Computer translation

PROPOSAL FOR A PARTNERSHIP IN THE DEVELOPMENT AND CREATION OF THE ELECTRICAL REACTOR WITH CHAIN REACTION.

Hello!

Please consider our proposal.

1. Objective: Replacement of the nuclear reactors of Nuclear power plants (NPP) and the steam boilers of Thermal power plants (TPP) at the electric reactors with a chain reaction. That will get rid of radioactive and hydrocarbon fuels and will put the electric power industry into the category of fuel-free electric power industry.
2. Capabilities: electric reactors will allow solving the problem of heating and hot water supply in the cities, of generating of the electrical energy on existing schemes of the nuclear power plants and thermal power plants, of the production of drinking water from sea water in large quantities.
3. Sales market: the global electric power industry, heat supply of cities and world production of drinking water.
4. Elaborated: a theoretical model of the electric reactor based on the experimental results of existing technologies used in other destinations due to the persecution of other technical purposes.
5. It is necessary: financing and production sites as the "ATOMMASH" for the production of large reactor housings under pressure of 240 bar and t = 560°C and a pressure of 24 bar and t = 150 ° C.
6. Partnership: on a contractual basis.
7. Stages: 1st – the creation of an experimental model in scale 1:10 ÷ 1:20;
   2nd – the creation of the reactor of the required power.
8. Economy: equipment sale + share in the sale of energy resources.

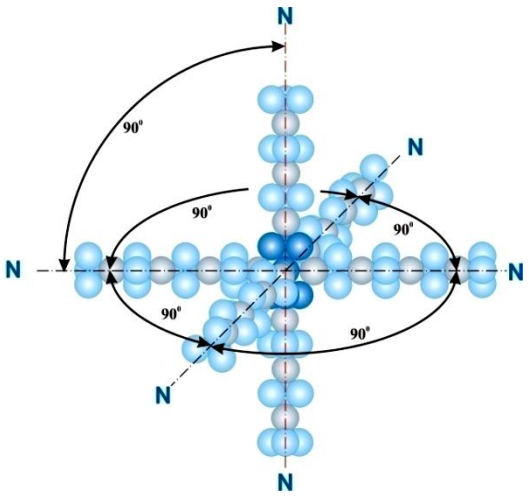
Theoretical study of the project

We have created a new Neutron Sciences (NS) – Neutron physics, Neutron chemistry and Neutron astrophysics (see http://neutronscience.com.ua/books/) and tested them in solving of the certain tasks.

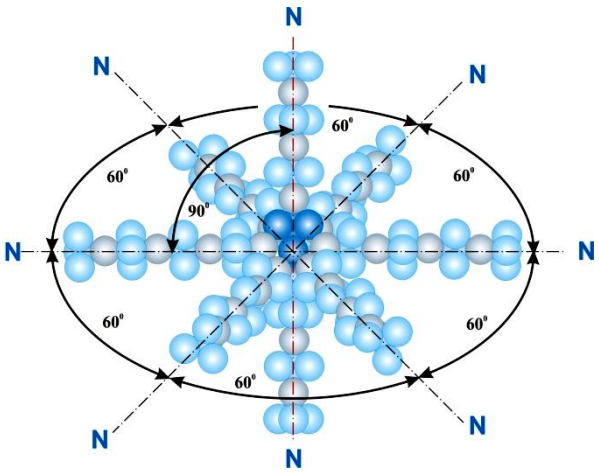
Let us denote **the basic postulates of Neutron Sciences**.

1. **Atoms as a nucleus with electrons in nature do not exist, and there are chemical elements in the form of six- and eight-pointed "hedgehogs" (see below Card № 2).**

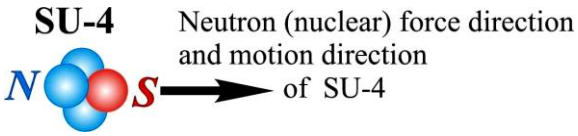
CARD №2



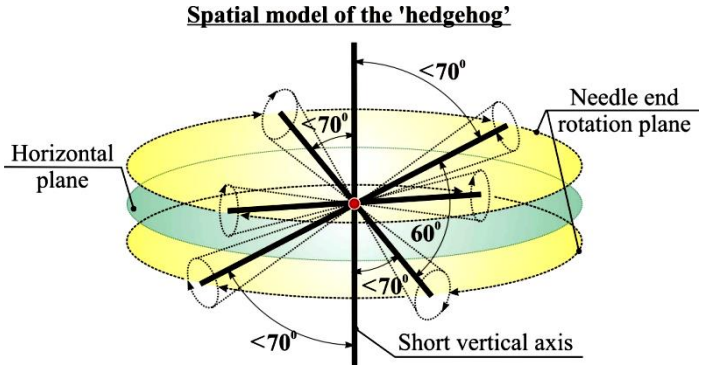
a). Quad-based six-pointed 'hedgehog' – simple sodium (Na)



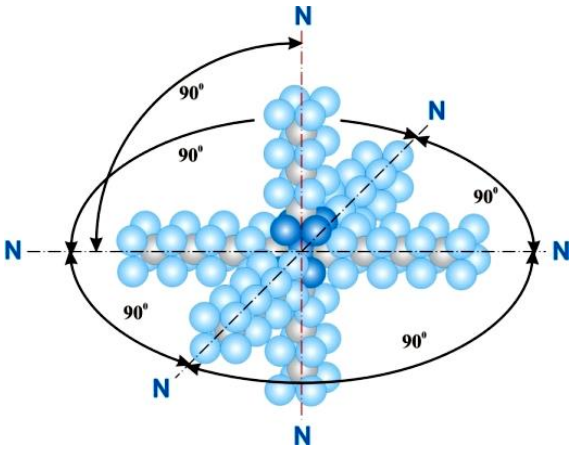
b). Quad-based eight-pointed 'hedgehog' – radioactive sodium (Na)



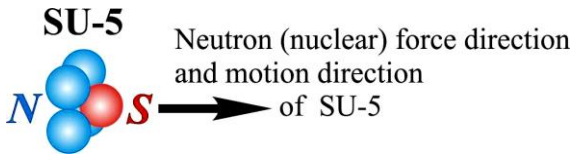
c) Quad structural unit (SU-4)



d) pentad-based eight-pointed 'hedgehog'



e) pentad-based six-pointed 'hedgehog'



f) Pentad structural unit (SU-5) (noble chemical elements – aurum, platinum, etc. are built on the basis of 'pentads')

Fig.3. Chemical elements – 'hedgehogs' and structural units SU-4 and SU-5

Both six-pointed (***fig.3.a and 3e***), and eight-pointed (***fig.3b*** and ***3d***) 'hedgehogs' are formed with needles on the basis of SU, they are summarized in the tables of conversions 1, 2 and 3, 4 (see http://neutronscience.com.ua/books/ "Tables №1, №2, №3, №4 of successive conversion of chemical elements into each other"). Let us consider a cell from ***Table 2*** of chemical elements conversions with chemical element ***Lithium*** as an example ***(***see ***fig.4*** and ***Fragment of Table of Conversions 2)***.

