Quantum Chemistry and erroneous mathematical extrapolations

Recently I was asked a rather simple and innocuous question regarding hypothesised atomic orbitals [s,p,d & f...] and why Tetryonics disagrees with modern chemical texts that state the electron shells continue to [g, h,& I etc. with an ever increasing number of electrons in each orbital].

I agreed to produce a short paper on the reasoning behind this small discovery and soon realised that in order to explain the reasoning in any way that would make sense to the student it was not simply good enough to supply the answers in short form – but instead as is often the case the reasoning had to be put into context in conjunction with the steps that led to such a discovery in the first place.

Tetryonic theory is a unified theory, based on a single geometric postulate that energy is quantised in small EQUILATERAL chunks that in turn combine to form all the laws of Nature and science that we know and observe today. It is not simply good enough, nor wise to jump right into an advanced topic within Tetryonic theory and expect it to agree with existing theory or what you have been taught...

This is especially the case with a unified theory, great care and time has been taken to build upon its single foundation postulate and advance the theory to the state that it is ready for others to begin exploring it – but I always take great care to encourage each and every student of Tetryonic theory to print out the templates I have supplied and to make physical models of everything they study – the power of tactile manipulation of paper models when developing a new understanding of Physics, Chemistry, Biology and Cosmology cannot be underestimated, especially when this very same geometry maps EVERYTHING in Nature.

“If maths is the language of science – then equilateral Planck geometry is its grammar”

That said I hope that this ever so short introduction to Tetryonic chemistry basics with its objective of reaching and explaining the topic in question is both succinct and informative enough to both explain the reasoning behind the answer/s given and also flames your initial desire to study this new theoretical approach to science further......
Tetryonic theory expands upon a single postulate, that of a 2d equilateral quantum field of charged mass-energy momenta creating all the particles and Forces of the Standard Model [and then some], in turn introducing us to tetryons [the namesake of Tetryonic theory] and a physical geometric identity for all the fields and particles that go into making up our Universe...

2d planar fields of mass-energy momenta [bosons & photons] are defined as being EM field geometries & 3D material particles [quarks, leptons, mesons & Baryons] are defined as Matter Topologies comprised of 2d mass-energy geometries... emphasising the need to model such forms geometrically using the Tetryonic templates provided...
Upon doing so it quickly becomes apparent that the current models of spherical particles and circular fields are hopeless out-dated and incapable of modelling the quantum reality of Nature like Tetryonic theory does, leading in turn to a paradigm shift in the geometric understanding of the quantum mechanics of nature and how complex compounds and macro-molecules really form from mass-energies and bind together to create the mechanics of Chemistry itself...

Foremost of these new ideas with respect to Chemistry is the realisation that Protons and Neutrons are mirror Matter topologies of each other with identical mass-energies [despite their differing nett charges] and that the Deuterium nuclei [not Hydrogen] is the key building block of periodic elements and their isotopes...

For centuries now the long-held assumption has been that all the periodic elements have a core \([Z]\) number of Protons and electrons balancing out their atomic charges and a number of Neutrons that contribute to their observed molar masses…… an idea that developed from our basic understanding of charged ions and neutral Matter and the relativity recent development of Mendeleev’s periodic table of elements where the emphasis on molar weight took precedent over any understanding of the actual quantum topology of the elements themselves – a situation that persists to this day [until now]
Using the rigid charge topologies of the elements themselves it quickly became apparent that an increasing number of Neutrons bound to Protons and each other was a physically unsustainable model of atomic binding, specifically as I attempted to build such models of elements using the charged Matter topologies of Baryons I could not proceed beyond element 60 – at which point Neutrons have to bind to other Neutrons in order to achieve the molar masses observed.

The solution to this impasse took a number of months of concerted thought – and led to the outright rejection of ideas put forward in modern science texts as to how larger and larger elements with ever increasing molar masses form from Hydrogen with an ‘excess’ number of Neutrons.

The solution in turn had the additional benefit of ‘straightening’ the Proton-Neutron curve of atomic isotopes and negating the need for any maths to explain why the curve exists in the first place along with their islands of isotopic stability.....

In short as various D-nuclei are attracted to each other via their extended kEM fields then orientate themselves wrt each other via their quark E-field apexes of their respective Matter topologies [UDU vs DUD] to bind together in a predictable and repeatable fashion/method that is currently termed the residual strong force or residual EM force in atomic nuclei...

![Residual Electro-Magnetic Forces](image)

Binding Protons and Neutrons to form Deuterium nuclei

This ‘residual’ strong force is far weaker than the STRONG force present between the opposite charge parallel fascia of tetryons themselves that make up the constituent quarks, leptons and Baryons of atomic nuclei and periodic elements and is always focused on the outermost extremities of the baryonic Matter topologies of elements as illustrated....

