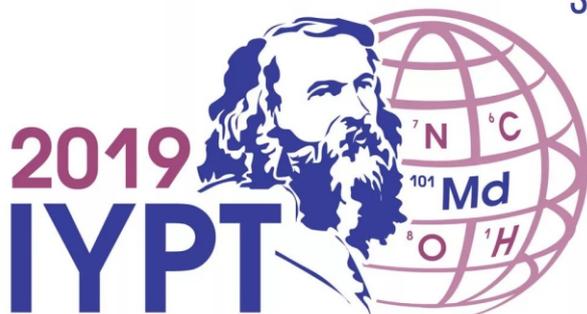


International Year
of the Periodic Table of Chemical Elements

SCIENCE – SOCIETY – WORLD – SUSTAINABLE DEVELOPMENT



ДИПЛОМ I степени

Награждается

За занятое **I МЕСТО**

в межвузовской студенческой научно-практической
олимпиаде по химии

«**ТЕОРЕТИЧЕСКАЯ И ЭКСПЕРИМЕНТАЛЬНАЯ ХИМИЯ - 2019**»,

посвященной 150 - летию Периодической таблицы
химических элементов Д.И. Менделеева

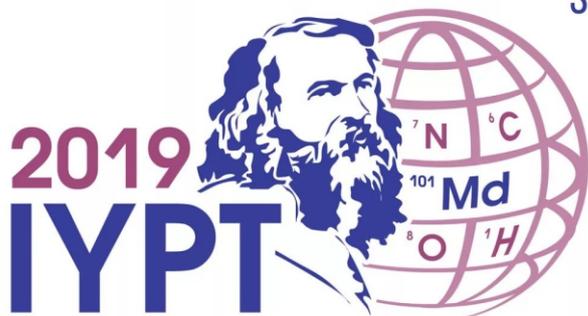
Ректор
ВКГУ им. Д. Серикбаева

Ж.К. Шаймарданов

1869

International Year
of the Periodic Table of Chemical Elements

SCIENCE – SOCIETY – WORLD – SUSTAINABLE DEVELOPMENT



ДИПЛОМ II степени

Награждается

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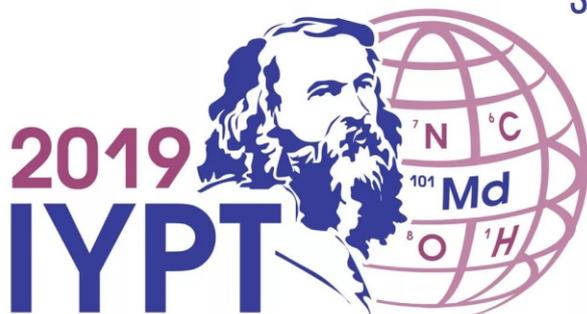
Ж.К. Шаймарданов