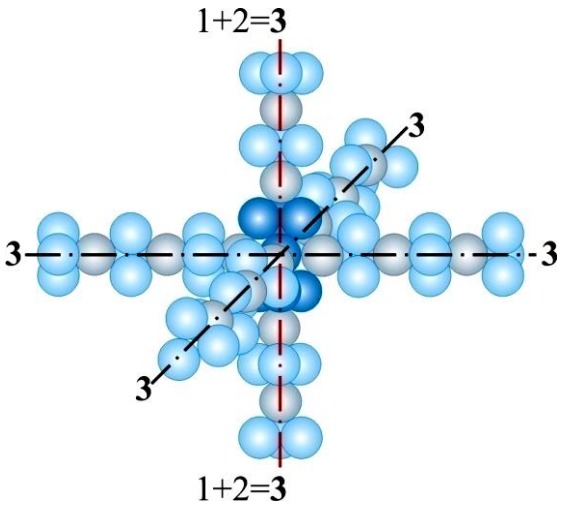


Fig.4. Six-pointed 'hedgehog' with quad-based needles. Lithium – 'solid state'

Solid state (physical state of the element)	
3 (atomic number)	
Li^2_{ss} (symbol) ***Lithium*** (name)	**71** (actual quantity of neutrons in the element)
	-1 (neutron deficit in protogas)
534 (roentgen density in solid state, kg/m^3)	**72** (theoretical number of neutrons)
542 (gravitational density in solid state, kg/m^3)	**3** (number of layers of structural units (SU) in the hedgehog's needles)
7.1 (relative neutron mass M)	**18** (number of SU-quads without neutron deficit)

Fragment of Table of Conversions 2 (6x4). LITHIUM.

gas-1		**liquid-1**		**gas-2**		**liquid-2**		**gas-3**		**solid state**	
3											
Li^2_{gas1}	51	***Li^2_{liq1}***	55	***Li^2_{gas2}***	59	***Li^2_{liq2}***	63	***Li^2_{gas3}***	67	Li^2_{ss} ***Lithium***	71
	-1		-1		-1		-1		-1		-1
	52		56		60		64		68	**534**	72
389	2 1/6	**420**	2 2/6	**450**	2 3/6	**481**	2 4/6	**511**	2 5/6	**542**	3
5.1	13	5.5	14	5.9	15	6.3	16	6.7	17	7.1	18

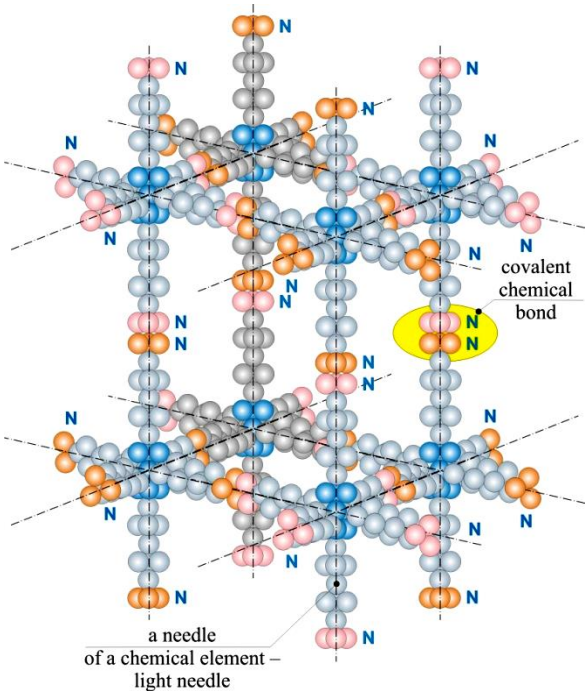


Fig.5. An example of the crystalline lattice made of chemical elements – 6x4 'hedgehogs'

Needles of a 'hedgehog' connect with the needles of neighboring 'hedgehogs' with the help of ***crystalline lattice*** (see ***fig.5***). Neutron Sciences distinguish such kinds of interactions (chemical bonds) of hedgehogs' needles – metallic, covalent (polar and non-polar), ionic and sedimental (metallic, covalent, ionic) chemical bonds.

DIRECT CONFIRMATION OF THE STRUCTURE OF THE CHEMICAL ELEMENTS IN THE FORM OF "HEDGEHOGS" ON THE BASIS OF ELECTRON MICROGRAPH OF CRYSTAL DIAMOND

Fragment of card No. 7

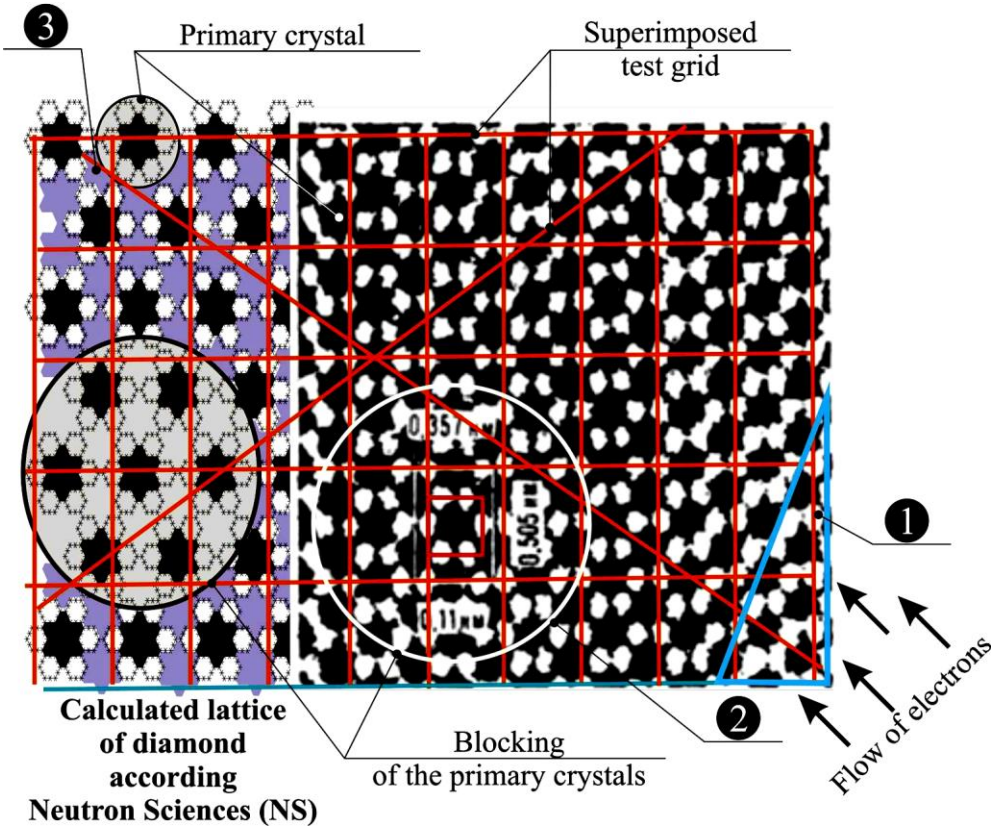
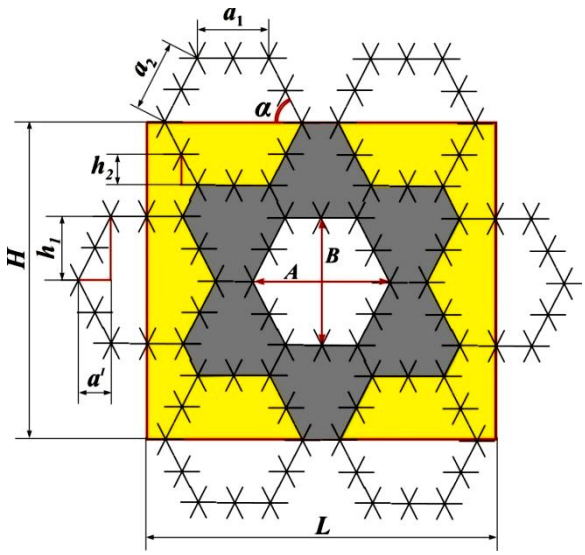
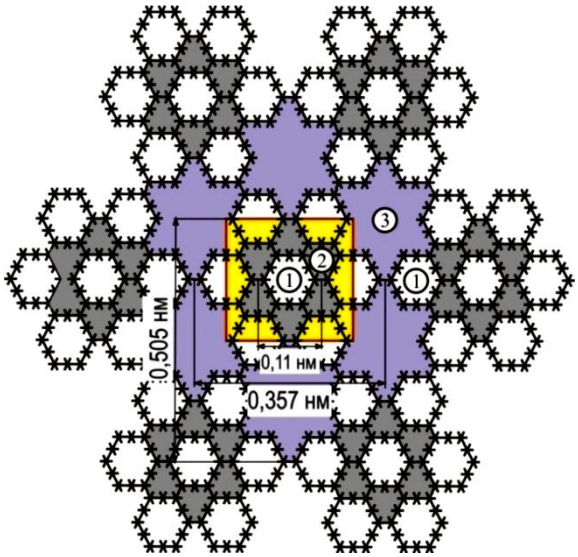