Initially facilitating the binding of Protons and Neutrons to each other [above] and later bringing about the orientation of D-nuclei to each other and the formation of the elements and their atomic orbitals [below]
Binding Deuterium nuclei to form periodic elements [with s & p orbitals]

The creation of larger and larger conglomerations of D-nuclei and the spin of bound electrons [along with the application of external forces on the newly formed elements themselves] results in each element developing a rotation [classical angular momentum] about its centre of mass/Matter.

This rotation then allows for the mapping of the circular orbits of bound electrons about the same centre of mass/Matter in each and every periodic element resulting in the familiar s, p, d & f electron orbitals with their associated electron sub-orbitals as per established modern theory.

Bohr’s electron orbitals – Schrodinger’s azimuthal quantum numbers
Of note was the fact that the Matter topologies of D-nuclei as they bind to each other create larger and larger periodic elements over time with shells [K-S] of INCREASED principal energy levels [1-8] BUT at shell O [energy level 5] the until-then expanding electron orbital configuration reverses resulting in a final Matter topology for element 120 that resembles a child’s spinning top [as illustrated in the P-N isotopic curve illustration]

This increase and subsequent decrease in the electron orbitals/sub-orbitals of periodic elements is also to be found within the layout of Hund’s aufbau principle table and the math of Schrodinger’s electron wave function numbers for elements 60+

Strangely, this pattern was not picked up on in the texts I researched despite it being readily apparent to all who look for it and even led to the supposition of an endless number of ever heavier periodic elements and the speculation of atomic orbitals g,h,l ….. [The basis for this article] with an ever increasing number of electrons within them.

The is purely a result of the extending maths developed to describe these electron orbitals without any basis in the geometric reality of the quantum mechanics actually at work in Chemistry...

By mapping Bohr and Schrodinger’s work to the physical charge topologies of each and every elements Tetryonic theory rules out erroneous and speculative ideas of modern science and replaces them with cold hard mass-energy geometries and Matter topologies to further our understanding of what we cannot see.
By mapping Bohr’s atomic shells to Schrodinger’s Principal quantum numbers \([N]\) for all atomic elements and nuclei, Tetryonic theory also facilitates the mapping of Bohr’s electron orbitals and sub-orbitals [electron configuration] to the secondary \([l]\) and tertiary \([m]\) quantum numbers of Schrodinger’s wave equation for the same.
It then completes the picture by arranging the exploded D-nuclei that comprise each periodic element accounting for their energy levels and Pauli’s electron spin to produce a ‘mirrored’ version of Hund’s aufbau table that allows all of Schrodinger’s quantum numbers [including electron spin] to be mapped to their classical Bohr’s shell-orbital equivalents for each and every periodic element possible.

This is no mean feat and represents the culmination of many years work building upon the single geometric postulate upon which Tetryonic is founded.
It in turn completely corrects our understanding of quantum chemistry and re-writes our scientific texts to include a geometric foundation on which to better clarify and text any future explorations and suppositions in these fields.

Tetryonics shows, without doubt or mathematical prejudices that there are only 120 periodic elements possible and that the Aufbau table and current suppositions of electron orbits beyond the ‘f’ orbital drawn from the math based extrapolation of Schrodinger’s quantum numbers or Bohr’s classical model of the atomic nuclei are without basis and must now be corrected wrt the detailed quantum [Tetryonic] model of periodic elements and their charged Matter topologies.

The Aufbau table, familiar to all who study chemistry is revealed to have been left or right justified in most chemical texts to better reflect the maths nomenclature of various maths schema in use throughout the world and that had it been centre justified and mirrored the real geometric pattern used by Nature would have been readily apparent to all years ago....

Equally, the extrapolation of the existence of orbitals and sub-orbitals to ever increasing distances from the nuclei because it is allowable mathematically is also shown not to ‘hold water’ in the case of how in reality Nature builds periodic elements using D-nuclei .....
Tetryonic chemistry, developed on the back of Tetryonic QM & QED provides a very detailed view of periodic elements inclusive of their electron configurations and quark arrangements [chemical family properties] that completely replaces the current mathematical/computer generated models of the same...

It affords no speculation with regard to the form of the nuclei and the electron configurations beyond what such a Matter topology can create when electrons bind to the nuclei of elements as everything must be physically modelled using only equilateral Planck quanta

ie Tetryonics is a BOTTOM-UP understanding of quantum chemistry while existing texts and theories remain TOP-DOWN approaches to the same and afford not physical models on which to clarify and correct assumptions being put forward let allow facilitate the development of a unified theory of science on all energy levels.....

Finally, in turn Tetryonic theory and its associated energy geometries providing us with a **new periodic table of elements** that reflects the natural topologies of the elements themselves and unifies Bohr’s & Schrodinger’s work to date within one detailed illustration that better reflects all the existing correct aspects of chemical theory as well as the true quantum geometry of Nature itself for all to use and learn from.

More so – it reveals that the purported or proposed g,h,i,... electron orbitals are not a factual part of any theory of chemistry that hopes to be unified in any meaningful any with Classical, Quantum or Relativistic theory.
Tetryonic element families

Elemental family groupings are a reflection of atomic orbitals, valence electron atoms.