Concept And Functions Of An Electron With Schrodinger's Wave Form Of The Electron

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DOI: 10.3578/jecsi .68.1&2.2019.29

Abstract:

The reincarnation of Schrodinger's wave equation of an electron tempts to advance its concept which lures to study the process of electro crystallization on single crystal planes of (100) (111) substrates cathode. The deposits occur in the crystalline forms, by virtue of involvement of the electrons.So the mathematical concepts of the crystals when studied on dynamic basis of Schrodinger wave concept of mass smeared upon static vacuum surface, one reaches the formula for the massive Cat of Schrodinger as $y= \psi(x)]=(V,del)^2\ \psi(_x) + (8\pi^2 m/h^2)[(E-V)\ \psi(_x)\ ]=0$ The large number of Schrodingers cats of massive ELECTRONS fetch out the desired reaction by the virtue of their common desire(property) be names as tanθ of them. Hence letting $\psi(_x)$ to be a function of the tanr, i.e $\psi(x) = f(\tan\theta)$. One gets $V^2\ \psi(_x)$ as $2\mathrm{Sec}^2\theta\ \tan\theta + (8m/h^2)[(E-V]\ \tan\theta]=0$ The above equation is of Massless cyclic electron of dynamic vacuum which is generic in nature like a driving force of the universe, responsible for the vivid natured morphologies of the animates and non animates of it's domain.

Keyword: Reincarnation, $\psi(_{x\ t})$, $\psi(_x)$, $\psi(_\theta)$ Oscillator, Enzyme crystal, Liquid crystal, Electrocrystallization

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Introduction and Discussion:

On of the Scientists namely Stoney[1] defined the electron quantitively as the ratio of Charge(e) to its Mass (m) as y = e/m . J.J Thompson and others proved it mathematically by carrying out experiments and it(Electron) was expressed as y =e/m=(E(electric Field /M(Magnetic Field))* (1/r) ……1 Where 'r' is radius of the curvature of electronic path. In the recent Days ref 2,3,4 the electron is defined as the compound of the reaction of dynamic vacuum and of the dynamic mass. Accordingly it has been defined 132 such electrons (Elements Of the periodic rable) of the universe. Michael Faraday the founding father of the electricity and Magnetism phenomena brought out the relation between mass and charge of electrolyzing material interms of Fardays laws of Electrolysis. The deposition of such material on sngle crystal planes of (100) and of (111) found to be in crystalline forms. when observed under metallurgical microscope ref 5,6…18 of figure 4.1 to 4.12. Catalysts used in under reversible reactions gain crystalline forms at the end of reactions. Enzymes also occur in crystalline forms like metals occurring in the earth crust. Hence the crystalline shapes drew the attention of many scientists to explain it interms of the electron. The Spectral studies of Rydberg, Hertz, Rutherford, Bohr Planck , L.Pauling, Sommerfield , Zeeman Einstein and others pointed out the electron's existence in transit or transportation process of their experimental evidences. Finally Hertz was the pioneer Scientist succeeded experimentally to transport the electron in the thin form of the vacuum waves away from its origin. Energy equations of the Einstein and of the Planck emerged out as the deBroglie wave equation of electron as $\lambda= h/p$ ……...……..2

The equation 2 expresses its dual nature present in the precessional electronic path. Heinsenburg and Schrodinger defined the electron $\psi(xt)$ in the matrix and wave forms respectively. But Schrodingers wave form over took the matrix form by gaining momentum and butts!! as Schrodingers Cat. The Successful separation of time's impact

on the wave formation from $\psi(xt)$ to $\psi(x)$ is Schrodinger's wave equation. The mathematical form of it is

$$V^2 \psi(_x) + (8\pi^2 m/h^2)[(E-V]\ \psi(_x)] = 0 \text{ ——— } (3)$$

The displacement or transportation of an electron under the influence of its driving force and directions of its time factor governs not only the rate of reactions but also results the geometrical shaped products on (100) and (111) single crystal planes as show in the microphotographs of the deposits studies under metallurgical microscope is show in figure 4.1 to 4.12. As the common property of large number of electrons is to bring out the only one chemical relation to be studied is as the function of tanr of them so that mathematical relation of $\psi(x)$ and of $\psi(\theta)$is $\psi(x) = f(\psi(\theta))$…….(4) hence

$$V^2 \psi(x) = d[d \tan\theta] = d[\sec^2 \theta] = 2 \sec^2 \theta \tan \theta \text{……..} \quad (5)$$