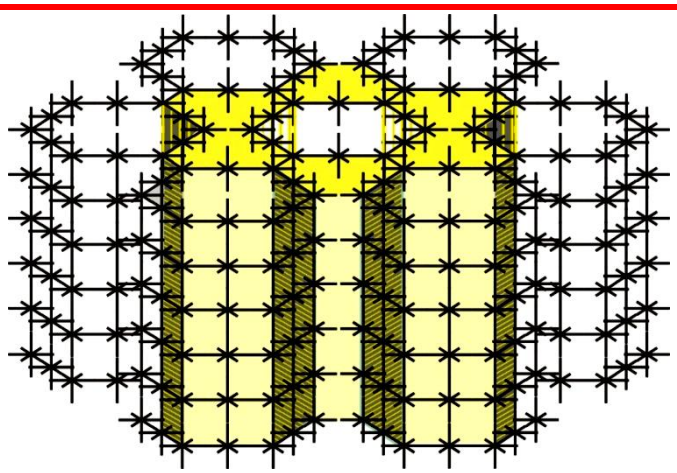
Fig.16. Electron micrograph of high-resolution of the diamond, the position of the carbon atoms projected on the plane (110).



a) a primary crystal with sizes to calculate



b) blocking of primary crystals:
1 – hexagonal cavity formed by the 12 chemical elements containing gases;
2 – rod of light;
3 – domain



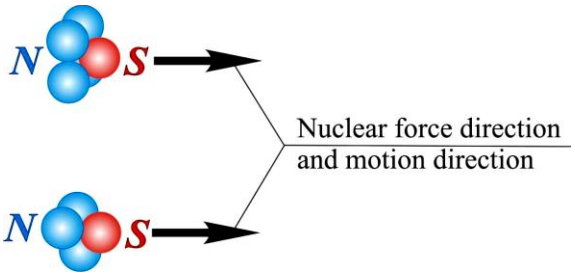
c) rod of light in the body of the primary crystal

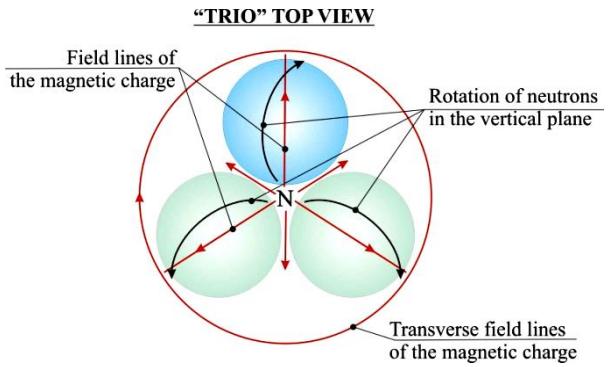
Fig.17.

2. **Negative electric charges are electrons (according to NS) – e^--particle and α^--particle with speed "*c*" and 0,1 ÷ 0,3 «*c*» and they have the south pole in the front (ahead); $e^- = \alpha^- + \gamma^-$ (see below Card № 1);**
3. **Positive electrical charge is a β^+-particle (graviton according to NS) having a North pole in front (ahead), and $\beta^+ = \alpha^- + \gamma^-$ (see below Card № 1);**
4. **β^+-particle and e^--particle are transformers, i.e. they can be converted into each other.**

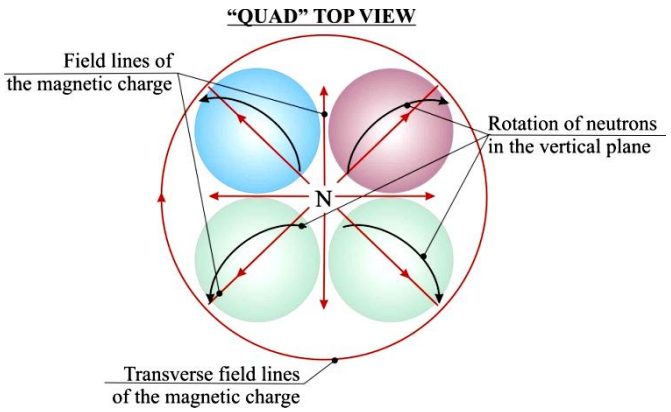
CARD №1

BASIC ENERGY CARRIERS of the I and II parallel worlds on the basis of neutron or neutrino

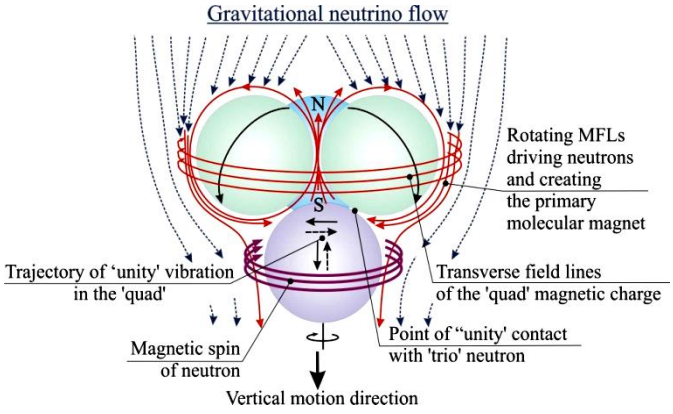
PRIMARY – structural unit (SU) SU-4 and SU-5 have a stable structure due to the rotation of neutrons, ensured by the rotating MFL of molecular magnets (‘drive belts’), having neutrino engines, and available magnetic charges, and speeds nearing the speed of light “*c*”.	‘pentad’	
	‘quad’	
Neutrons consist of neutrinos and contact with each other in SU-4 and SU-5 through covalent neutrino chemical bond like sticky lubricants		



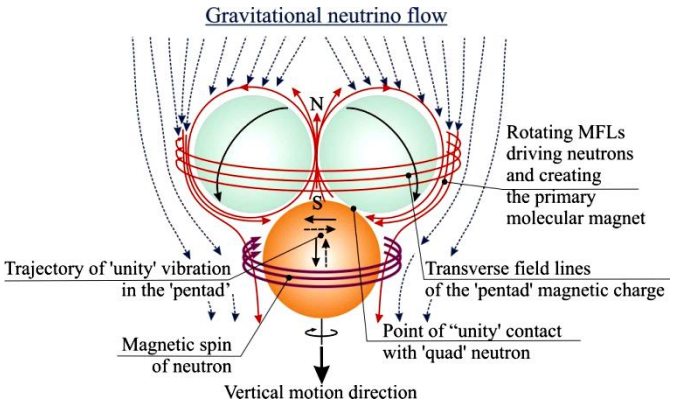
Magnetic charge of 'trio'



