

# Comments on BPOM, UOM and Outline

*Prof. K.V.K. Nehru, Ph. D.*

## Outline

1. Sec. 2, P. 3, # 65, last lines: “it is an outward motion added to an inward motion.”  
Comment: not always. It is inward, in the case of electro-positive elements.
2. #116: “The effect of this restriction ( #57 ) is to bar three-dimensional rotational vibration.”  
Comment: How does this follow from #57?
3. #127: “... each unit of rotational vibration combines with a unit of rotation.”  
Comment: The electron has one natural unit of rotational displacement. Therefore it can take one unit of electric charge. But the atoms are doubled rotating systems. If  $Z$  is the net electric displacement of an atom, its atomic number, then the number of this displacement in natural units is  $2Z$ . If each natural unit of rotation can take on one unit of electric charge, the atom can take  $2Z$  number of charges on complete ionization and not merely  $Z$ .

## Basic Properties of Matter

4. P. 57, lines 4 & 3 from bottom: “Radiation originates three-dimensionally in the time region, and makes contact one-dimensionally in the outside region. It is thus four-dimensional ...”  
Comment: gap in the logic.
5. P. 59, lines 3,2 from bottom: “The  $3/4$  power of  $7.20423 \times 10^{12}$  is ...”  
Comment: A dimensional error is involved:  $^{\circ}\text{K}$  get altered to  $^{\circ}\text{K}^{3/4}$ .
6. P. 60, line 19 from bottom: “ $1/3 (3.598 \times 10^9)^{1/3}$  degrees K = 510.8  $^{\circ}\text{K}$ .”  
Comment: The dimensional balance is thrown to the winds.
7. P. 86, Table 22:  
Comment: How are the thermal factors arrived at?
8. P. 87, lines 11, 10 from bottom: “... for rubidium and cesium, there is no effective displacement in the electric dimension...”  
Comment: But Rb and Cs have 1 unit of effective displacement.
9. P. 113, 4 para, lines 1-2: “... there are two dimensions of rotation in space... in many of the elements of Division IV...”  
Comment: needs explanation.
10. P. 213, para 4, last 4 lines: “On one side of this dividing line the rotation appears CW to observation. The scalar direction of the magnetic charge on this side is therefore outward from a CW direction. A similar charge on the opposite side is a motion outward from a CCW direction.”

Comment: But since the charge is a rotational vibration, in the next half-cycle it reverses.

11. P. 213, para 5, lines 1,2: “The unit of magnetic charge applies to only one of the two rotating systems of the atom. Each atom therefore acquired two charges...”

Comment: What happens in the core of subatomic particles: Don't these manifest two poles (see line 3)?

12. P. 230, para 3, lines 5,6: “Since this remaining motion is scalar and two-dimensional, it is magnetic...”

Comment: (i) But it is a *rotation* and not a rotational vibration. Moreover, it is a time displacement and not space displacement. How does it show up as magnetism? It is more like gravitational charge than magnetic charge.

(ii) Should this not also show up as a mass loss?

13. P. 235, Fig. 25

Comment: What does the Theory predict about the force between two currents perpendicular to each other?

14. P. 238, para 2, lines 3,4: “... a two-dimensional magnetic motion... applied in opposition to gravitation will leave one-dimensional residue, an electric current...”

Comment: The scalar direction of this current is *inward*, what would be its results.

15. P. 241, para 2: “unlike the ferromagnetic charge, (The internal magnetic) charge on the basic rotation of the atom is subject to the electric rotation of the atom in the third scalar dimension...”

Comment: In such case the charge does not display any bipolar effect.

16. P. 241, para 3: “The corresponding factor ... is a square root of the product of 1 and  $3 \times 10^{10}$ ...”

Comment: What is the rationale?

17. P. 251, line 3,2 from bottom: “each magnetically charged atom exerts a force on its magnetic neighbors, tending to line up these... atoms with its own magnetic direction...”

Comment: But it would be an antiparallel line-up, not a parallel!

18. P. 253, line 2: “... the electron rotation has the inward scalar direction...”

Comment: since it is a space displacement, it has to be an outward scalar direction.

19. P. 253, lines 2-4: “... the electron rotation... the charge. the two motions take place in different scalar dimensions”

Comment: But the charge (motion) modifies the rotation. As such they ought to be in the *same* scalar dimension. Also see P. 257, lines 20,19: “Addition of an oppositely directed unit of charge... reduces the net displacement to zero, and terminates the existence of the particle.”

20. P. 262, 263: (about the gravitational charge)

Comment: Since the gravitational charge is a two-dimensional rotational vibration like the magnetic charge, there should be a bipolar effect!

21. P. 271, lines 3,4: “Th<sup>234</sup> → Pa<sup>234</sup>; 180-54 → 182-52”

Comment: The vibrational mass for  $Z = 91$  is 52.93 (see P. 268) Since  $52 < 52.93$  why should  $\text{Pa}^{234}$  need a beta decay  $182-52 \rightarrow 184-50$ ?

22. P. 283, Table 36: “M 1-1-(1) proton”

Comment: Why \*M 1-1-(1) does not take precedence over +M 1-1-(1)? In the case of the neutron the gravitational charge is stated to take precedence, \*M  $\frac{1}{2}$ - $\frac{1}{2}$ -(1), on the grounds that 2-dimensional motion is more probable.

## The Universe of Motion

23. ... the inner and the outer gravitational limits...

Comment: One wonders whether similar limits exist for the translational effects in the cases of magnetic and electric charges too.

24. P. 234: The chapter on Pulsars contains many inconsistencies,

Comment: It is not clear what the author wants to say about  $P$  and  $\dot{P}$ .

If  $P$ , the period is taken to be proportional to  $t^6$  then  $dP/dt$  is proportional to  $t^5$ , that is,  $P^{5/6}$ , but not to  $P^5$  as depicted. Even if  $(P)_{\text{obsd}}$  is taken to be  $(\dot{P})_{\text{cald}}^{-1}$ , we have  $\dot{P}_{\text{obsd}}$  proportional to  $P^{-5/6}$ .

It is easy to see that the observed relation,  $\dot{P}$  being proportional to  $P^{-5}$ , means that  $P$  is proportional to  $t^{1/6}$  (and not to  $t^6$  as assumed).

25. P. 235, line 7: ...the expression  $1/6 (n/P)^5$  ...

Comment: The above expression does not give the set of radiating lines as shown in Fig. 24. Remembering that Fig. 24 is a log-log plot, the above expression can be seen rather to represent a set of *parallel* lines with slope = -5 on the diagram. The observed spread of the data on this diagram may be due not only to the different values of  $n$ , but also to the differences in the masses of the pulsars.

26. P. 297, para 2, lines 5-2: “... all ... sources then Known.”

Comment: That was in 1967. What about in 1984, the year of publication of this Volume? Still no more than 5 conclusive cases ! ?

27. P. 341, bottom para: “... the radiation ... travels back to us through time...”

Comment: What does that mean?

28. P. 382, lines -14: “... addition of rotational motion in space to an atom of matter *decreases* the isotopic mass...”

Comment: decreases or *increases*?

## General

29. Electric charge is a unit of 1-dimensional rotational vibration.

Comment: Two such units make up double ionization. But what would then be a charge with displacement 2?