Substituting the values of equation 4 and 5 in equation 3 one gets the modified form of Schrödinger's

Wave equation of vacuum material of three dimensions as

$$Y(\theta) = 2 \sec^2 \theta.\tan \theta + (8m/h^2)[(E-V]\ \psi(\theta)] = 0 \text{ —(6)}$$

which is generic in nature to represent repetitive original shapes and directions during its cyclic path of it's advancement on the surface of the substrate cathode , thus one can explain the formation(i) points (ii) capped line (iii) facet crystal and also of others like cubical or rectangular and hexagonal crystal deposits. The mathematical reoccurrence of number of derivates or of integration processes of repeated steps of the same quantum energy waves results in the polymerization process of these steps in the cyclic path of its advancement (fig 4.1 to 4.12).

The ratio of participation of vacuum material to massive material of the copper system used at isochoric strength points out the base of the crystal growth on substrate surface of vacuum. It can be mathematically expressed as of $(360^0/n * \theta^0)$……(7) geometrical shapes where 'n' and 'θ' generate at the cost of internal

The Predictable and observable crystals from equation ——6 & 7 during electrocrystallization process are as shown in tabular column below

Interfacial Angle 'θ' between orientation and directional growth	**No of unit length (n) of Planck's Oscillator of unit cyclic process**	**Shapes of the Crystal**	
		Computed	**Formed in dynamic state at the cost of the system**
0^0	Group number unit	Points of zero space	Capped Lines & Layers
30^0	12	Dodekohdral	Dekahedral crystals of Schechtman
45^0	8	Octahedral	Hexagonal, Trigonal
60^0	6	Hexagonal	Pentagonal, ridge
72^0	5	Pentagonal	Ridge, Line of dislocation
90^0	4	Rectangular (Cubical)	Square Pyramid Deposits
180^0	Pair of lines of equi potential area	Piles of successive layers	Piles of successive layers
108	Pair of Pentagons linked internally	Ridge	Ridge

wave's energy. The predictable and observable crystal growth of equation 6 and 7 during electrocrystallization are shown in the tabular form given below. The Bases of congruent shapes of crystals are at equi distance apart of its energetic base at each of its successive growth..

The typical crystal deposits observed by the author during 1985 to 1988 is enclosed for sake of clarity [5 - 18]



Fig.4.1. Electrogrowth of copper on copper (100) plane from acid copper sulphate bath at 2 mA/cm^2 (500X).



Fig 4.2. Electrogrowth of copper on copper (100) plane from acid copper sulphate bath at 5 mA/cm^2 (500X).

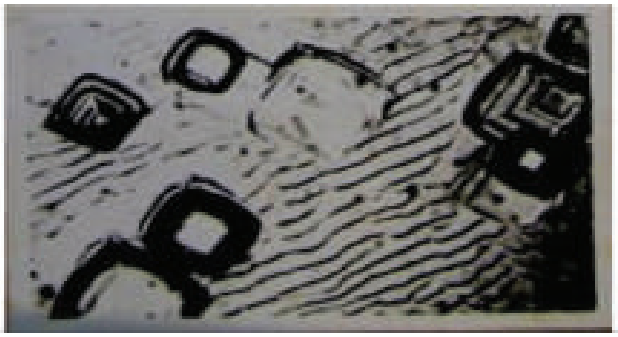


Fig 4.3. Electrogrowth of copper on copper (100) plane from acid copper sulphate bath at 10 mA/ cm2(500X).

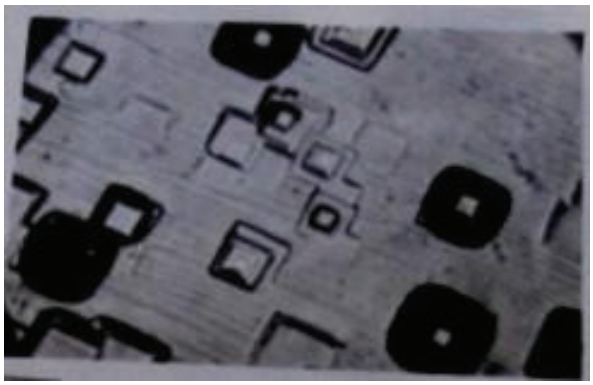


Fig 4.4. Electrogrowth of copper on copper (100) plane from acid copper sulphate bath at 15 mA/cm2 (500X).



Fig 4.5. Electrogrowth of copper on copper (100) plane from acid copper sulphate bath at 20 mA/cm^2 (500X).