Magnetic charge of 'quad'



Magnetic field lines of 'quad'



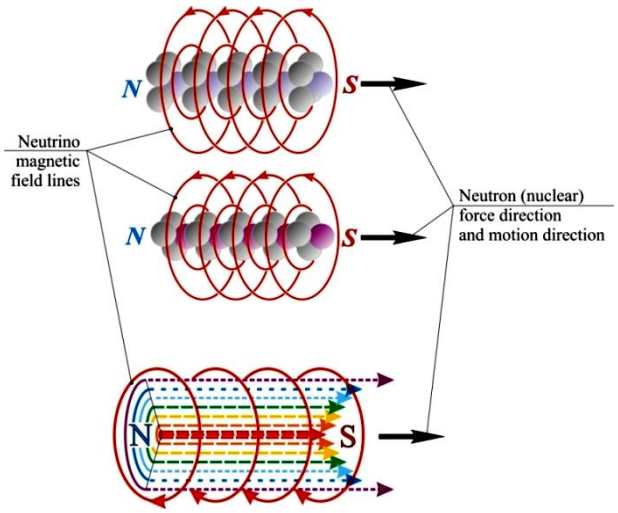
Magnetic field lines of 'pentad'

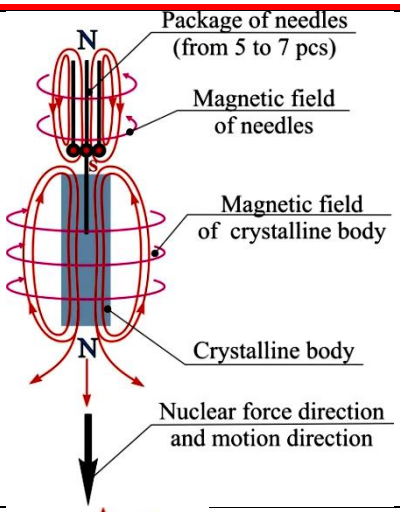
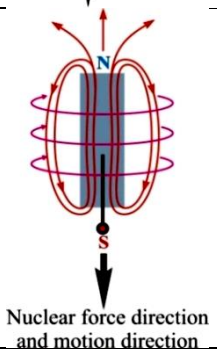
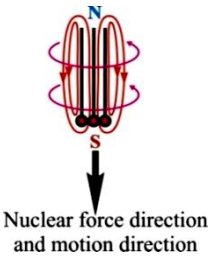
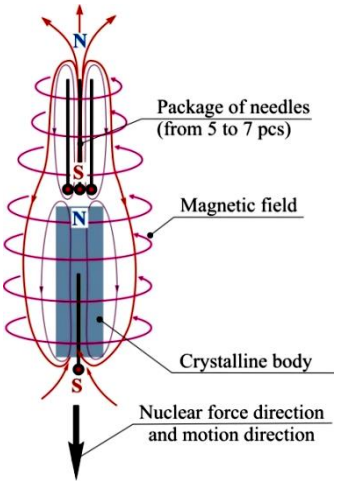
LIGHT

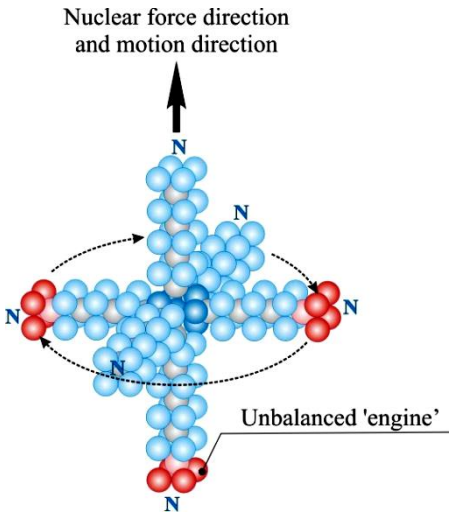
A needle from 'pentads'

A needle from 'quads'

Cord



MAGNETIC – **graviton** or **β^+ - particle**	Anode carrier – transformer mainly on the basis of the chemical element Ferrum with the needle 43 SU-4 long	
DURING GRAVITON FRACTURE	**α^- – particle** (a needle with crystalline body)	
	γ - particle (a package of 5-7 needles or package of light)	
ELECTRIC – "electron", e^--particle (when fractured – **α^--particle** and **γ-particle**)	Cathode carrier – transformer	

CHEMICAL ELEMENT – "GAS"	There is one unbalanced 'engine' (SU)	

Under certain conditions, all of the above energy carriers and their temporal combinations are broken into smaller structures (needles and cords of light, the SU), as well as into neutrons and neutrinos (for the II parallel world – the 'dark matter'), which become heat carriers.

Let us pay attention to the fact that from the point of view of NS the Universe has a **plurality of parallel worlds** built on the same principle, but using different initial carriers: the I world uses the neutron, the II the world – the neutrino (dark matter), the III world - the superneutrino, etc.

5. All chemical bonds in the chemical elements and in the energy carriers, regardless of their type are magnetic clasps – "Velcro fasteners" (see below Card no. 3).

CARD № 3
THE MECHANISM OF ALL TYPES OF CHEMICAL BONDS

Now let us consider the mechanism of all types of chemical bonds –it is common, a magnetic one.

MFL from gravitons on the basis of neutrino and super-neutrino (II world)

Magnetic clasps – 'Velcro fastener' (is obtained when compressing parallel MFL)

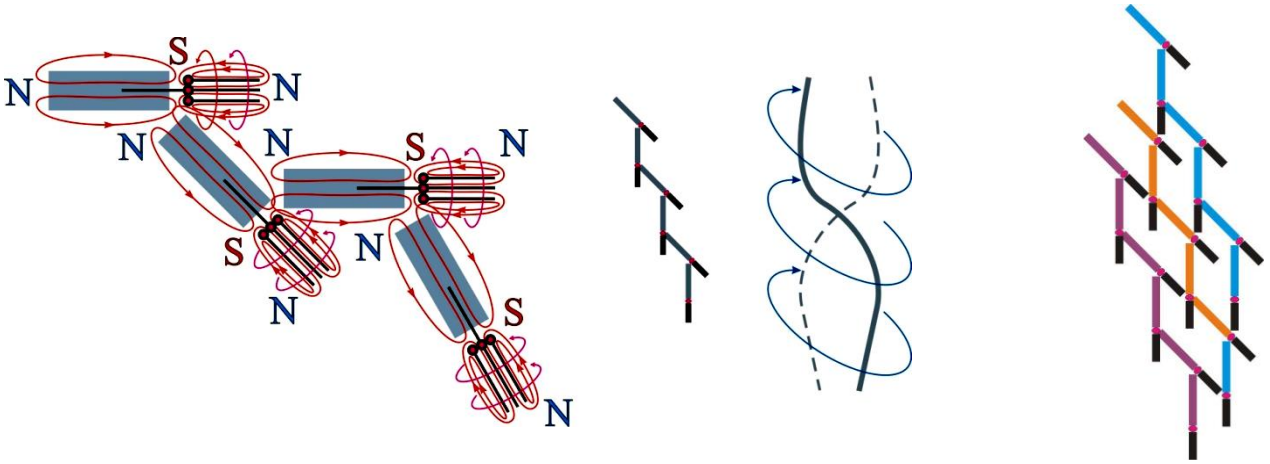


Fig.10

Let us have a look at a covalent chemical bond (***Fig.11***) with magnetic clasps – 'Velcro fastener'. In the needles with SU-4 covalent bond will be carried out by three magnetic clasps – 'Velcro fastener'; and by four of them with SU-5.