																			18 He helium				
																			8 O oxygen	9 F fluorine	10 Ne neon		
																			16 S sulfur	17 Cl chlorine	18 Ar argon		
																			34 Se selenium	35 Br bromine	36 Kr krypton		
																			52 Te tellurium	53 I iodine	54 Xe xenon		
																			82 Pb lead	83 Bi bismuth	84 Po polonium	85 At astatine	86 Rn radon
																			114 Fl flerovium	115 Mc moscovium	116 Lv livermorium	117 Ts tennessine	118 Og oganeson
																			102 No nobelium	103 Lr lawrencium			
																			104 Rf rutherfordium	105 Db dubnium	106 Sg seaborgium	107 Bh bohrium	108 Hs hassium
																			100 Fm fermium	101 Md mendelevium	102 No nobelium	103 Lr lawrencium	
																			98 Cf californium	99 Es einsteinium	100 Fm fermium	101 Md mendelevium	102 No nobelium
																			96 Cm curium	97 Bk berkelium	98 Cf californium	99 Es einsteinium	100 Fm fermium
																			94 Pu plutonium	95 Am americium	96 Cm curium	97 Bk berkelium	98 Cf californium
																			92 U uranium	93 Np neptunium	94 Pu plutonium	95 Am americium	96 Cm curium
																			90 Th thorium	91 Pa protactinium	92 U uranium	93 Np neptunium	94 Pu plutonium
																			88 Sr strontium	89 Y yttrium	90 Zr zirconium	91 Nb niobium	92 Mo molybdenum
																			86 Kr krypton	87 Rb rubidium	88 Sr strontium	89 Y yttrium	90 Zr zirconium
																			84 Xe xenon	85 Cs cesium	86 Ba barium	87 La lanthanum	88 Ce cerium
																			82 Pb lead	83 Bi bismuth	84 Po polonium	85 At astatine	86 Rn radon
																			80 Hg mercury	81 Tl thallium	82 Pb lead	83 Bi bismuth	84 Po polonium
																			78 Pt platinum	79 Au gold	80 Hg mercury	81 Tl thallium	82 Pb lead
																			76 Os osmium	77 Ir iridium	78 Pt platinum	79 Au gold	80 Hg mercury
																			74 W tungsten	75 Re rhenium	76 Os osmium	77 Ir iridium	78 Pt platinum
																			72 Hf hafnium	73 Ta tantalum	74 W tungsten	75 Re rhenium	76 Os osmium
																			70 Yb ytterbium	71 Lu lutetium	72 Hf hafnium	73 Ta tantalum	74 W tungsten
																			68 Er erbium	69 Tm thulium	70 Yb ytterbium	71 Lu lutetium	72 Hf hafnium
																			66 Dy dysprosium	67 Ho holmium	68 Er erbium	69 Tm thulium	70 Yb ytterbium
																			64 Gd gadolinium	65 Tb terbium	66 Dy dysprosium	67 Ho holmium	68 Er erbium
																			62 Sm samarium	63 Eu europium	64 Gd gadolinium	65 Tb terbium	66 Dy dysprosium
																			60 Nd neodymium	61 Pm promethium	62 Sm samarium	63 Eu europium	64 Gd gadolinium
																			58 Ce cerium	59 Pr praseodymium	60 Nd neodymium	61 Pm promethium	62 Sm samarium
																			56 Ba barium	57 La lanthanum	58 Ce cerium	59 Pr praseodymium	60 Nd neodymium
																			54 Xe xenon	55 Cs cesium	56 Ba barium	57 La lanthanum	58 Ce cerium
																			52 Te tellurium	53 I iodine	54 Xe xenon	55 Cs cesium	56 Ba barium
																			50 Sn tin	51 Sb antimony	52 Te tellurium	53 I iodine	54 Xe xenon
																			48 Cd cadmium	49 In indium	50 Sn tin	51 Sb antimony	52 Te tellurium
																			46 Zn zinc	47 Ag silver	48 Cd cadmium	49 In indium	50 Sn tin
																			44 Ru ruthenium	45 Rh rhodium	46 Zn zinc	47 Ag silver	48 Cd cadmium
																			42 Mo molybdenum	43 Tc technetium	44 Ru ruthenium	45 Rh rhodium	46 Zn zinc
																			40 Zr zirconium	41 Nb niobium	42 Mo molybdenum	43 Tc technetium	44 Ru ruthenium
																			38 Sr strontium	39 Y yttrium	40 Zr zirconium	41 Nb niobium	42 Mo molybdenum
																			36 Kr krypton	37 Rb rubidium	38 Sr strontium	39 Y yttrium	40 Zr zirconium
																			34 Se selenium	35 Br bromine	36 Kr krypton	37 Rb rubidium	38 Sr strontium
																			32 Ge germanium	33 As arsenic	34 Se selenium	35 Br bromine	36 Kr krypton
																			30 Zn zinc	31 Ga gallium	32 Ge germanium	33 As arsenic	34 Se selenium
																			28 Ni nickel	29 Cu copper	30 Zn zinc	31 Ga gallium	32 Ge germanium
																			26 Fe iron	27 Co cobalt	28 Ni nickel	29 Cu copper	30 Zn zinc
																			24 Cr chromium	25 Mn manganese	26 Fe iron	27 Co cobalt	28 Ni nickel
																			22 Ti titanium	23 V vanadium	24 Cr chromium	25 Mn manganese	26 Fe iron
																			20 Ca calcium	21 Sc scandium	22 Ti titanium	23 V vanadium	24 Cr chromium
																			18 Ar argon	19 K potassium	20 Ca calcium	21 Sc scandium	22 Ti titanium
																			16 S sulfur	17 Cl chlorine	18 Ar argon	19 K potassium	20 Ca calcium
																			14 Si silicon	15 P phosphorus	16 S sulfur	17 Cl chlorine	18 Ar argon
																			12 Mg magnesium	13 Al aluminum	14 Si silicon	15 P phosphorus	16 S sulfur
																			10 Ne neon	11 Na sodium	12 Mg magnesium	13 Al aluminum	14 Si silicon
																			8 O oxygen	9 F fluorine	10 Ne neon	11 Na sodium	12 Mg magnesium
																			6 C carbon	7 N nitrogen	8 O oxygen	9 F fluorine	10 Ne neon
																			4 Be beryllium	5 B boron	6 C carbon	7 N nitrogen	8 O oxygen
																			2 He helium	3 Li lithium	4 Be beryllium	5 B boron	6 C carbon