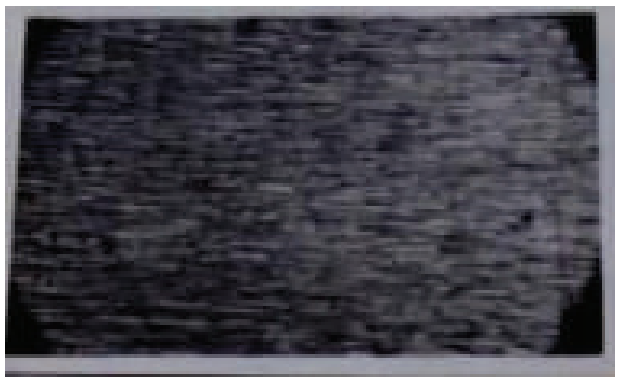


Fig 4.6. Electrogrowth of copper on copper (110) plane from acid copper sulphate bath at 2 mA/cm^2 (500X).

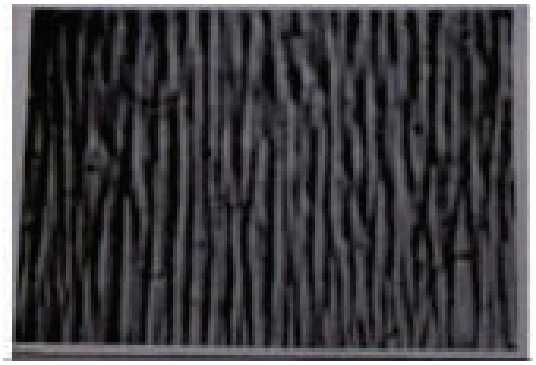


Fig 4.7. Electrogrowth of copper on copper (110) plane from acid copper sulphate bath at 10 mA/cm^2 (500X).

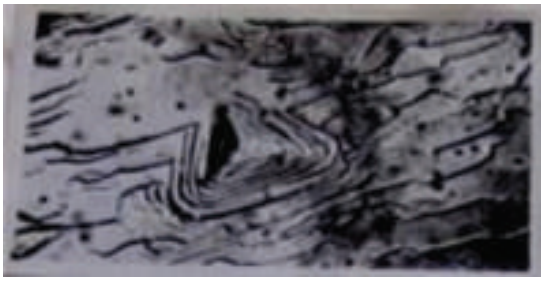


Fig 4.8. Electrogrowth of copper on copper (111) plane from acid copper sulphate bath at 2 mA/cm^2 (500X).

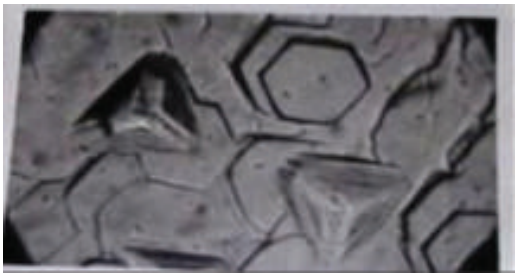


Fig 4.9. Electrogrowth of copper on copper (111) plane from acid copper sulphate bath at 5 mA/cm^2 (500X).

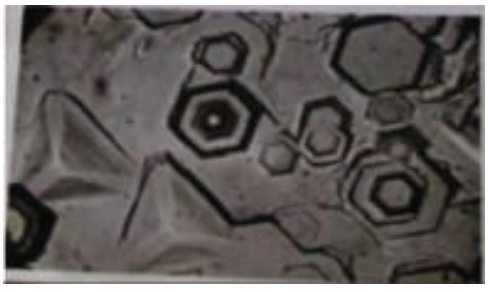


Fig 4.12. Electrogrowth of copper on copper (111) plane from acid copper sulphate bath at 10 mA/cm^2 (500X).

Wishing the new form of Schrodinger's wave equation (6) which may become a stepping stone for advancement of the sciences

Conclusion:

Theories of the natural crystallization in the geosphere, lithosphere and in the aero sphere inclusive of ice capped universal crystals point out the movement on account of the role of finite quantum energy changes of its mass and vacuum components of the universe which is shown as numerical number 2 in the phase rule P + F = C +2. J.Willard Gibb, the greatest mathematician of the yester years!. The Munich museum of *water system* has inspired, amused and amazed the many Scientists and visitors of the yester year till the day of their visits!.

Acknowledgment

The author remembers late Prof Dr. B.S.Sheshadri and also his amicable discussions and guidance while shaping this paper. The author also remembers his well wishers and mentors.

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