

Zero Point Energy: The Fuel of the Future by Thomas Valone, Integrity Research Institute, 2007, 236 pages, \$22, ISBN 978-09641070-2-1

## How to Use Zero Point Energy

Zero bias diodes are one of the many overlooked converters of vacuum fluctuations for the production of DC electricity that are explained in detail in a new zero point energy breakthrough technology book paving a path toward carbonless, emission-free energy

UP UNTIL now the use of zero point energy (ZPE) for electricity generation was mere fantasy and science fiction. No one thought it possible for ZPE to offer a source of unlimited energy for homes, cars, and space travel, even though it is agreed that the energy density of the vacuum *exceeds the energy density of matter*. Some “experts”

**“You have to appreciate that looking in the noise level is where ZPE manifests”**

still say zero point energy can do nothing useful. The experimental evidence however, incontrovertibly demonstrates that ZPE-caused fluctuations in electricity have been measured in coils and semiconductors, such as diode rectifiers. Furthermore, ZPE can be focused, turned on or off, attract or repel matter in one direction, move dielectric fluid and even electrons for a desired electricity flow in a circuit.

The details of these discoveries are presented in the book, *Zero Point Energy: The Fuel of the Future* which concludes that there is a major future



Max Planck's Second Law proved that ZPE was useful

energy trend in the physics community toward ZPE power. For example, there exists a class of diodes that operate

at "zero-bias" (no voltage applied to make them work) and up into microwave frequencies, which are suitable for generating trickle currents from the zero point energy quantum vacuum because of natural nonthermal electrical

fluctuations (Johnson noise) which have ZPE as their source. Thus, in this age of “energy harvesting” for various nanotechnology circuits, the all-pervasive ZPE may be the next big thing to start harvesting, according to Valone.

One class of ZPE diodes that are interesting function by “tunneling,” even at zero voltage (zero bias). Several microwave diodes today exhibit this feature. However, “You have to appreciate that looking in the noise level is where ZPE manifests,” says author Thomas Valone. “Nature has been helpful since Johnson noise in the diode is also generated at the junction itself and therefore, requires no minimum signal to initiate the conduction in one direction.”

The diodes demonstrate substantive, greater than uncertainty, generation of energy from ZPE, such as the DARPA developed night vision “Unamplified Direct Detection Sensor” published recently (Proc. of SPIE, V. 6211, 621101, 2006). In fact, simple coils do as well, according to Koch. In a series of experiments from 1980 to 1982, Koch measured voltage fluctuations in resistive wire circuits that are induced by ZPE (Phys. Rev. Lett., V. 41, 1981). The Koch result is striking confirmation of the reality of ZPE and proves that the vacuum fluctuations can do real work (creating electricity). Although the Koch

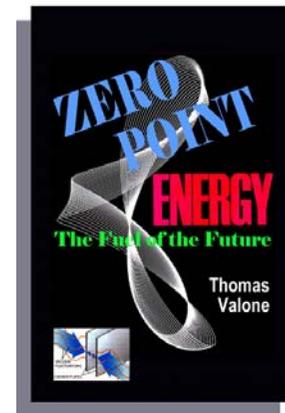
### Profile

Thomas Valone, PhD, PE did his thesis on the “Practical Conversion of Zero Point Energy from the Quantum Vacuum for the Performance of Useful Work” and is the author of *Harnessing the Wheelwork of Nature: Tesla's Science of Energy, Electrogravitics Systems, Electrogravitics II, Homopolar Handbook, and Bioelectromagnetic Healing*

experiment detected miniscule amounts of zero point energy, it shows the principle of ZPE circuit effects to be valid and opens the door to consideration of means to extract useful amounts of energy.

Eric Davis, from the Institute for Advanced Studies in Austin Texas is now trying to get Lockheed money to fund a replication of Koch's work. Professor Christian Beck (Queens College, London), author of a textbook on chaotic systems, posted a paper on measurements of dark energy in the lab (<http://xxx.arxiv.org/abs/astro-ph/0406504>) which also cites Koch.

All of these developments make exciting reading in a book full of pictures, history, science and suspense



on a subject that has not been accessible to the general public in any digestible form until now. Reviewers say “This book is

indeed welcome” -- Jeane Manning, author of *The Coming Energy Revolution* (Avery). “Valone describes with masterful ease, and in an easy-to-understand timeline, the history and science underpinning this esoteric, yet vitally important subject - one that is rightly beginning to move from left- to centre-stage in our understanding of the universe and, indeed, the very essence of reality, both at a macro and quantum level” -- Nick Cook, former Science Writer, *Janes Defence Weekly* (UK) and author of *The Hunt for Zero Point*, Random House.

*Zero Point Energy, The Fuel of the Future*, being so comprehensive and yet readable, may yet become a classic. A popular Valone ZPE lecture is online (<http://www.youtube.com/watch?v=UMNZyOs7UU0>). ●