419.00 **Superatomics**

419.01 Those subsequently isolated chemical elements beyond the 92 prime self-regenerative chemical elements constitute super-atomics. They are the non-self-regenerative chemical elements of negative Universe.

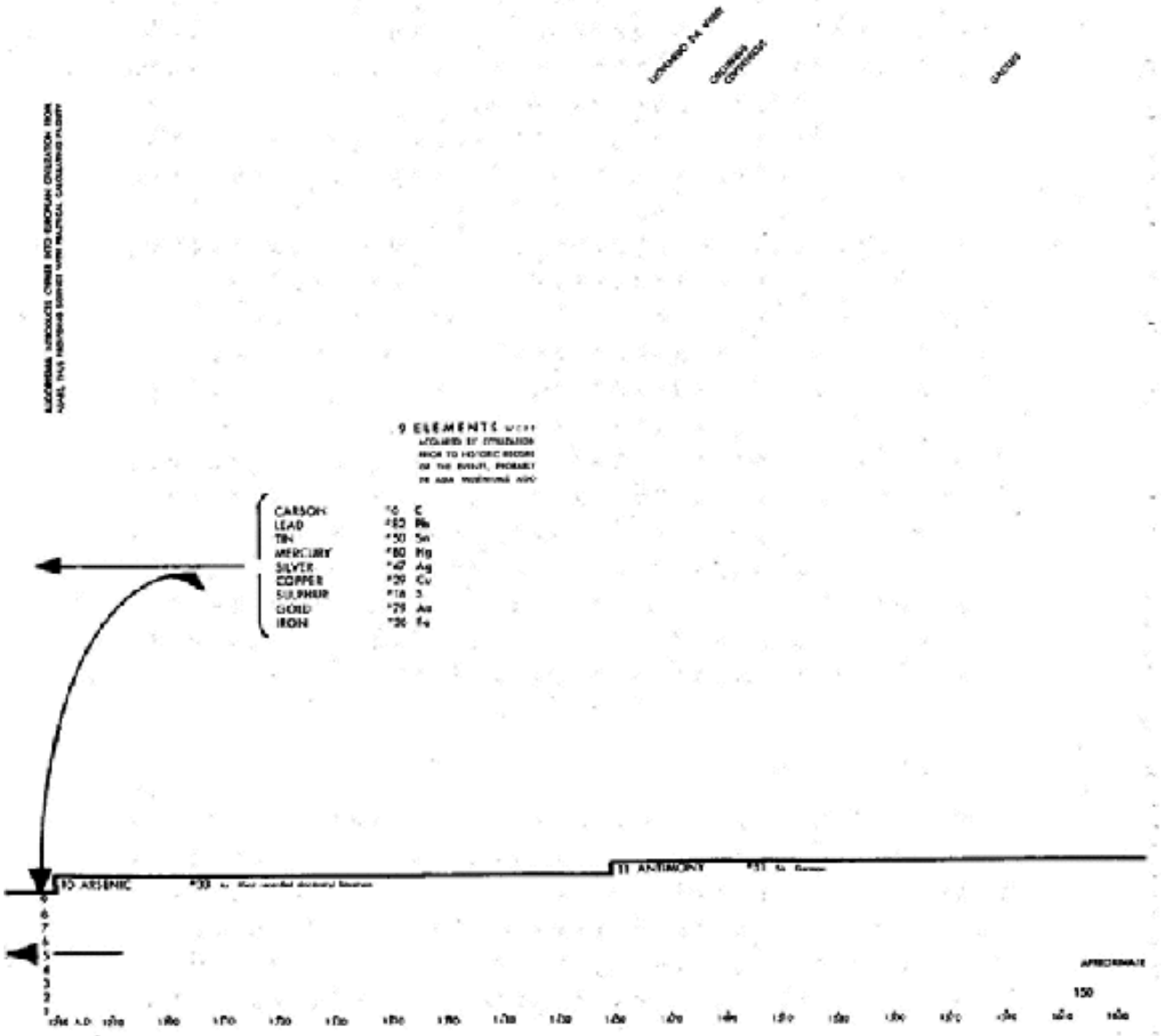
419.02 Negative Universe is the complementary but invisible Universe. To demonstrate negative Universe, we take one rubber glove with an external green surface and an internal red surace. On the green surface a series of 92 numbers is patterned; and on the red surface a continuance of 93, 94, through to 184, with number 184 at the inside end of the pinky—each of the inner surface numbers being the inner pole of the outer pole point number positionings. The positions of the numbers on the inside correspond to the positions of the numbers on the outside. The numbering starts with the position of the five fingernails, then their successive first joints, and then their successive second joints from the tips: 5, 10, 15, and 20 numbers accommodated by the digits. The other 62 members are arranged in four rows of 12 each around the back and front of the palm of the hand. There is a final row of 14 at the terminal edge of the glove opening—this makes a total of 92. Now we can see why the 92 numbers on the outside were discoverable in a random manner requiring very little physical effort. It was just a matter of which part of your gloved hand you happened to be looking at. But if we become curious about what may be on the inside of the glove we discover that the glove is powerfully resilient. It takes a great deal of power to turn it up, to roll back the open edge—and it takes increasing amounts of power to cope with the increasing thickness of the rubber that rolls up as the glove opens. The elements from 93 on are revealed progressively by the numbers.