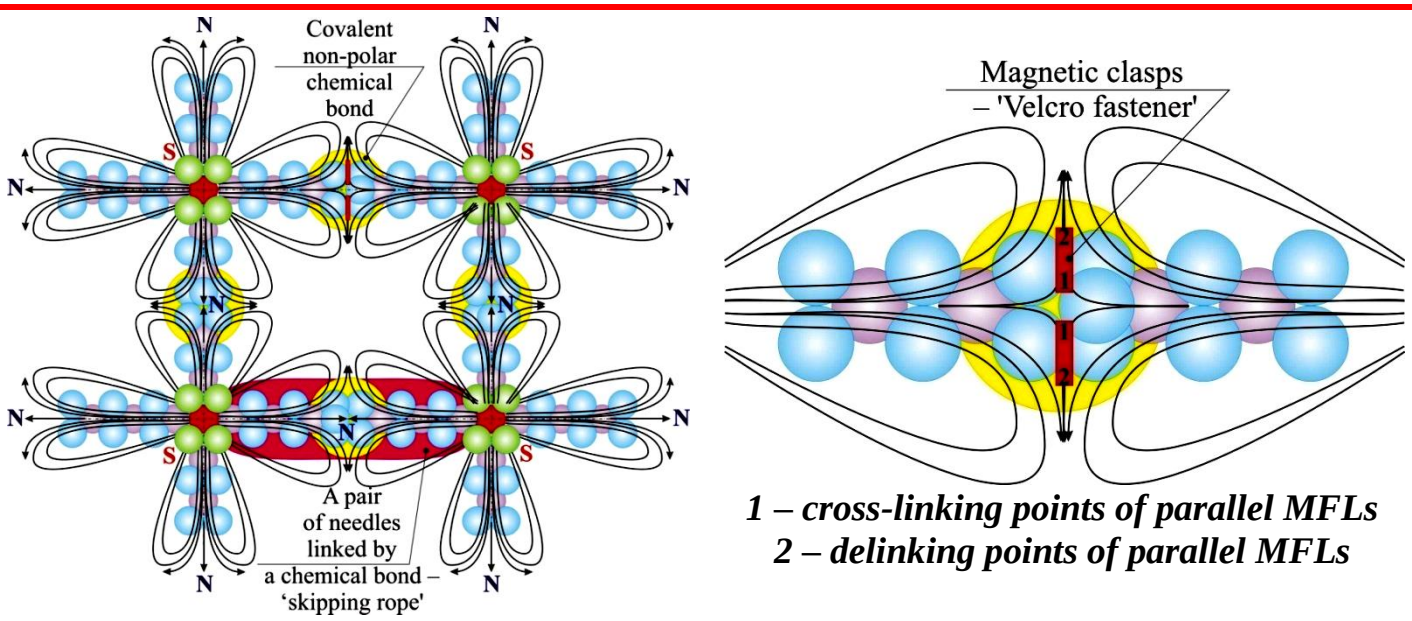
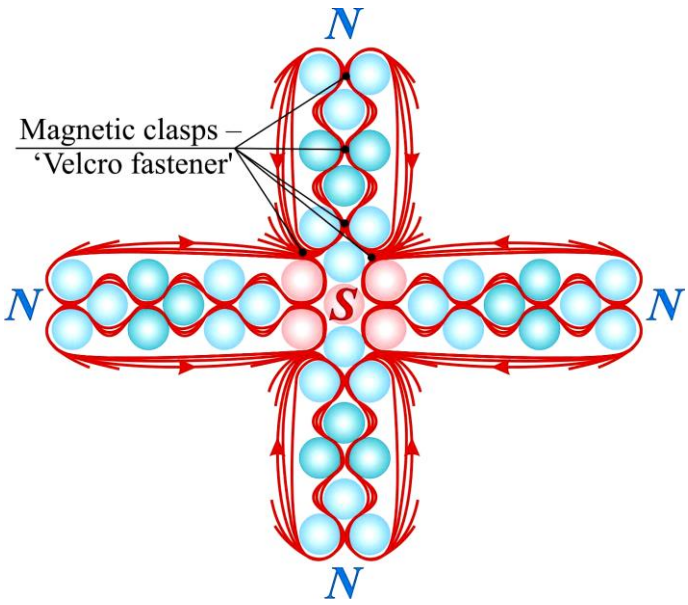


Fig.11. Covalent bond

The metallic chemical bond of a pair of needles will have one magnetic clasps – 'Velcro fastener', the length of which can change.

The ionic chemical bond will have four short magnetic clasps – 'Velcro fastener'.

Thus, all the chemical bonds regardless of their type are magnetic clasps – 'Velcro fastener'.



The top needle symbolically is not shown

Let us recall that magnetic clasps – 'Velcro fastener' are generated automatically as soon as external compression of parallel neutrino magnetic field lines (MFL) took place, regardless of their motion direction.

Looking at ***Fig. 13*** we see that there is a multitude of MFL compression zones in the chemical element, they keep the structure from damage and allow constructing the crystal lattice of any kind, even the most exotic.

Fig. 13. Magnetic clasps – 'Velcro fastener' in a chemical element

6. The Neutron (nuclear) forces are impact forces (see below Card № 4).

CARD № 4

MECHANISM OF NEUTRON (NUCLEAR) POWER FORMATION

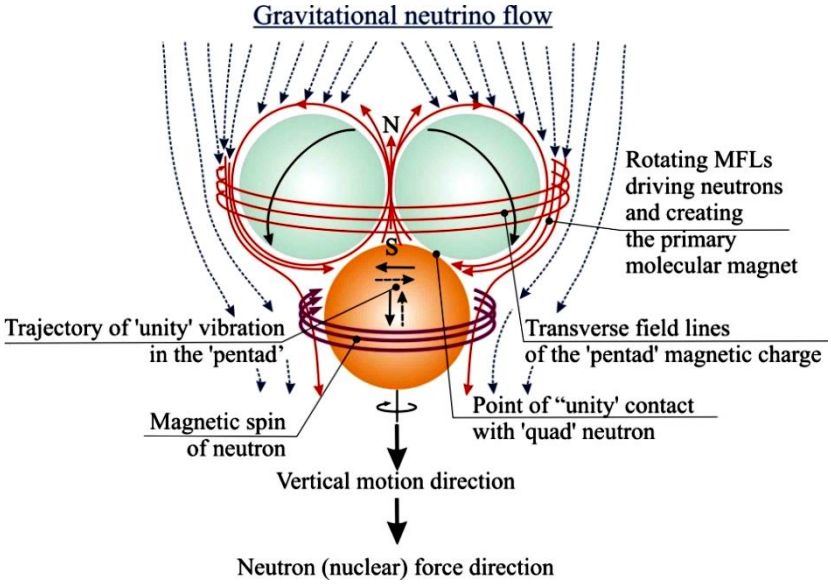


Fig.12

We are looking at ***Fig.12*** and see that inside the SU-4 and SU-5 neutrino MFLs will be compressed, i.e., magnetic clasps – 'Velcro fastener' will appear, which does not let structural units decompose. During paired contacts of rotating neutrons, which tend to run along the surface of each other, there will be throws with a blow on the central neutron. **Thus, the neutron (nuclear) forces are impact forces!**

