The Unique Nature of Palladium in Therapeutic Research

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We have been involved in research on palladium since the early 1990s. Our patents and publications support clinical use in restoring energy to the chronically ill, and adjunctive support for those undergoing cancer treatment. More recently we are involved in a clinical study on degenerative neurologic disorders. Therefore I address fundamental questions on the unique properties of palladium.

The catalytic properties of palladium are widely acknowledged by its use in catalytic converters. We reported its catalytic ability to add charge to DNA in 1993. The question is how does palladium transfer electric charge at the molecular level. We must therefore study its precession and its Hall effects.

Precession is the process in which the extended d-orbital electrons in certain metals assume their elliptic orbits, and continuously advance their angle of orbital excursion outward from the nucleus. As they swing forward with each cyclic advance, the electron is significantly displaced in space. In keeping with the views of Faraday and Oersted and others, such a moving charge creates a magnetic field along its path. So palladium in a suitable bond-extending molecular state undergoes precession. In this way it produces a pulsing magnetic field. This magnetic space field is in addition to the electric surface field which accompanies the charges of electron transfer reactions flowing in palladium complexes. We have now a complete Lorentz Force based on both magnetic (B) and electric fields (E), and modulated by the angle between the fields (Theta). : This is expressed as -

F = E v. B sin Theta. This is the Lorentz Force equation. It is the basis for the Hall Effects discovered by Edwin Hall, in which a flow of current is increased and an angular voltage is produced when the current flow intersects its preliminary path. The field of Hall Effects has been further enriched by the discovery of materials in which this reactions is native, and does not depend on circuit architecture. This is the <u>Anomalous Hall Effect</u>. The use of palladium in biology now introduces rich theoretical possibilities for accelerating energy access.