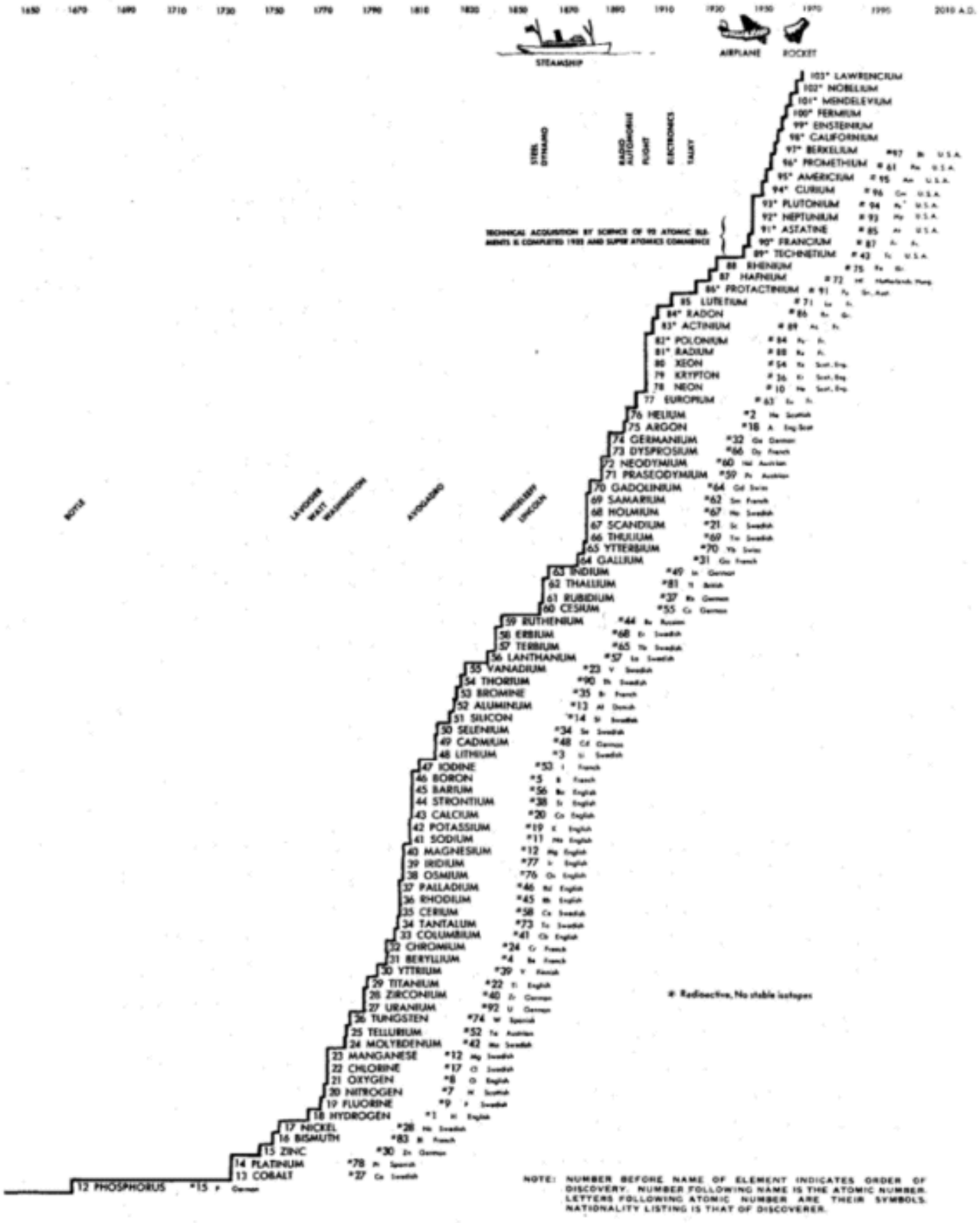
Fig. 419.03

419.03 The discovery of the first 92 self-regenerative chemical elements was not by the numbers starting with one, but in a completely random sequence. In the super-atomics, beyond Uranium, number 92, the split-second-lived chemical elements have been discovered in a succession that corresponds to their atomic number—for example, the 94th discovery had the atomic weight of 94; the 100th discovery was atomic weight 100, etc.

EARTH ORBIT IN MAN MADE ENVIRONMENT CONTROL:
PRODUCT OF SUCCESSFUL APPLICATION OF HIGH
PERFORMANCE PER UNIT OF INVESTED RESOURCES

PROFILE OF THE INDUSTRIAL REVOLUTION
AS EXPOSED BY THE CHRONOLOGICAL RATE OF ACQUISITION OF THE BASIC INVENTORY OF COSMIC ABSOLUTES–THE 92 ELEMENTS





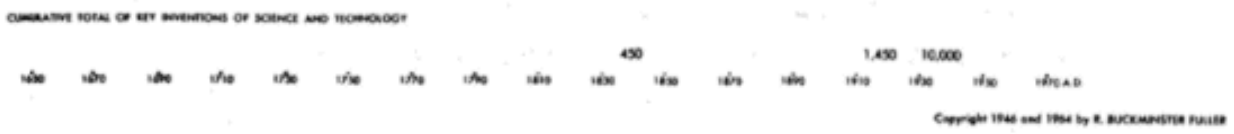


Fig. 419.03.

Zoom Image

419.04 This orderly revelation is in fundamental contrast to the discoveries of the 92 self-regenerative elements and their naturally self-regeneratively occurring isotopes. The discovery of the post-uranium elements has involved the employment of successively greater magnitudes of energy concentration and focusing. As each of the super-atomic trans-uranium elements was isolatingly discovered, it disintegrated within split seconds. The orderliness of the succession of the discovery of super-atomics corresponds to the rate of increase of the magnitudes of energy necessary to bring them into split-second identifiability before they revert to their inside—ergo, invisible to outside— position.

419.05 Every layer of a finite system has both an interior, concave, associability potential and an exterior, convex, associability potential. Hence the *outer* layer of a vector-equilibrium-patterned atom system always has an additional full number "unemployed associability" count. In the example cited above (Sec. 418.03), an additional 92 was added to the 146 as the sum of the number of spheres in the first three shells. The total is 238, the number of nucleons in uranium, whose atomic weight is 238. Four of the nucleons on the surface of one of the square faces of the vector equilibrium's closest-packed aggregation of nucleons may be separated out without impairing the structural-stability integrity of the balance of the aggregate. This leaves a residue of 236 nucleons, which is the fissionable state of uranium—which must go on chain-reacting due to its asymmetry.

419.10 Nuclear Domain and Elementality

419.11 Where the primitive polyhedron considered is the vector equilibrium, the closest-packed-sphere-shell growth rate is governed by the formula $10F^2 + 2$ (Sec.222). Where the most primitive polyhedron is the tetrahedron, the growth rate is governed by the formula $2F^2 + 2$; in the cases of the octahedron and the cube see Sec. 223.21. The formula is reliably predictable in the identification of the chemical elements and their respective neutron inventories for each shell. The identifications are related exclusively to the unique nuclear domain pattern involvements.