7. Gravitons (β+-particles) are formed on the surface chemical elements (see below Card No. 5).

CARD №5

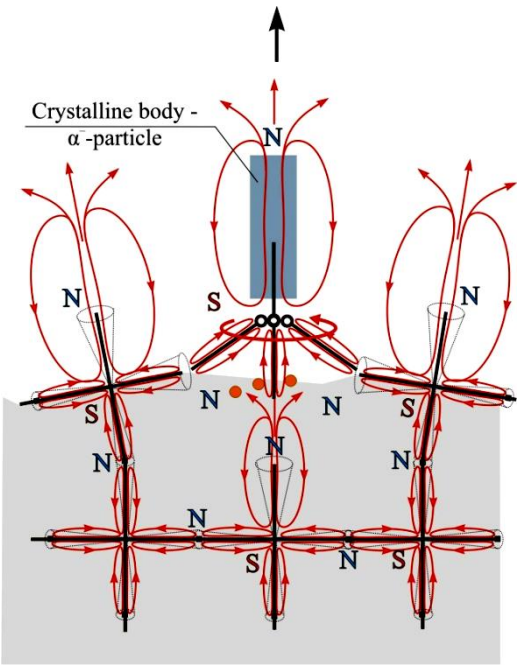


Fig.14. Graviton formation

Where do gravitons and electrons come from?

Gravitons are generated after formation of α^--particles on the free needles of surface chemical elements of the bodies after they are torn out by oscillating heavy α^--particles from their lattices with the break-down of chemical bonds (see ***Fig.14***), thus, many bodies made of different chemical elements may produce gravitons;

Slow (α^-) and fast (e^-) electrons are obtained from gravitons, and electricity can be 'ferrous', 'golden', 'silver', 'uranium', etc., depending on which chemical elements the graviton was formed on;

SUMMARY TABLE OF CONVERSIONS OF CHEMICAL ELEMENTS №6

($m_{substance}$ =1kg)

SU layers	Table 1(8x4)		Table2(6x4)		Table 3(8x5)		Table 4(6x5)		ρ_{theor}	$m_{hedgehog}$ in the grid, kg	Symbol	Name
	n^0	ρ_{gr}	n^0	ρ_{gr}	n^0	ρ_{gr}	n^0	ρ_{gr}				
1	2	3	4	5	6	7	8	9	**10**	11	12	13
1/2	11	84	11	84	14	107	14	107	**90**	$5{,}96\cdot10^{-34}$	H	Hydrogen ▲
1 **1/8(6)**	27	206	27	206	34	259	34	259	**206**	$6{,}77\cdot10^{-33}$	He	Helium ▲
3	95	725	71	542	119	908	89	679	**534**	$2{,}35\cdot10^{-31}$	Li	Lithium
4	127	969	95	725	159	1213	119	908	**971**	$6{,}36\cdot10^{-31}$	Na	Sodium
4 **3/6(8)**	139	1061	107	816	174	1328	134	1022	**1026**	$1{,}03\cdot10^{-30}$	N	Nitrogen ▲
5	159	1213	119	908	199	1518	149	1137	**862**	$1{,}73\cdot10^{-30}$	K	Potassium
6	191	1457	143	1091					**1550**	$3{,}12\cdot10^{-30}$	Ca	Calcium
6					239	1823	179	1366	**1830**	$2{,}8\cdot10^{-30}$	P_{white}	White Phosphorus ▲
6 **1/6(8)**					244	1862	184	1404	**1444**	$3{,}44\cdot10^{-30}$	Ne	Neon ▲
6 **1/8(6)**	195	1488	147	1122					**1469**	$3{,}46\cdot10^{-30}$	O	Oxygen ▲
7	223	1738	167	1274					**1738**	$5{,}72\cdot10^{-30}$	Mg	Magnesium
7					279	2129	209	1595	**1532**	$5{,}62\cdot10^{-30}$	Rb	Rubidium
71/6			171	1305			214	1633	**1656**	$6{,}17\cdot10^{-30}$	Ar	Argon ▲
8	255	1946	191	1457					**1959**	$9{,}7\cdot10^{-30}$	Cs	Cesium
8					319	2434	239	1823	**1848**	$9{,}46\cdot10^{-30}$	Be	Beryllium
8 **3/8(6)**	267	2037	195	1488	334	2548	254	1938	**2040**	$1{,}19\cdot10^{-29}$	Cl	Chlorine ▲
8 **7/8(6)**	283	2159	211	1610	354	2701	264	2014	**2120**	$1{,}47\cdot10^{-29}$	F	Fluorine ▲
9	287	2190	215	1640					**2265**	$1{,}54\cdot10^{-29}$	C_{gr}	Carbon (graphite) ▲
9					359	2739	269	2052	**2702**	$1{,}34\cdot10^{-29}$	P_{bl}	Black Phosphorus ▲
10	319	2434	239	1823					**2314**	$2{,}34\cdot10^{-29}$	B	Boron ▲
10					399	3044	299	2281	**2223**	$2{,}27\cdot10^{-29}$	P_{red}	Red Phosphorus ▲
11	351	2678	263	2007	439	3349	329	2510	**2698**	$3{,}42\cdot10^{-29}$	Al	Aluminum
12	383	2922	287	2190					**2085**	$5{,}48\cdot10^{-29}$	S_1	Sulfur -1 ▲
12					479	3655	359	2739	**3513**	$4{,}12\cdot10^{-29}$	C_{diam}	Carbon (diamond) ▲
13	415	3166	239	2373					**2332**	$7{,}52\cdot10^{-29}$	Si_1	Silicon-1 ▲
13					519	3960	389	2968	**2988**	$6{,}37\cdot10^{-29}$	Sc	Scandium
13 1/6			315	2403			394	3006	**3004**	$6{,}7\cdot10^{-29}$	Kr	Krypton ▲
15	479	3655	359	2739	599	4570	449	3426	**2630**	$1{,}33\cdot10^{-28}$	Sr	Strontium
15 3/6			371	2831			464	3540	**3571**	$1{,}28\cdot10^{-28}$	Xe	Xenon ▲
16	511	3899	383	2922	639	4875	479	3655	**3594**	$1{,}45\cdot10^{-28}$	Ba	Barium
17	543	4143	407	3105	679	5181	509	3883	**4073**	$1{,}89\cdot10^{-28}$	Br_L	Bromine (liq) ▲
18 **1/8(6)**	579	4418	435	3319	724	5524	544	4151	**4400**	$2{,}5\cdot10^{-28}$	Rn_r	Radon (gas) ??
20	639	4875	479	3655	799	6096	599	4570	**4504**	$3{,}50\cdot10^{-28}$	Ti	Titanium
21	671	5119	503	3838					**5000**	$4{,}46\cdot10^{-28}$	Ra_1	Radium-1
21					839	6401	629	4799	**4808**	$4{,}25\cdot10^{-28}$	Se_1	Selenium ▲
22	703	5364	527	4021	879	6706	659	5028	**6694**	$4{,}48\cdot10^{-28}$	Sb	Stibium
23	735	5608	551	4204	919	7012	689	5257	**6977**	$5{,}34\cdot10^{-28}$	Yb	Ytterbium
23 1/6(8)	739	5638	555	4234	924	7050	694	5295*	**5245**	$6{,}27\cdot10^{-28}$	Eu	Europium
24	767	5852	575	4387	959	7317	719	5486	**7194**	$6{,}32\cdot10^{-28}$	Cr	Chromium
25	799	6096	599	4570					**6000**	$8{,}93\cdot10^{-28}$	Ra_2	Radium -2
25	799	6096	599	4570					**4472**	$1{,}01\cdot10^{-27}$	Y	Yttrium
25	799	6096	599	4570	999	7622	749	5715	**5780**	$8{,}48\cdot10^{-28}$	As_1	Arsenic-1 ▲
26	831	6340	623	4753	1039	7927	779	5943	**5907**	$9{,}91\cdot10^{-28}$	Ga	Gallium
27	863	6584	647	4936					**4934**	$1{,}38\cdot10^{-27}$	I	Iodine ▲
27					1079	8232	809	6172	**6162**	$1{,}15\cdot10^{-27}$	La_1	Lanthanum-1
28	895	6829	671	5119	1119	8538	839	6401	**6769**	$1{,}40\cdot10^{-27}$	Pr_1	Praseodymium-1
29	927	7073	695	5303					**7007**	$1{,}61\cdot10^{-27}$	Nd	Neodymium-1
29	927	7073	695	5303					**5323**	$1{,}83\cdot10^{-27}$	Ge_1	Germanium-1
29					1159	8843	869	6630	**8790**	$1{,}34\cdot10^{-27}$	Co	Cobalt
30	959	7317	719	5486	1199	9148	899	6859	**7260**	$1{,}85\cdot10^{-27}$	Pm	Promethium
31	991	7561	743	5669	1239	9453	929	7088	**7286**	$2{,}10\cdot10^{-27}$	In	Indium
32	1023	7805	767	5852	1279	9758	959	7317	**5769**	$2{,}71\cdot10^{-27}$	Sn_1	Stannum-1
33	1055	8049	791	6035	1319	10063	989	7546	**6110**	$3{,}06\cdot10^{-27}$	V	Vanadium
34	1087	8293	815	6218	1359	10369	1019	7775	**6272**	$3{,}45\cdot10^{-27}$	Te	Tellurium ▲
36	1151	8782	863	6584					**6531**	$4{,}33\cdot10^{-27}$	Zr	Zirconium
36					1439	10979	1079	8232	**8230**	$3{,}61\cdot10^{-27}$	Se_1	Selenium-1
37	1183	9026	887	6767	1479	11284	1109	8461	**8630**	$4{,}03\cdot10^{-27}$	Nb	Niobium
38	1215	9270	911	6951					**9314**	$4{,}74\cdot10^{-27}$	Po_1	Polonium-1
38					1519	11589	1139	8690	**8642**	$4{,}48\cdot10^{-27}$	Cd	Cadmium
39	1247	9514	935	7134					**9523**	$5{,}25\cdot10^{-27}$	Po_2	Polonium-2