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ДИПЛОМ III степени

Награждается

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Ректор
ВКГУ им. Д. Серикбаева

Ж.К. Шаймарданов

18	2																18
He	He																He
helium	helium																helium
4.0026	4.0026																4.0026
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
B	C	N	O	F	Ne	Na	Mg	Al	Si	P	S	Cl	Ar	K	Ca		
boron	carbon	nitrogen	oxygen	fluorine	neon	sodium	magnesium	aluminum	silicon	phosphorus	sulfur	chlorine	argon	potassium	calcium		
10.811	12.011	14.007	15.999	18.998	20.180	22.990	24.305	26.982	28.086	30.974	32.06	35.45	39.948	39.098	40.078		
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34		
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se		
potassium	calcium	scandium	titanium	vanadium	chromium	manganese	iron	cobalt	nickel	copper	zinc	gallium	germanium	arsenic	selenium		
39.098	40.078	44.956	47.88	50.942	51.996	54.938	55.845	58.933	58.933	63.546	65.38	69.723	72.63	74.922	78.971		
35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50		
Br	Kr	Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn		
bromine	krypton	rubidium	strontium	yttrium	zirconium	niobium	molybdenum	technetium	ruthenium	rhodium	palladium	silver	cadmium	indium	tin		
79.904	83.798	85.468	87.62	88.906	91.224	92.906	95.94	98.906	101.07	106.36	106.36	107.868	112.414	114.818	118.710		
51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66		
Sb	Te	I	Xe	Ba	La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho		
antimony	tellurium	iodine	xenon	barium	lanthanum	cerium	praseodymium	neodymium	promethium	samarium	europraseodymium	gadolinium	terbium	dysprosium	holmium		
121.757	127.603	126.905	131.29	137.327	138.905	140.12	140.908	144.24	144.913	150.35	151.964	157.25	158.925	162.50	164.930		
67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82		
Tl	Pb	Bi	Po	At	Rn	Fr	Ra	Ac	Th	Pa	U	Np	Pu	Am	Cm		
thallium	lead	bismuth	polonium	astatine	radon	francium	radium	actinium	thorium	protactinium	uranium	neptunium	plutonium	americium	curium		
204.3833	207.2	208.9804	209	210	222	223	226	227	232.0377	231.036	238.02891	237.048173	244.06422	247.07125	251.079486		
83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98		
Lr	Yb	Lu	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po		
lutetium	ytterbium	lutetium	hafnium	tantalum	tungsten	rhenium	osmium	iridium	platinum	gold	mercury	thallium	lead	bismuth	polonium		
174.967	173.054	174.967	178.49	180.94788	183.84	186.207	187.0339	188.85386	195.084	196.966569	200.59	204.3833	207.2	208.9804	209		
99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114		
U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr	Rf	Hs	Mt	Ds		
uranium	neptunium	plutonium	americium	curium	berkelium	californium	einsteinium	fermium	mendeleevium	nobelium	lawrencium	rutherfordium	hassium	meitnerium	darmstadtium		
238.02891	237.048173	244.06422	247.07125	251.079486	254.1065	257.10375	261.10888	265.1054	269.10974	273.109471	277.10929	281.10914	285.10914	289.10914	293.10914		
105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120		
Uu	Uub	Uuc	Uud	Uue	Uuq	Uur	Uus	Uut	Uuq	Uuu	Uuq	Uur	Uus	Uut	Uuq		
unbinilium	unbinilium	unbinilium	unbinilium	unbinilium	unbinilium	unbinilium	unbinilium	unbinilium	unbinilium								
288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303		

For details and updates to this table, see www.iupac.org. This version is dated 28 November 2016.
Справка и обновления к этой таблице см. на официальном сайте Международного союза теоретической и прикладной химии.