419.12 When a new nucleus becomes completely surrounded by two layers, then the exclusively unique pattern surroundment of the first nucleus is terminated. Thereafter, at three enclosure levels or more, the initial nucleus is no longer the unique nucleus. The word *elemental* relates to the original unique patterning around any one nucleus of closest-packed spheres. When we get beyond the original unique patterning, we find the patternings repeating themselves, and we enter into the more complex structurings of the molecular world.

419.13 Uranium-92 is the limit case of what we call *inherently selfregenerative chemical elements.* Beyond these we get into demonstrations of non-self-regenerative elements with the split-second life of Negative Universe. These demonstrations are similar to having a rubber ball with a hole in its skin and stretching that hole's rubber outwardly around the hole until we can see the markings on the inner skin that correspond to markings on the outer skin— but when we release the ball, the momentarily outwardly displayed markings on the inside will quickly resume their internal positions.

419.14 As we see in Sec. 624, the inside-outing of Universe occurs only at the tetrahedral level. In the nucleated, tetrahedral, closest-packed-sphereshell growth rates the outward layer sphere count increases as frequency to the second power *times two plus two*—with the outer layer also always doubled in value.

419.20 Elemental Identification of First and Second Shell Layers

419.21 The outer layer of the vector equilibrium aggregates always equals the shell wave frequencies to the second power times 10 plus two. The sum of all the layers equals the number of neutrons of the elements, and the outer layer is always complemented by an equal number of active nucleons, which, if added to the sum of the previously encompassed neutron layer, equals the isotope number.

419.22 The omnidirectional closest packing of spheres in all six symmetrical conformations of the primitive hierarchy of polyhedra probably provides models for all the chemical elements in a hierarchy independent of size in which the sum of the spheres in all the layers and the nuclear sphere equals the most prominent number of neutrons, and the number in the outer layer alone equals the number of protons of each atom. In the VE symmetry of layer growth the sum of the spheres is one and the outer layer is one: the initial sphere represents the element hydrogen, with the atomic number 1, having one neutron and one proton. The second VE assembly layer, magnesium, with the atomic number 12, has 12 protons and 24 neutrons. The third layer, molybdenum, with the atomic number 42, has 42 protons and a majority of 54 neutrons. The fourth layer, uranium, with the atomic number 92, has 92 protons and an isotopal majority of 146 neutrons. (Compare Secs. 986.770 and 1052.32.)

419.23 **Table: Number of Protons and Neutrons in Magnesium, Molybdenum, and Uranium**

Element	Protons		Neutrons		Abundance
Hydrogen	1	+	1	= 2	
Magnesium	12	+	12	= 24	78.6 %
	12	+	13	= 25	10.11
	12	+	14	= 26	11.29
Molybdenum	42	+	52	= 94	9.12
	42	+	53	= 95	15.7
	42	+	54	= 96	16.5
	42	+	55	= 97	9.45
	42	+	56	= 98	23.75
Uranium	92	+	142	= 234	0.0051
	92	+	143	= 235	0.71
	92	+	146	= 238	99.28

Vector Equilibrium Shell Growth Rate: $10F^2 + 2$

Zero Frequency	$1 + 1 = 2$
Initial Frequency	$12 \times 2 = 24$
$Frequency^2$	$42 + 42 + 12 = 96$
$Frequency^3$	$92 + 92 + 42 + 12 = 238$

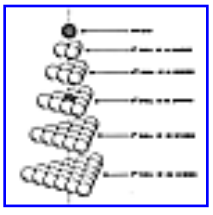


Fig. 419.30

419.30 **Closest-sphere-packing Analogy to Atomic Structure:** In 1978 Philip Blackmarr, a student of synergetics from Pasadena, proposed a novel analogy of closest- sphere-packing geometry to electron-proton-neutron interrelationships and atomic structure. He took note of the following four facts;

1. In the closest packing of unit radius spheres each spheric and interspheric space domain is equally and symmetrically embraced by allspace-filling rhombic dodecahedra. (Sec. 426.20.)
2. The concentrically embracing shells of the vector equilibrium have a successive population growth rate of $10F^2 + 2$, resulting in 12 spheres in the first layer, in the second, 92 in the third, and 162 in the fourth. (See Chart 415.03.)