39	1247	9514	935	7134					**7144**	$5{,}96\cdot10^{-27}$	Zn	Zinc
39					1559	11895	1169	8919	**8902**	$4{,}97\cdot10^{-27}$	Ni	Nickel
41	1311	10002	983	7500	1639	12505	1229	9377	**10062**	$6{,}41\cdot10^{-27}$	Ac	Actinium
41 **1/8(6)**	1315	10033	987	7530	1644	12543	1234	9415	**7536**	$7{,}40\cdot10^{-27}$	Sm_1	Samarium
42	1343	10247	1007	7683	1679	12810	1259	9606	**7469**	$8{,}01\cdot10^{-27}$	Mn	Manganese
43	1375	10491	1031	7866					**7872**	$8{,}8\cdot10^{-27}$	Fe	Ferrum
43					1719	13115	1289	9835*	**9800**	$7{,}33\cdot10^{-27}$	Bi	Bismuth
44	1407	10735	1055	8049	1759	13421	1319	10063	**7895**	$9{,}65\cdot10^{-27}$	Gd	Gadolinium
45	1439	10979	1079	8232	1799	13726	1349	10292	**8272**	$1{,}06\cdot10^{-26}$	Tb_1	Terbium -1
46					1839	14031	1379	10521	**10500**	$9{,}58\cdot10^{-27}$	Ag	Argentum
47	1503	11467	1127	8599	1879	14336	1409	10750	**11563**	$1{,}11\cdot10^{-26}$	Tc	Technetium
47	1503	11467	1127	8599					**8559**	$1{,}26\cdot10^{-26}$	Dy	Dysprosium
48	1535	11711	1151	8782	1919	14641	1439	10979	**11724**	$1{,}20\cdot10^{-26}$	Th	Thorium
48 **1/6(8)**	1539	11742	1155	8812	1924	14679	1444	11017	**8799**	$1{,}38\cdot10^{-26}$	Ho	Holmium
49	1567	11956	1175	8965	1959	14946	1469	11208	**8933**	$1{,}48\cdot10^{-26}$	Cu	Cuprum
50	1183	12200	1199	9148	1999	15252	1499	11437	**9062**	$1{,}61\cdot10^{-26}$	Er	Erbium
51	1631	12444	1223	9331	2039	15557	1529	11666	**9318**	$1{,}74\cdot10^{-26}$	Tm	Thullium
53	1695	12932	1271	9697	2119	16167	1589	12123	**12038**	$1{,}69\cdot10^{-26}$	Pd	Palladium
54	1727	13176	1295	9880					**9849**	$2{,}18\cdot10^{-26}$	Lu	Lutetium
54					2159	16472	1619	12352	**12437**	$1{,}82\cdot10^{-26}$	Ru	Rhutenium
55	1759	13421	1319	10063	2199	16778	1649	12581	**16623**	$1{,}70\cdot10^{-26}$	Ta	Tantalum
56	1791	13665	1343	10247	2239	17083	1679	12810	**13680**	$2{,}23\cdot10^{-26}$	Cm	Curium
56	1791	13665	1343	10247					**10220**	$2{,}53\cdot10^{-26}$	Mo	Molybdenum
57	1823	13909	1367	10430	2279	17388	1709	13039	**13780**	$2{,}39\cdot10^{-26}$	Am	Americium
58	1855	14153	1391	10613	2319	17693	1739	13268	**13248**	$2{,}41\cdot10^{-26}$	Hf	Hafnium
59	1887	14397	1415	10796	2359	17998	1769	13497	**14193**	$2{,}67\cdot10^{-26}$	Hg	Mercury
62	1983	15130	1487	11345	2479	18914	1859	14183	**11340**	$3{,}79\cdot10^{-26}$	Pb	Lead
63	2015	15374	1511	11528					**15370**	$3{,}56\cdot10^{-26}$	Pa	Protactinium
63					2519	19219	1889	14412	**19263**	$2{,}92\cdot10^{-26}$	W	Wolfram
64	2047	15618	1535	11711	2559	19524	1919	14641	**19320**	$3{,}11\cdot10^{-26}$	Au	Aurum
65	2079	15862	1559	11895	2599	19829	1949	14870	**11870**	$4{,}58\cdot10^{-26}$	Tl	Thallium
68	2175	16594	1631	12444	2719	20745	2039	15557	**12423**	$5{,}49\cdot10^{-26}$	Rh	Rhodium
69	2207	16839	1655	12627	2759	21050	2069	15786	**21020**	$4{,}19\cdot10^{-26}$	Re	Rhenium
71	2271	17327	1703	12993	2839	21661	2129	16243	**21450**	$4{,}7\cdot10^{-26}$	Pt	Platinum
73	2335	17815	1751	13359	2919	22271	2189	16701	**22400**	$5{,}24\cdot10^{-26}$	Ir	Iridium
74	2367	18059	1775	13543	2959	22576	2219	16930	**22590**	$5{,}54\cdot10^{-26}$	Os	Osmium
78	2495	19036	1871	14275	3119	23797	2339	17845	**18950**	$8{,}36\cdot10^{-26}$	U	Uranium
81	2591	19768	1943	14824			2429	18532	**19816**	$9{,}72\cdot10^{-26}$	Pu	Plutonium
83	2655	20257	1991	15191			2489	18990	**20250**	$1{,}07\cdot10^{-25}$	Np	Neptunium

Note: For the chemical elements Br and Hg data shown in Table 7, are averaged.