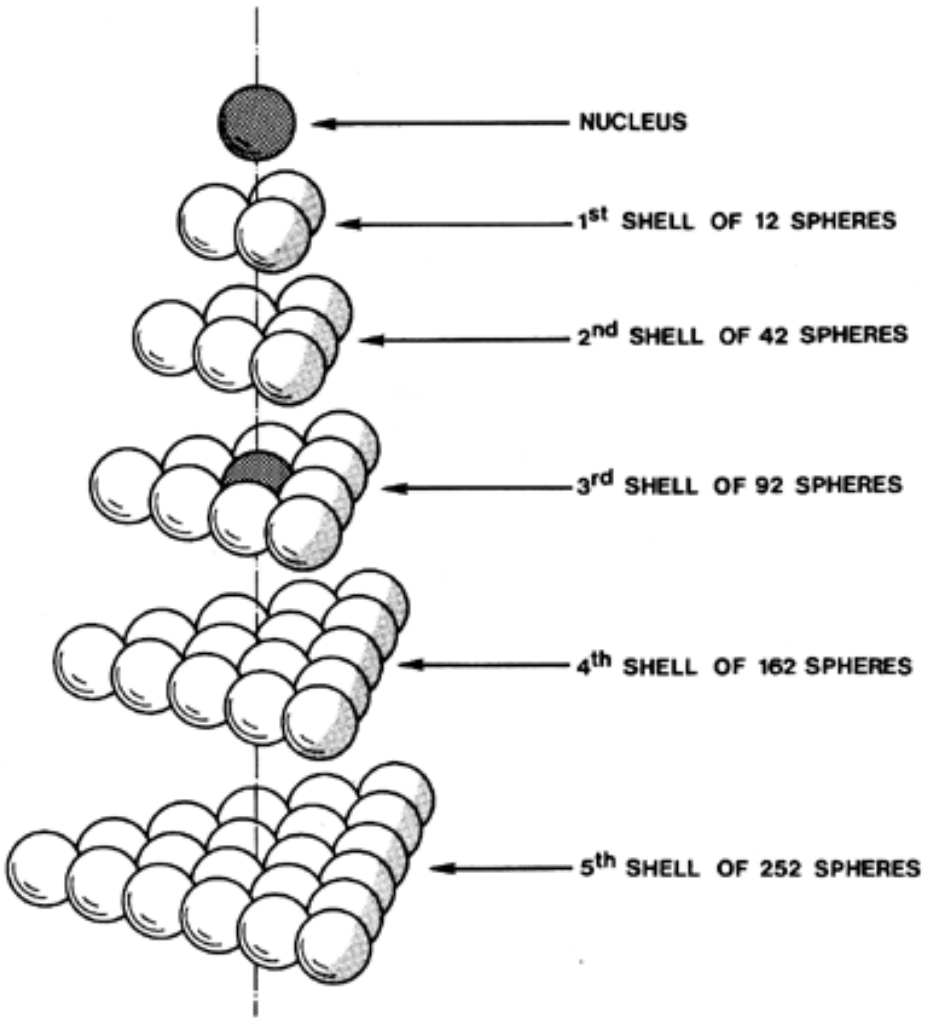


Fig. 419.30 Realized Nucleus Appears at Fifth Shell Layer: In concentric closest packing of successive shell layers potential nuclei appear at the third shell layer, but they are not realized until surrounded by two shells at the fifth layer.

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3. In the concentric successive shells of closest-packed spheres a new nucleus does not appear until the fifth frequency— the fifth shell layer. (Secs. 414 and 415.30)
4. The ratio of the electron mass to the proton mass is 1:1836. (Sec. 433.02.)

Bearing those four facts in mind Blackmarr employed a symmetrical fourshell aggregate of 308 rhombic dodecahedra to represent the total allspacefilling domains of the 308 spheres of the maximum limit nuclear domain. He then intuitively divided the number 1836 by 6, the latter being the volume of the rhombic dodecahedron in respect to the volume of the tetrahedron as one. The number 1836/6= 306 becomes significant as it represents the total number of neutron spheric domains in the vector equilibrium concentric shell packingess the number two of their integral number to serve as poles of the axis of spin of the symmetrical system. The spheres in the successive shell layers— 12, 42, 92, 162—add up to 308; 308 - 2 = 306. (Compare Sec. 418.)

419.31 Blackmarr then hypothetically identified the electron as the volume of the unit-vector-edge tetrahedron as ratioed to the volume of the four-frequency vector equilibrium, representing a symmetrical and "solid" agglomeration of 308 rhombic dodecahedra (with two of the outer-layer rhombic dodecahedra assigned to serve as the symmetrically opposite poles of the system's axis of spin), or of 308 unit-radius spheres and their interspaces. This evidences that the space filled by the 308 rhombic dodecahedra is the maximum, cosmic-limit, unit-vector, symmetrical polyhedral space occupiable by a single nucleus.

419.32

$$\frac{\text{The volume of the ELECTRON (which is that of one regular vector-edged negative tetrahedron)}}{\text{The volume of the rhombic-dodecahedron - composed four - frequency VECTOR EQUILIBRIUM}} = \frac{1}{1836}$$

$$\frac{\text{The volume of the POSITRON (which is that of one regular vector-edged negative tetrahedron)}}{\text{The volume of the rhombic-dodecahedron - composed four - frequency VECTOR EQUILIBRIUM}} = \frac{1}{1836}$$

419.33 Here is an elegant realization that two spheres of the outer-layer spheres (or rhombic dodecahedra) of the symmetrical system have to serve as the polar axis of the system spin. (See Secs.223 and 1044.)

419.34 Thus by experimental evidence we may identify the electron with the volume of the regular, unit-vector-radius-edge tetrahedron, the simplest symmetrical structural system in Universe. We may further identify the *electron tetrahedra* with the maximum possible symmetrical aggregate of concentrically-packed, unit-radius spheres symmetrically surrounding a single nucleus— there being 12 new potential nuclei appearing in the three-frequency shell of 92 spheres, which three-frequency shell, when surroundingly embraced by the four-frequency shell of 162 spheres, buries the 12 candidate new nuclei only one shell deep, whereas qualifying as full-fledged nuclei in their own right requires two shells all around each, which 12, newborn nuclei event calls for the fifth-frequency shell of 252 spheres.

419.35 Together with the closest-packed spheres of the outer layer of the icosahedron of frequencies 1 and 4 (and of the outer layers of the closestpacked spheres of the one— and only one— nucleus-embracing, symmetrically and closest-packed, unit-radius sphere aggregates in the form of the octahedron, rhombic dodecahedron, rhombic triacontahedron, and enenicontahedron) as well as the already identified four-frequency vector equilibrium, the rhombic dodecahedron is the maximum nuclear domain within which the pretime-size set of chemical-element-forming atoms' proton-neutron-and- electron interrelationship events can and may occur.

419.36 All of the foregoing is to say that the size of one spinnable proton consisting of 308 rhombic dodeca closest packed in the symmetrical form of the four-frequency vector equilibrium is 1836 times the size of one prime, pre-time-size, prefrequency, unit- vector-edge tetrahedron or of one electron. Multiplication only by division means that the time-size frequencies of the elements (other than hydrogen) occur as various concentric- shell symmetry phases of the single-nucleus-embracing, symmetrically closest-packed, single-nucleus aggregates in the multiconcentric-layered forms of the vector equilibrium, tetrahedron, octahedron, rhombic dodecahedron, rhombic triacontahedron, and cube.

419.37 Synergetics has long associated the electron with the icosahedron. Icosahedra cannot accommodate concentric shells; they occur as single-layer shells of closest-packed, unit-radius spheres. Since the *proton* has only the outer shell count, it may be identified with the icosa phase by having the total volume of the rhombic- dodecahedron-composed four-frequency vector equilibrium transformed from the 306 (non-axial) *nucleon* rhombic dodecahedron into each of the closest-packed, single-layer icosahedra shells as an emitted wave entity. The rhombic dodecahedron *neutrons* are packed into concentric layers of the vector equilibria to produce the various isotopes. For example:

VE f ^{1}	=	12 neutrons
VE f ^{2}	=	42 "
VE f ^{3}	=	92 " ----------
		146 neutrons in Uranium
Icosa f ^{3}	=	92 protons
		(238 nucleons in Uranium)
92 Tetra	=	92 electrons in Uranium

Next Section: 420.00