Legend:

Curium	Radioactive element according to MP (Modern Physics)
Actinium	Actinoid according to MP (Modern Physics)
Lanthanum	Lanthanide according to MC (Modern Chemistry)
▲	Nonmetals

Gravitational density of substances in the solid state is calculated by formula:

$$\frac{\rho(He)}{\mathrm{N}(He)}=\frac{\rho_{grav}(element)}{N_{true}(element)},\quad \text{hence}\quad \rho_{grav}(element)=N_{true}(element)\cdot\frac{\rho(He)}{\mathrm{N}(He)},$$

where

$\rho_{grav}(element)$ – calculated gravitational density of the given element in the table of conversions (solid state)

$N_{true}(element)$ – true quantity of neutrons in the ‘hedgehog’ of the given element in the solid state

$\rho(He)$ – Helium density in the solid state, being equal ρ=206 kg/m^3

$N(He)$ – quantity of neutrons in helium ‘hedgehog’ in the solid state, being equal to N=27

CARD № 8
VERIFICATION OF AVOGADRO'S LAW

Avogadro's law: «*Equal volumes of gaseous substance at the similar pressure and temperature contain the same number of molecules, so the gas density is a measure of the mass of their molecules*».

Determine the number of molecules of known gases in a volume of 22.4 liters under normal conditions, that is, verify the statement of the law of Avogadro and his constant (N_A=6,022·10^{23} mol^{-1}).

We calculated the mass of the "hedgehogs" of the chemical elements $m_{hedgehogs}$. All known gases are diatomic molecules, so the mass of one molecule of gas equal

$$m_{molecule} = 2\ m_{hedgehogs}.$$

Knowing the density of the gas under normal conditions ρ_{gas}, we can determine the mass of gas in a volume of 22.4 liters using the formula

$$m_{gas} = \rho_{gas} \cdot 22{,}4 \cdot 10^{-3}\ \text{(kg)}.$$

The number of gas molecules contained in a volume of 22.4 liters under normal conditions, define by the formula:

$$N_{molecule} = \frac{m_{gas}}{m_{molecule}} = \frac{\rho_{gas} \cdot 22{,}4 \cdot 10^{-3}}{2 \cdot m_{hedgehog}}.$$

According to the above formula we will calculate the number of molecules of simple gases and will put them in a table.

Chemical element	**$m_{hedgehogs}$, kg**	**Gas**	**ρ_{gas}, кг/м^3**	**$N_{molecule}$**
H (6×4)	5,96·10^{-34}	**H_2**	8,988·10^{-2}	**1,69·10^{30}**
He (6×4)	6,77·10^{-33}	**He_2**	1,785·10^{-1}	**2,95·10^{29}**
N (6×5)	1,02·10^{-30}	**N_2**	1,2506	**1,38·10^{28}**
Ne (6×5)	3,44·10^{-30}	**Ne_2**	9,0035·10^{-1}	**2,93·10^{27}**
O (8×4)	3,46·10^{-30}	**O_2**	1,429	**4,62·10^{27}**
Ar (6×5)	6,17·10^{-30}	**Ar_2**	1,7839	**3,24·10^{27}**
Cl (8×4)	1,19·10^{-29}	**Cl_2**	3,214	**3,03·10^{27}**
F (8×4)	1,47·10^{-29}	**F_2**	1,693	**1,29·10^{27}**
Kr (6×5)	6,7·10^{-29}	**Kr_2**	3,745	**6,26·10^{26}**
Xe^{g2} (6×5)	1,28·10^{-28}	**Xe_2**	5,851	**5,13·10^{26}**
Rn (8×4)	2,50·10^{-28}	**Rn_2**	9,73	**4,36·10^{26}**

This result shows that under normal conditions the number of molecules of a gas contained in a volume of 22.4 liters, is not constant N_A=6,022·10^{23}mol^{-1}.

Therefore Avogadro's law is not the law!

Accordingly, **the universal gas constant $R = k \cdot N_A = 8{,}31 \cdot$ J/(mol·K)**, where k = 1,38·10^{-23} J/K is the Boltzmann's constant, **is not constant and depends on the type of gas.**

8. Mass does not attract mass, i.e., the nature of gravity is other.

It has been determined on the evidence base that the mass is a physical object, not "a physical quantity is a property of the object".

The most convincing thing is to look closely at the formula of power in the modern formulation of the second Newton's law:

$$F = m \cdot a$$

Substituting instead of *m* (mass) its definition of Modern Physics (***MP***) in the form of "a physical quantity is an object property" we shall ask a question: can the "mass as an object property" be accelerated or slowed down or cannot?

It is obvious without any proofs that the abstract word 'property...'cannot be accelerated in principle, since it is impossible to exert force upon it.

There remains a definite answer that only the physical object of any size ranging from very small to the stars can get the acceleration under the action of force (see **6. Mass of a body – what is it?**, **8. Additional explanations for the articles "mass of a body", "tables…" and an example of possibilities of Neutron sciences**).

Kilogram (kg) - this is a unit of measurement of the **resistance force of the chemical bonds** of a physical object to gravitational magnetic flux. Any mechanical force F, which is not related to mass *m* or with the *g* and which is applied to the body, is compared with the weight force: $P = mg$.

Electrical turbo generators receive electricity from the gravitational flow, i.e., from β^+-particles (gravitons in NS).

In nuclear reactors burnable nuclear fuel produces no more than 7% of the electrical equivalent of the installed capacity of NPP power unit at $\eta \approx 30\%$ and the remaining 93% are supplied by gravitational flow from β^+-particles. In the reactor a chain reaction occurs in the gravitational flow, and α^--particles of nuclear fuel only create the conditions for its occurrence (α^--particle in NS is the neutron in Modern Science (MF), see **6. Mass of a body – what is it?**).

Scheme of the chain reaction is as follows:

α^--particles of Uranium that are collided with a β^+-particle of the flow, will divide the latter on α- and γ^--particles (nuclear fission in MF), which, in turn, will continue to divide new β^+-particles – the gravitons of the flow. For one primary α^--particle of Uranium we have 270 α^-- and 270 γ^--particles of the flow.

In the electrical reactor electrical energy instead of nuclear fuel creates the conditions for starting a chain reaction all also in the gravitational flow of the β^+-particle at the same cost no more than 7% of the electric installed capacity of NPP power unit. So, for a power unit of 1,000 MW, this would amount to no more than 70 MW.

Today we use gravitational flow, without knowing it. In the production chain of nuclear power plants in a nuclear reactor we get heat from the gravitational flow, and then by means of heat in the form of steam we produce electricity from gravitational flow in the turbogenerator. In our proposal we replace nuclear fuel for electrical energy with the same effect.

Thus, our power plants will become fuel-free power plants, and we can solve the problem of unlimited power generation with the preservation of the environment and climate (see **5. About trying to preserve the environment and the Earth climate**, with the possibility of a large production of fresh drinking water.

For more information, see http://neutronscience.com.ua/books/.